

Start at Lane!

1

Enroll at
Lane!

2

Earn a certificate
or get your
Associate Degree

3

Transfer to
a University



2012 - 2013 CATALOG

Student Success Starts Here

Vision

Transforming lives through learning

Mission

Lane is the community's college:

We provide comprehensive, accessible, quality, learning-centered educational opportunities that promote student success.

Core Values

Learning

- Working together to create a learning-centered environment
- Recognizing and respecting the unique needs and potential of each learner
- Fostering a culture of achievement in a caring community

Diversity

- Welcoming, valuing and promoting diversity among staff, students and our community
- Cultivating a respectful, inclusive and accessible working and learning environment
- Working effectively in different cultural contexts to serve the educational and linguistic needs of a diverse community
- Developing capacity to understand issues of difference, power and privilege

Innovation

- Supporting creativity, experimentation, and institutional transformation
- Responding to environmental, technological and demographic changes
- Anticipating and responding to internal and external challenges in a timely manner
- Acting courageously, deliberately and systematically in relation to change

Collaboration and Partnership

- Promoting meaningful participation in governance
- Encouraging and expanding partnerships with organizations and groups in our community

Integrity

- Fostering an environment of respect, fairness, honesty and openness.
- Promoting responsible stewardship of resources and public trust.

Accessibility

- Strategically growing learning opportunities
- Minimizing financial, geographical, environmental, social, linguistic and cultural barriers to learning

Sustainability

- Integrating practices that support and improve the health of systems that sustain life
 - Providing an interdisciplinary learning environment that builds understanding of sustainable ecological, social, and economic systems, concern for environmental justice, and the competence to act on such knowledge
 - Equipping and encouraging all students and staff to participate actively in building a socially diverse, just, and sustainable society, while cultivating connections to local, regional, and global communities
-

Core Themes

As part of an on-going self-study for the Northwest Commission on Colleges and Universities, Lane has identified the following four core themes that collectively encompass all elements of Lane's comprehensive Mission. Success for students pursuing educational goals in these curricular areas provides a key indicator of Mission fulfillment for Lane.

Core Theme 1: Academic Transfer

Foster student learning and success through accessible, quality academic transfer preparation.

Core Theme 2: Career Technical and Workforce Development

Foster student learning and success through accessible, quality career-technical preparation and workforce development.

Core Theme 3: Foundational Skills Development

Foster student learning and success through accessible, quality foundational skills development.

Core Theme 4: Lifelong Learning

Provide accessible, quality lifelong learning experiences for the community we serve.

	<table><tr><td rowspan="5">About Lane</td><td>Academic Calendar</td><td>2</td></tr><tr><td>Welcome to Lane</td><td>3</td></tr><tr><td>How to Get Started at Lane</td><td>5</td></tr><tr><td>Phone Numbers</td><td>7</td></tr><tr><td>Locations and Maps</td><td>8</td></tr></table>	About Lane	Academic Calendar	2	Welcome to Lane	3	How to Get Started at Lane	5	Phone Numbers	7	Locations and Maps	8										
About Lane	Academic Calendar		2																			
	Welcome to Lane		3																			
	How to Get Started at Lane		5																			
	Phone Numbers		7																			
	Locations and Maps	8																				
	<table><tr><td rowspan="10">College Transfer and Career and Technical Programs</td><td>Credit Student Admissions and Registration</td><td>10</td></tr><tr><td>Steps to Enroll in Credit Classes</td><td>12</td></tr><tr><td>Overview of Academic Programs</td><td>14</td></tr><tr><td>Tuition, Fees, Financial Aid and Payment</td><td>19</td></tr><tr><td>Academic and Student Services</td><td>24</td></tr><tr><td>Degrees and Certificates</td><td>36</td></tr><tr><td>Career and Technical Programs</td><td>52, 68</td></tr><tr><td>Procedures and Policies</td><td>53</td></tr><tr><td>Transfer Plans</td><td>50, 162</td></tr><tr><td>Course Descriptions</td><td>186</td></tr></table>	College Transfer and Career and Technical Programs	Credit Student Admissions and Registration	10	Steps to Enroll in Credit Classes	12	Overview of Academic Programs	14	Tuition, Fees, Financial Aid and Payment	19	Academic and Student Services	24	Degrees and Certificates	36	Career and Technical Programs	52, 68	Procedures and Policies	53	Transfer Plans	50, 162	Course Descriptions	186
College Transfer and Career and Technical Programs	Credit Student Admissions and Registration		10																			
	Steps to Enroll in Credit Classes		12																			
	Overview of Academic Programs		14																			
	Tuition, Fees, Financial Aid and Payment		19																			
	Academic and Student Services		24																			
	Degrees and Certificates		36																			
	Career and Technical Programs		52, 68																			
	Procedures and Policies		53																			
	Transfer Plans		50, 162																			
	Course Descriptions	186																				
This information is available in an alternate format upon request by contacting Disability Resources: 541.463.5150 (voice) TTY Relay: 711 email: disabilityresources@lanecc.edu This catalog is published for informational purposes and every effort is made to insure accuracy at the time of printing. However, the provisions in this catalog are not to be regarded as an irrevocable contract between the student and the college. Lane Community College reserves the right to change any provision or requirement at any time. Students are advised to study the class schedule and to work closely with a counselor or advisor.	<table><tr><td rowspan="5">Community Education, Community Services and Business Education</td><td>Continuing Education</td><td>271</td></tr><tr><td>English as a Second Language</td><td>272</td></tr><tr><td>Adult Basic and Secondary Education</td><td>273</td></tr><tr><td>Community Services</td><td>273</td></tr><tr><td>Business and Workforce Development</td><td>275</td></tr></table>	Community Education, Community Services and Business Education	Continuing Education	271	English as a Second Language	272	Adult Basic and Secondary Education	273	Community Services	273	Business and Workforce Development	275										
Community Education, Community Services and Business Education	Continuing Education		271																			
	English as a Second Language		272																			
	Adult Basic and Secondary Education		273																			
	Community Services		273																			
	Business and Workforce Development	275																				
This catalog was prepared with assistance from: Angela Miller, editor; Mary Brau, coordinator of student outcomes assessment and curriculum development; Melanie Brown, curriculum specialist; Neil Isaacson, graphic designer; Cover design by Funk/Levis and Associates.	<table><tr><td rowspan="3">Governance and Staff</td><td>Governance</td><td>278</td></tr><tr><td>Instructional Staff</td><td>280</td></tr><tr><td>Index</td><td>290</td></tr></table>	Governance and Staff	Governance	278	Instructional Staff	280	Index	290														
Governance and Staff	Governance		278																			
	Instructional Staff		280																			
	Index	290																				

Academic Calendar 2012-2013

Summer Term 2012 (session 201310)

Staged Registration begins*	May 7-10—7 a.m.
Open registration begins*	June 5—7 a.m.
Summer term books available	June 18
Summer term classes begin	June 25
Independence Day observed, college closed	July 4
First four-week session	June 25-July 21
First six-week session	June 25-August 4
Eight-week session	June 25-August 18
Twelve-week session	June 25-September 15
Second four-week session	July 23-August 18
Second six-week session	August 6-September 15
Third four-week session	August 20-September 15
Labor Day, college closed	September 3

Fall Term 2012 (session 201320)

Staged Registration begins*	May 21-24—7 a.m.
Open registration begins*	September 10—7 a.m.
Fall term books available	September 10
Inservice, college closed	September 20
Fall term classes begin	September 24
Last day to receive a tuition refund	September 30 —11:59 p.m.
Veterans' Day, college closed	November 12
Last day for schedule changes	November 16
Thanksgiving weekend, college closed	November 22-25
Finals week	December 3-8
Fall term ends	December 8
Winter break	December 9-January 6

Winter Term 2013 (session 201330)

Staged Registration begins*	October 29-November 1 —7 a.m.
Open registration begins*	December 4—7 a.m.
New Year's Day observed, college closed	January 1
Winter term books available	January 2
Winter term classes begin	January 7
Last day to receive a tuition refund	January 13, —11:59 p.m.
Martin Luther King Day, college closed	January 21
Presidents' Day, college closed	February 18
Last day for schedule changes	March 1
Finals week	March 18-23
Winter term ends	March 23
Spring break	March 24-31

Spring Term 2013 (session 201340)

Staged Registration begins*	February 11-14—7 a.m.
Open registration begins*	March 12—7 a.m.
Spring term books available	March 25
Spring term classes begin	April 1
Last day to receive a tuition refund	April 7—11:59 p.m.
Inservice, college closed	May 3
Last day for schedule changes	May 24
Memorial Day, college closed	May 27
Finals week	June 10-15
Spring term ends	June 15
Graduation	June 15

*For detailed registration information, visit lanec.edu/calendars/registration.

June 2012

					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

January 2013

		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

July 2012

1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

February 2013

						1	2
3	4	5	6	7	8	9	
10	11	12	13	14	15	16	
17	18	19	20	21	22	23	
24	25	26	27	28			

August 2012

			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

March 2013

						1	2
3	4	5	6	7	8	9	
10	11	12	13	14	15	16	
17	18	19	20	21	22	23	
24	25	26	27	28	29	30	
31							

September 2012

							1
2	3	4	5	6	7	8	
9	10	11	12	13	14	15	
16	17	18	19	20	21	22	
23	24	25	26	27	28	29	
30							

April 2013

		1	2	3	4	5	6
7	8	9	10	11	12	13	
14	15	16	17	18	19	20	
21	22	23	24	25	26	27	
28	29	30					

October 2012

		1	2	3	4	5	6
7	8	9	10	11	12	13	
14	15	16	17	18	19	20	
21	22	23	24	25	26	27	
28	29	30	31				

May 2013

			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

November 2012

				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

June 2013

							1
2	3	4	5	6	7	8	
9	10	11	12	13	14	15	
16	17	18	19	20	21	22	
23	24	25	26	27	28	29	
30							

December 2012

							1
2	3	4	5	6	7	8	
9	10	11	12	13	14	15	
16	17	18	19	20	21	22	
23	24	25	26	27	28	29	
30	31						

Taking a class at Lane is easy!

Watch the Getting Started at Lane YouTube video at <http://youtube.com/lanetuberscafe> by entering the "Taking a Class at Lane is Easy" in the search box.

Lane Tubers Cafe

Welcome To Lane Community College

Welcome to Lane Community College, a great place to start your college education or train for a career. At Lane you can achieve your dreams—earn a transfer degree, skill up for the workplace, gain basic academic skills, start a business, or pursue lifelong learning.

Whatever your goal, it's important to stay on course and complete your studies. A degree or certificate matters – for your own personal prospects and for the viability of our economy and democracy.

A college credential will give you a competitive edge in the workplace, increase your earning potential, and prepare you for an advanced degree at much less cost.

Lane welcomes all who desire to learn. We recognize that education is a right, not a privilege, and you need a good education to succeed in a challenging world.

Nearly 38,000 students a year seize the opportunities at Lane—open admission, lower tuition and fees, flexible scheduling, outstanding facilities, experienced and passionate faculty, individualized attention, student services, cultural opportunities, and most of all, quality programs.

You can choose from more than 50 academic subjects and more than 40 professional degrees and certificates. All of our programs meet rigorous academic standards and many have earned prestigious special accreditations.

Nationally known for excellence, Lane is the only Oregon college in the international League for Innovation in the Community College. We are engaged in the national Achieving the Dream project and other initiatives focused on your success.

We are prepared to help you achieve your goals. Student success starts here.

Sincerely,

Mary Spilde, President



About Lane Community College

Lane is a comprehensive community college dedicated to providing accessible, high quality, affordable, lifelong education. The college offers dozens of credit and noncredit programs.

Lane serves a population of approximately 349,000 people within a 5,000-square-mile area stretching from the Pacific Ocean to the Cascade Mountains.

The district includes most of Lane County, Monroe Elementary School District in Benton County, Harrisburg Union High School District in Linn County, and a small area in northern Douglas County. The college is governed by a seven-member elected board.

In addition to the main campus in south Eugene, the college has centers at Florence, Cottage Grove, downtown Eugene, and the Eugene Airport.

Enrollment

During the 2010-11 academic year, 37,561 students enrolled in Lane Community College classes. The average age for all students was 34 years.

Accreditation, Certificates and Affiliations

Lane is accredited by the Northwest Commission on Colleges and Universities, 8060 165th Avenue N.E., Suite 100, Redmond, WA 98052. The Commission is an institutional accrediting body recognized by the Council for Higher Education Accreditation and/or the U.S. Department of Education. Related regional accreditation documents are on reserve in the college library.

Individual Lane programs are evaluated for quality by numerous vocational and professional accrediting associations, including:

- Automotive Technology, certified by the National Automotive Technicians Education Foundation, a non-profit foundation within the National Institute for Automotive Service Excellence
- Aviation Maintenance, approved under Part 147 of the Federal Aviation Regulations of the Federal Aviation Administration
- Culinary Arts, accredited by the American Culinary Federation Education Foundation Accrediting Commission, a specialized accrediting commission recognized by the Council for Higher Education Accreditation
- Dental Assisting, accredited by American Dental Association's Commission on Dental Accreditation, a specialized accrediting board recognized by the U.S. Department of Education. The Commission may be contacted at 312.440.4653 or 211 East Chicago Avenue, Chicago, Illinois 60611
- Dental Hygiene, accredited by American Dental Association's Commission on Dental Accreditation, a specialized accrediting board recognized by the U.S. Department of Education. The Commission may be contacted at 312.440.4653 or 211 East Chicago Avenue, Chicago, Illinois 60611
- Diesel Technology, evaluated and accredited by the Association of Equipment Distributors Foundation
- Dietary Manager, approved by the Association of Nutrition and Food Service Professionals
- Emergency Medical Technology-Paramedic, application for approval of EMT courses. (1) The Health Professions Division is responsible for approving EMT courses. (2) An EMT course must be offered by a teaching institution accredited by the Oregon Department of Education (ODE) or the Oregon State Board of Higher Education. The ODE uses the DHS/EMS administrative rules (OAR 333-265) and must meet the standards established by the ODE in OAR chapter 581, division 49. arcweb.sos.state.or.us/rules/OARS_500/OAR_581/581_049.html
- Energy Management, awarded Institute for Sustainable Power Quality accreditation credential from the Interstate Renewable

Energy Council, International Standard #0102,1 for accreditation and certification of renewable energy training programs and instructors

- Exercise and Movement Science: The American College of Sports Medicine has endorsed the curriculum for Lane Community College's Associate of Applied Science program. This curriculum covers the knowledge, skills and abilities expected of an ACSM Health/Fitness Specialist®. This curriculum has been reviewed for the educational content and has been endorsed by ACSM.
- Flight Technology approved by the Federal Aviation Administration. Flight Technology is a Certified Part 141 approved training course and has FAA approved self-examining.
- Geospatial Information Science and Technology Endorsement of The National Geotech Center, Del Mar Community College.
- Hospitality Management, accredited by the Accreditation Commission for Programs in Hospitality Administration (ACPHA)
- Medical Office Assistant, accredited by the Commission on Accreditation of Allied Health Education Programs, a specialized accrediting board recognized by the Council for Higher Education Accreditation, on recommendation of the Medical Assisting Education Review Board of the American Association of Medical Assistants Endowment. Commission on Accreditation of Allied Health Education Programs, 1361 Park Street, Clearwater, FL 33756, 727.210.2350
- Nursing, the Oregon State Board of Nursing, 17938 SW Upper Boones Ferry Rd., Portland, OR 97163-0685, oregon.gov/OSBN
- Physical Therapist Assistant, accredited by the Commission on Accreditation in Physical Therapy Education of the American Physical Therapy Association (CAPTE), 1111 N. Fairfax Street, Alexandria, VA 22134; phone: 703.706.3245; email: accreditation@apta.org; website: capteonline.org
- Practical Nursing, accredited by the Oregon State Board of Nursing (OSBN), 17938 SW Upper Boones Ferry Rd., Portland, OR 97163-0685, oregon.gov/OSBN
- Respiratory Care, accredited by the Commission on Accreditation for Respiratory Care, coarc.com

Awards

The college has earned national recognition for many of its instructional programs, services and administrative practices. Lane also is a member of the League for Innovation in the Community College and is an Achieving the Dream College.

Funding

Lane Community College is funded by local property taxes, state revenues, and tuition and fees. The 2010-11 General Fund budgeted resources are \$93,691,967 of which approximately 50 percent came from intergovernmental, 43 percent from tuition and mandatory fees, and 7 percent from other sources.

In November 2008, Lane county voters approved an \$83 million 15 year bond. Funds are being used to update instructional facilities, equipment and technology at Lane. Work began summer 2009 with upgrades to roofing, central heating and cooling systems upgrades, and increased safety lighting.

The college also has a foundation which is an independent, nonprofit corporation that raises funds to support programs for which tax monies are insufficient or unavailable.

How to Get Started at Lane

Who Can Attend Lane

In general, anyone 18 years or older may enroll in Lane Community College credit classes. A high school diploma is not required. Noncredit classes are generally open to persons 16 years or older.

The college is dedicated to helping each student accomplish his or her immediate educational goals.

What Lane Has To Offer

Lane Community College offers lower division college courses, career and technical training, precollege and skill development, cooperative programs with area high schools, career and life planning, services for businesses, continuing education, and cultural activities.

Credit Classes and Programs

Some of the courses offered at the college are for "credit." Credit courses are designed to be transferable to other colleges or to be part of a career and technical degree program. Information about credit program offerings begins on page 68.

Noncredit Community Education Classes

Noncredit courses are not transferable to Lane's career and technical degree programs or to other colleges. Information about these offerings begins on page 271.

Good Places to Start

Lane offers a variety of educational options which are designed to meet the needs of individuals at different stages of their lives and education. The following are good places to start.

AskLane Lane's 24/7 online tool for finding answers to general questions relating to attending Lane can be found at the top of Lane's homepage at lanecc.edu.

Catalog This catalog is produced annually in the spring and is available at no charge at college centers. It also is available through the mail for a small charge. To order a catalog, call Lane's Bookstore at 541.463.5256 or use the order form in the Community Education Class Schedule. The catalog also can be found on Lane's Web site, lanecc.edu.

Lane's catalog is published for informational purposes and every effort is made to insure accuracy at the time of printing. However, the provisions in this catalog are not to be regarded as an irrevocable contract between the student and the college. Lane Community College reserves the right to change any provision or requirement at any time. Students are advised to study the web class schedule and to work closely with a counselor or advisor. Students also are encouraged to see a counselor or advisor to have an evaluation done early in their programs of study to obtain the most accurate information on their program requirements.

Class schedule The quarterly class schedule is available on the web at lanecc.edu about one week before Staged Registration begins. Staged Registration usually begins the fourth week of the preceding term except fall term, which occurs the preceding spring term. The most current registration calendar can be found on Lane's web site at lanecc.edu/calendars/registration.

The Community Education Class schedule which contains non-credit offerings is mailed to homes in the college district each term. Lane Community College at Florence also mails schedules specific to the Florence Center to Florence area residents.

Counseling and Advising Center Building 1, First Floor, Room 103, lanecc.edu/counseling, 541.463.3200, coundept@lanecc.edu

The Counseling and Advising Center assists students in planning and meeting their educational goals. The center provides academic advising, career advising and counseling, and retention counseling. Hours are Monday-Wednesday, 8 a.m.-5 p.m.; Thursday, 8 a.m.-4 p.m.; Friday, 8 a.m.-2 p.m. Summer term, Monday-Thursday, 9 a.m.-5 p.m.; Friday, hours vary.

For information about the center and other counseling services, see page 26.

Counseling services also are available at these off-campus centers: Lane Community College at Cottage Grove, 541.942.4202; and Lane Community College at Florence, 541.997.8444.

Enrollment Services Building 1, First Floor (Lobby), lanecc.edu/es/ 541.463.3100, 877.520.5391, or TTY 541.463.4722

Enrollment and Student Financial Services admits credit students, provides registration and billing assistance to all students, and responds to all questions and issues regarding financial aid. Hours are Monday-Wednesday, 9 a.m.-5 p.m.; Thursday, 9 a.m.-4 p.m.; Friday, 9 a.m.-2 p.m. The college is closed on Fridays during summer term.

Web Information about the college, such as the catalog, class schedule, and myLane, can be found on the Internet at lanecc.edu.

Other Good Starting Places:

- College centers and maps, pages 8-9
- Disability Resources, page 27
- English as a Second Language, page 272
- International Student Program, page 29
- Multicultural Center, page 29
- Native American Program, page 30
- TRiO Learning Center, page 33
- Veterans' Office, page 34
- Women's Center, page 35

Como Empezar en Lane

Quien puede asistir a Lane

En general, cualquier persona 18 años o mayor puede matricularse en clases de valor curricular en Lane Community College. No se requiere diploma de preparatoria. Las clases al público sin valor curricular generalmente están abiertas a personas de 16 años o mayores. El college está dedicado a ayudar a cada estudiante a lograr sus metas educativas inmediatas.

Que les Ofrece Lane

Lane Community College ofrece cursos de tronco común, capacitación profesional y vocacional, desarrollo de habilidades preuniversitarias, programas cooperativos con preparatorias locales, orientación profesional y personal, servicios para empresas, educación continua, y actividades culturales.

Programas y Clases de Valor Curricular

Algunos de los cursos que el college ofrece son de "crédito" (valor curricular). Los cursos de crédito curricular están diseñados para transferirlos a otros colleges/universidades o para que formen parte de un programa técnico/profesional. La información sobre clases de crédito curricular empiezan en la página 68.

Clases de Educación Comunitaria

Los cursos "sin crédito" no pueden transferirse a otros colleges/universidades ni pueden formar parte de un programa de grado técnico/profesional. La información sobre estos cursos empieza en la página 271.

Buenos Puntos de Partida

Lane ofrece una variedad de opciones educativas las cuales están diseñadas para cumplir con los deseos académicos de las personas durante las diferentes etapas de su vida y educación. A continuación presentamos unos buenos puntos de partida.

Ask Lane es la herramienta en línea disponible las 24 horas del día que ayuda a contestar preguntas generales relacionadas con asistir a Lane. Se encuentra en la parte superior de la página inicial de Lane en lanecc.edu.

Catálogo Este catálogo se produce anualmente durante la primavera y lo puede adquirir gratis en los centros del college. También se puede ordenar, a bajo costo, por correo. Para ordenar un catálogo, llame a la Librería de Lane al 541.463.5256 o puede usar la hoja de pedido que se encuentra en la revista de Community Education Class Schedule. El catálogo se encuentran en el portal de Lane en el Internet, lanecc.edu.

El catálogo de Lane es publicado para fines informativos y se hacen todos los esfuerzos para asegurar exactitud a la hora de imprimirlo. Sin embargo, lo presentado en este catálogo no debe ser considerado como un contrato irrevocable entre el estudiante y el college. Lane Community College reserva el derecho de cambiar, en cualquier momento, cualquier parte de lo presentado o de los requisitos. Se les aconseja a los estudiantes revisar la lista de clases y asesorarse detalladamente con un consejero o asesor. También se les recomienda a los estudiantes obtener una evaluación formal de sus expedientes académicos, al iniciar sus programas de estudios,

para así obtener la información más precisa sobre los requisitos que necesitan para sus programas.

Lista de Clases El horario de clases trimestrales está a su disposición en el Internet, en lanecc.edu aproximadamente una semana antes de que se inicie la Matriculación Previa (Advance Registration, en inglés). La Matriculación Previa usualmente inicia la tercera semana del trimestre anterior excepto el trimestre de otoño, el cual se lleva a cabo durante el trimestre de primavera anterior.

La revista impresa con el horario de clases trimestrales también es enviado por correo a los hogares dentro del distrito escolar aproximadamente una semana antes de que se inicie cada trimestre. El centro en Florence también envían por correo horarios de clases específicos a eso centro.

Centro de Consejería y Asesoría Edificio 1, Salón 103, 541.463.3200

El Centro de Consejería y Asesoría ayuda a los estudiantes a planear y alcanzar sus metas educativas. El centro proporciona asesoría académica, y consejería vocacional: Para recibir ayuda, vaya al centro o haga una cita al llamar al 541.463.3200.

Para información sobre el Centro y otros servicios de consejería, ver páginas 26.

Servicios de consejería también se ofrecen en los siguientes centros fuera del plantel:

Downtown Center, 541.463.5940 Lane Community College en Cottage Grove, 541 942-4202 Lane Community College en Florence, 541997-8444

Admisión/Enrollment Services Edificio 1, Primer piso, lanecc.edu/es/, 541.463.3100, 877.520.5391, or TTY 541.463.4722 Admisión/Enrollment and Student Financial Services proporciona una variedad de servicios para estudiantes de nuevo ingresos y para los que regresan a Lane. Estos servicios incluyen: admisión, apoyo y asesoría para la ayuda financiera, servicios de pagos, y ayuda con matriculación. Los horas de servicios: lunes-miércoles, 9 a.m.-5 p.m.; jueves, 9 a.m.-4 p.m.; viernes, 9 a.m.-2 p.m. El colegio estará cerrado los Viernes durante el trimestre de Verano.

Internet Para obtener información sobre el college en el Internet, vaya al lanecc.edu.

Otros Buenos Puntos de Partida

Centros del college, páginas 8-9

Recursos para Discapacitados, páginas 27

Inglés como Segundo Idioma, página 272

Programa para Estudiantes Internacionales, página 29

Centro Multicultural, página 29

Programa Nativo Americano, página 30

Centro de Aprendizaje TRiO, página 33

Oficina de Veteranos, página 34

Centro para la Mujer, página 35

College Phone Numbers

Main college phone: 541.463.3000

Administrators

President	541.463.5200
Vice President, College Services.....	541.463.5311
Vice President, Academic and Student Affairs	541.463.5302
Executive Dean Academic Affairs, Career Technical... ..	541.463.5315
Executive Dean Academic Affairs, Transfer	541.463.5306
Executive Dean Student Affairs	541.463.5725
Admissions/Enrollment Services	541.463.3100
Adult Basic and Secondary Education (ABSE)	541.463.5214
Downtown Center.....	541.463.5945
ABSE Volunteer Tutor Program	541.463.5919
Affirmative Action	541.463.5801
Associated Students of Lane	
Community College (ASLCC).....	541.463.5365
Athletics	541.463.5599
Bookstore.....	541.463.5256
Business Development Center.....	541.463.5255
Career and Employment Services.....	541.463.5167
Child and Family Education	541.463.5519
Continuing Education	541.463.5252
Cooperative Education.....	541.463.5203
Cottage Grove Center*	541.942-4202
Counseling (Main Campus).....	541.463.3200
Counseling* (Downtown Center)	541.463.5940

Credit Instructional Departments

Academic Learning Skills	541.463.5439
Advanced Technology.....	541.463.5380
Arts Division	541.463.5409
Business Department.....	541.463.5221
Child and Family Education.....	541.463.3522
Computer Information Technology.....	541.463.5826
Cooperative Education.....	541.463.5203
Culinary Arts and Hospitality Management.....	541.463.3503
Flight Technology.....	541.463.4195
Health and Physical Education.....	541.463.5545
Health Professions	541.463.5617
Human Development (Counseling Department).....	541.463.3200
Language, Literature and Communication	541.463.5419
Mathematics.....	541.463.5392
Music, Dance and Theatre Arts.....	541.463.5209
Science	541.463.5446
Social Science	541.463.5427
Women's Program	541.463.5353
Denali (Student Publication)	541.463.5897
Dental Hygiene Clinic.....	541.463.5206
Disability Resources	541.463.5150
Dislocated Worker Program	541.463.5223
Downtown Center.....	541.463.5252
Emergency Calls (on campus)	541.463.5555
Emergency Medical (on campus).....	541.463.5555

Employment Services	541.463.5167
English as a Second Language.....	541.463.5253
Enrollment and Student Financial Services	541.463.3100
Family Connections of Lane and Douglas Counties.....	541.463.3954/1.800.222.3290
Financial Aid.....	541.463.3100
Fitness Education Center*	541.463.3987
Florence Center.....	541.997.8444/541.463.4800
Foundation	541.463.5226
GED, Classes	541.463.5214
GED, Testing.....	541.463.5324
Health Clinic.....	541.463.5665
High School Connections	541.463.5521
International Students Counselor.....	541.463.3200
KLCC (Radio Station).....	541.463.6000
LaneOnline	541.463.5893
Library*	541.463.5220
Medical Emergencies (on campus).....	541.463.5555
Multicultural Center.....	541.463.5276
Music, Dance and Theatre Arts Ticket Office	541.463.5202
Public Safety* (emergency calls).....	541.463.5555
General Public Safety Information	541.463.5558
Recreational/Club Sports.....	541.463.5293
Registrar, Director of Enrollment Services	541.463.5686
Student Life and Leadership Development	541.463.5336
Student Child Care Office	541.463.5519
Student Financial Services	
Student Loan Payments (Perkins)	541.463.3012
Tuition and Other Payments.....	541.463.3100
Student Legal Services	541.463.5365
Student Records	541.463.3100
Student Resource Center.....	541.463.5342
Student Services Downtown Center.....	541.463.5940
Substance Abuse Prevention.....	541.463.5178
TTY (Disability Resources).....	541.463.3079
TTY (Personnel)	541.463.3999
Titan Store	541.463.5256
Torch (Student Newspaper)	541.463.5881
Tours (Main Campus).....	541.463.5678
Transitions to Success	541.463.5837
TRIO Learning Center.....	541.463.3131
Veterans' Benefits.....	541.463.5663
Veterans' Services	541.463.5497
Women's Center	541.463.5353
Work Study	541.463.5039
Workforce Development.....	541.463.5223

* These offices and facilities also can be reached during evening hours.



Locations and Maps

Facilities

The college has a 301-acre campus on 30th Avenue in Eugene. About one-third of the construction money came from local taxes and two-thirds from state and federal grants.

A center in downtown Eugene is centrally located and convenient for those who live, work or shop downtown.

Lane Community College at Cottage Grove provides educational services for the southern part of the college district, and the Florence Center serves residents in the western part of the district.

Siltcoos Station, located south of Florence on Siltcoos Lake, is a facility for educational and recreational use.

The Wildish Building provides office space, classrooms and a community conference room.

Lane's Flight Technology program offers ground/flight courses at its facilities at Eugene's Mahlon Sweet Airport. The college's Return-to-Service facility at the airport provides advanced training for Aviation Maintenance Technology students.

The college also offers classes via television and the Internet.

Bus Pass and Bus Transportation

Credit students taking classes on main campus or the Downtown Center and ESL students at main campus and DTC will be assessed

a \$27 per term transportation fee* which will cover the cost of a Lane Transit District/Lane Community College term bus pass. All other students will be assessed a \$5 per term transportation fee. Refer to current term class schedule for more information.

*subject to change

Parking

Main Campus

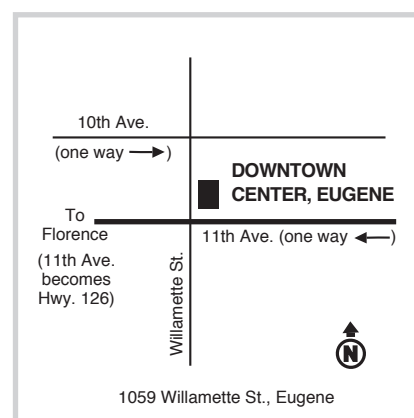
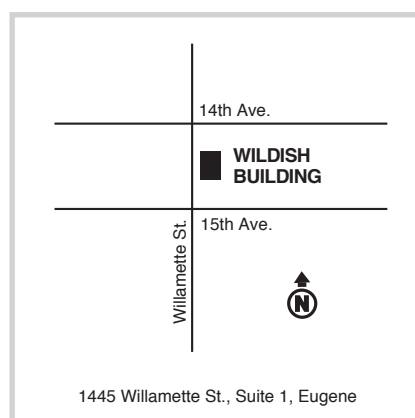
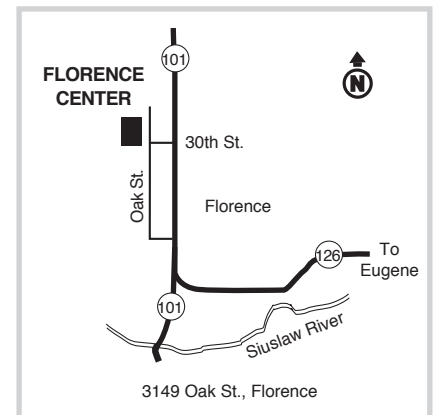
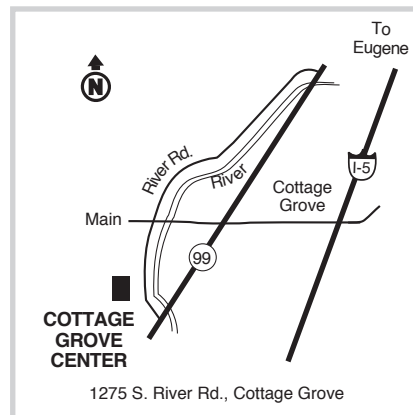
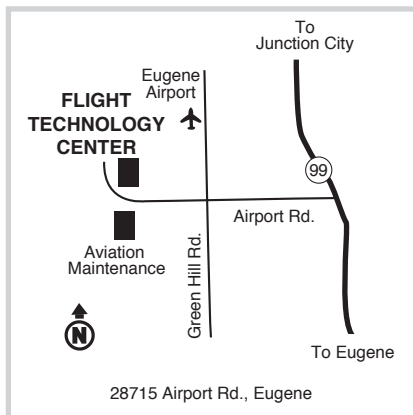
Parking is permitted in all parking lots on the main campus, hard surface and gravel. Parking is prohibited on main access roads at Gonyea Road and Eldon Schafer Drive. If parking is temporarily permitted in an area where parking is not normally permitted, the area will be clearly marked.

More information about motor vehicle regulations applicable to Lane is available by calling 541.463.5558 or on Lane's website at lanecc.edu/cops/mvreg.htm.

Downtown Center

- Parking is free on Saturday and Sunday in the Overpark at 10th and Oak Streets and the Arcade at 8th and Willamette Streets, and for the first hour of parking Monday through Friday, and after 6 p.m. These parking garages and other downtown lots charge hourly, daily and monthly rates.
- Refer to Community Education Class Schedule for current parking program information.

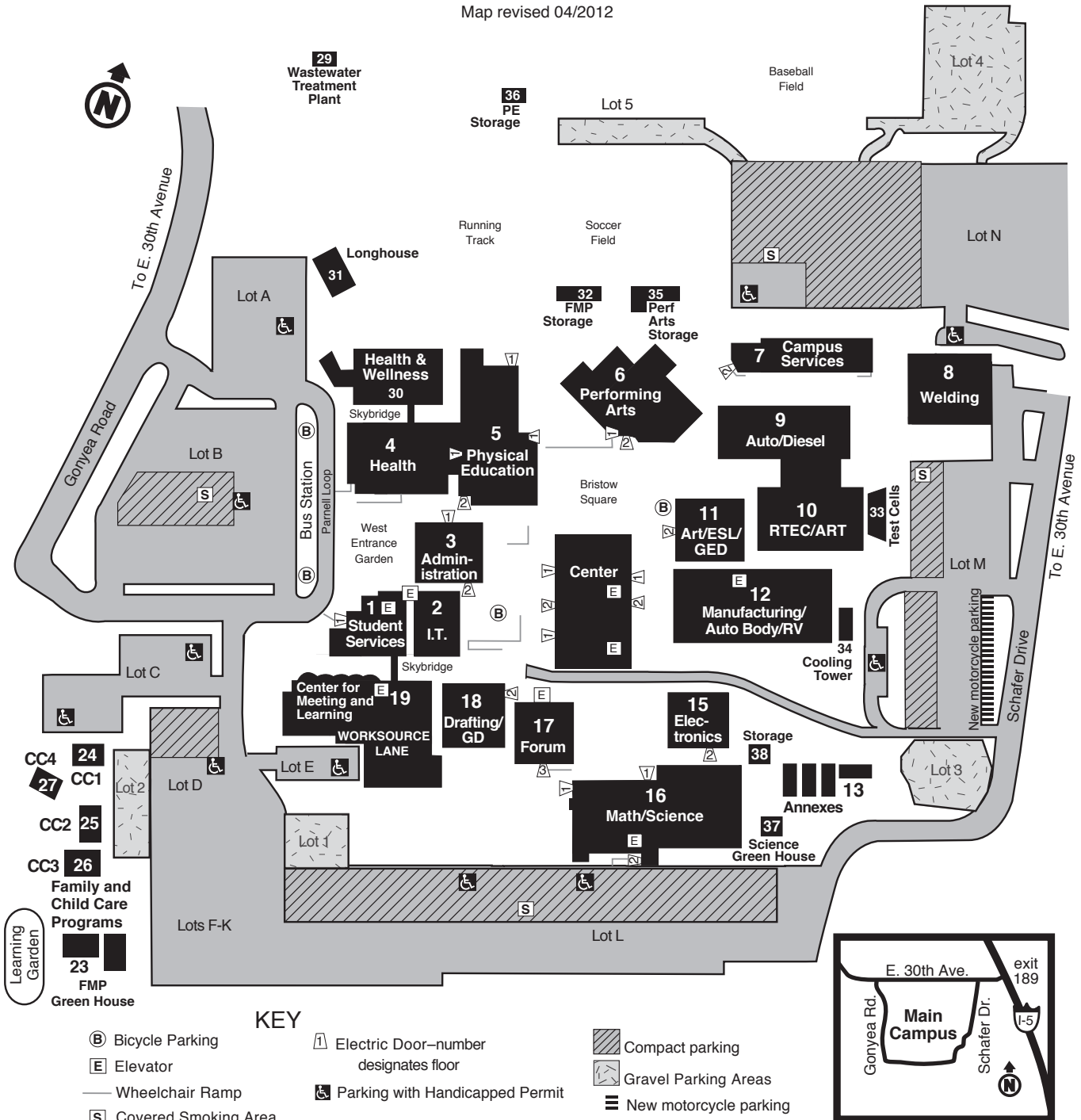
Maps to Lane Community College



Lane Community College Main Campus

4000 East 30th Avenue ■ Eugene, Oregon 97405 ■ (541) 463-3000

Map revised 04/2012



Parking

- Parking is permitted in all parking lots on main campus.
- Parking is prohibited on the access roads to main campus (Gonyea Road and Eldon Schafer Drive).

Credit Student Admissions and Registration

Who May Enroll in Lane Credit Classes

Students over age 18 Anyone who is at least 18 years of age may enroll in Lane credit classes. A high school diploma is not required. Students planning to use financial aid to attend Lane must have a high school diploma, a GED certificate, completed home schooling at the secondary level prior to the term the student wishes to receive aid. For more information, contact Enrollment Services at 541.463.3100.

Students under age 18 Anyone under age 18 must be a high school graduate or follow one of the procedures listed below in order to enroll in credit classes at Lane.

- Students who have not graduated and who are not enrolled in high school must have a GED certificate to enroll in credit classes at Lane.
- Students who are under the age of 18 at the time they are applying to Lane to become a credit student, need to complete the on-line admissions application process at lanecc.edu/es/admissions.html. To finalize the admissions process students under the age of 18 without a high school diploma must complete and submit to Enrollment and Student Financial Services the "Student/Parent-Guardian Consent Signature" form included in the on-line admissions process. Students attending Lane under the age of 18 will not be considered as regularly admitted students until they reach the age of 18 or they have demonstrated that a high school diploma has been earned.

Information about Lane's noncredit and Adult Basic and Secondary Education programs is in the Community Education section of this catalog.

Residency More information about residency, including tuition rates and documentation requirements, is provided in the Tuition, Financial Aid and Payment section. Briefly, students are considered In-District* if they

- have maintained a permanent residency within the college district for at least 90 continuous days prior to the first day of the term.

* In-District includes Lane County, the Monroe Elementary District, and the Harrisburg Union High School District.

Students are considered In-State (out-of-district) if they

- have maintained a permanent residency within the state for at least 90 continuous days prior to the first day of the term.

Students who are In-District, In-State or permanent residents of Washington, Idaho, Nevada, or California pay In-State tuition at Lane.

Please be aware that being designated as an Oregon resident at Lane Community College does not guarantee the same status with any other two-year or four-year institutions, both within and outside the state of Oregon. It is vital that you review the residency requirements at all institutions to understand their in-state residency requirements

Admissions

The admissions process at Lane is very easy. Simply complete the Admissions Process on-line at lanecc.edu, click on "Apply Now!"

International Student Admissions

Building 11, Room 235, 541.463.3404

International students on F-1 student visa are welcome at Lane. We're excited to be part of educating international students from over 30 countries each term.

Students applying to Lane need to complete the online application (processing fee included) and submit the following documents: copy of passport, financial certification, and official bank statement. The following additional documents are needed to be admitted directly to credit level classes: copies of college, university or high school transcripts and one or more of the following test scores: TOEFL 475 PBT, 153 CBT, 53 iBT; IELTS 5.5; or STEP Eiken pre-first grade.

All credit-level students will take the Accuplacer placement test, regardless of TOEFL or other test scores. Students who don't place into credit-level classes on the Accuplacer will have the option of taking International English as a Second Language classes. Upon completion of IESL, students will be eligible to take the Accuplacer and begin taking credit classes without meeting the TOEFL requirement.

International application deadlines are: August 1, December 1, March 1, and June 1. College major and International English as a Second Language students are admitted for fall, winter and spring terms. Summer term is a vacation term for college major students, but new International English as a Second Language students are admitted summer term. All international students must attend an orientation prior to the beginning of the term.

Students who are transferring to Lane from another college, university or language institute in the USA need to have at least a 2.0 GPA, be eligible to return to their current school, and have earned less than 180 quarter credits to be admitted to the regular program. Students who have less than a 2.0 GPA or are not eligible to return to their current school can enroll in the International Student Success Program. Students who have earned more than 180 quarter credits need to identify a specific degree plan and specific number of credits needed before they can be admitted. All students must be in status with immigration. Students with terminated I-20s are not eligible to transfer to Lane.

For more information, contact International Admissions at 541.463.3404, Lane Community College, 4000 East 30th Avenue, Eugene, Oregon 97405-0640 or visit lanecc.edu/international. The international application is an online process and includes an application processing fee. Go to lanecc.edu to apply. Click on Apply Now and be sure to choose the International Students application type.

Lane International Programs offers special services and activities that help international students succeed at Lane. See page 29. For more information about Lane's International English as a Second Language Program, see page 272.

Transferring Credit to Lane

The amount of credit transferred depends upon the nature of the student's college work, which is evaluated according to the academic requirements of Lane Community College. Official transcripts and other transfer documents are accepted from students admitted to Lane.

Once Lane receives a student's official transcript from another school, it becomes the property of Lane Community College and is subject to federal law, The Family Education Rights and Privacy Act (FERPA). A student may view the transcripts but Lane cannot release a copy back to the student. It is suggested that students order an unofficial copy for personal use. See Procedures and Policies, page 53.

More information is available on Lane's transfer practices at lanecc.edu, click on Help For Students and Transferring Credits.

Programs with Special Admission Procedures

Each of the following programs has special admission procedures. Students must be officially admitted to these programs. Contact the Health Professions Application Center for more information hpapplicationcenter@lanecc.edu. Admission Packets are available on Lane's website, lanecc.edu.

Associate Degree Nursing	Practical Nursing
Dental Hygiene	Dental Assisting
Emergency Medical	Health Records Technology
Technology/Paramedic	Medical Office Assistant
Physical Therapist Assistant	Respiratory Care

The programs listed below are limited enrollment requiring that the program be listed as the major or requiring a special application for acceptance listing as the major. Contact the sponsoring department for information:

Apprenticeship Trades	541.463.5380
Automotive Technology	541.463.5380
Culinary Arts and Food Service Management	541.463.3503
Hospitality Management	541.463.3503
Early Childhood Education.....	541.463.3522
Energy Management: Renewable Energy Technician	541.463.3977
Energy Management Technician	541.463.3977
Exercise and Movement Science	541.463.5545
Flight Technology	541.463.4195
Graphic Design (the second year)	541.463.5409
Occupational Skills	541.463.5203

Physical Exams and Immunizations

Some academic programs and student activities such as varsity sports have special requirements for physical exams and immunizations. Students can get specific information from the sponsoring department.

Registering for Classes

Staged Registration

The process known as Advance Registration has been discontinued. Registration for each term is now staged over four days according to the cumulative number of Lane credits earned through studies at Lane (transfer credits do not count). Students can easily check their registration date and see if they have any holds or restrictions preventing registration by going to myLane. For more information, visit the website at lanecc.edu/es/whentoregister. For questions, email RegistrationInfo@lanecc.edu.

Schedule Changes

Students may add and drop full-term classes through the eighth week of the term using myLane. Schedule changes could result in additional tuition and fees.

Some classes require the instructor's consent to enroll. myLane will inform students of this requirement when attempting registration.

Increasing the number of credits for a variable credit class can be processed using myLane through the last week of regular classes, prior to the beginning of finals week. Additional tuition and applicable fees will be charged to the student's account, and payment policies will apply.

Refunds

Tuition is not prorated. Students who drop a class and meet the refund deadline of Sunday midnight, the first week of the term for classes that meet 11 weeks will be refunded all of the tuition. Students who drop after this deadline will not receive a refund. More information about the refund process is provided in the tuition section of this catalog.



Steps to Enroll in Credit Classes

All the information you need for attending Lane is on Lane's website at lanecc.edu.

All new students will be required to submit an email address when applying to the college by using the online admissions process. Students who already have been admitted are encouraged to enter an email address via their myLane account. Students taking online web courses also may be required to have a valid email address to participate in the course.

If you would like help in arranging for a free email address, contact the IT Service Center by stopping by the SHed in Bldg. 4, Room 201 or call 541.463.3333 (ext. 3333 on campus).

Step 1: Apply for Admission/Readmission

First time credit student? Apply for admissions.

From lanecc.edu, click on "Apply now!"

Already taken credit classes at Lane? Apply for readmission if it has been more than four terms since you attended.

From lanecc.edu, click on Help for Students in the upper left-hand column and click on Apply for Readmission in the "Former Students" column. If you are returning to Lane on a non-immigrant visa, select the Reapply Online link.

Studying in the United States as an international student or on a non-immigrant visa?

From lanecc.edu, click on Help for Students in the upper left-hand column and click on International Students in the "New Students" column.

Under 18 and want to take credit classes?

From lanecc.edu, click on Help for Students in the upper left-hand column and click on Under 18 Years Old Admission in the "New Students" column.

Want to earn credit at Lane while attending high school?

From lanecc.edu, click on High School Connections in the upper left-hand corner to find out how to sign up for College Now, RTEC, Expanded Options and other High School Partnership classes.

Step 2: Apply for Financial Aid

From lanecc.edu, click on Help for Students in the upper left-hand column and click on Financial Aid in the "New" or "Current" Students boxes.

Step 3: Schedule a Placement Testing appointment (after receiving your L number). From Lane's home page, click on Steps to Enroll in Credit Classes: New and Transfer Students in the Student Announcements box. Click on Step 3 and follow the instructions to schedule your appointment for Placement Testing. You must schedule your Placement Testing before moving on to Step 4.

Step 4: Schedule a Student Orientation, Advising, and Registration (SOAR) session

From Lane's home page, choose Steps to Enroll in Credit Classes: New and Transfer Students in the Student Announcements box.

SOAR includes academic advising and new student information. An optional Money Matters workshop will be offered on the same day. Choose Step 4 and follow the instructions to schedule your appointment for SOAR.

To view Lane's degree and certificate programs of study online, go to Lane's home page and choose Catalog in the left-hand column to review programs currently offered at Lane.

Step 5: Register for Classes

Review credit classes being offered each term and for the current availability of each class.

From lanecc.edu, click on the term's classes, i.e. Spring Classes link on the left-hand column and click on Credit Class Listings by Subject to review classes offered and current availability.

From lanecc.edu, click on Help for Students in the upper left-hand column and click and read the directions on Registering for Classes in the "New Students" column.

Review refund deadlines and payment processes.

From lanecc.edu, click on Help for Students in the upper left-hand column and click on Paying for Classes in the "New Students" column.

If you have any questions about the programs offered at Lane Community College, contact the Counseling and Advising Center: email coundept@lanecc.edu, call 541.463.3200, or come by the Counseling and Advising center at the 30th Avenue campus, in Building 1, Room 103. For the web version of the above steps go to: lanecc.edu/counseling/stepstoenroll.



Pasos para matricularse en clases con valor curricular

Toda la información que necesita para asistir a Lane se encuentra en la página de Internet lanecc.edu.

Todos los estudiantes nuevos deberán presentar una dirección electrónica cuando se matriculan al college al usar el proceso electrónico de matriculación. A los estudiantes que previamente han sido admitidos se les pide que presenten una dirección electrónica por medio de su cuenta myLane. Los estudiantes que toman cursos por medio del Internet también deben tener una dirección electrónica válida para participar en el curso. Si le gustaría obtener ayuda para conseguir una dirección electrónica gratuita, comuníquese con el IT Service Center al visitar el SHED en el edificio 4, salón 201 o llame al 541-541.463.3333 (ext. 3333 en campus).

Paso 1: Solicitar matriculación/ readmisión

¿Estudiante de nuevo ingreso para clases con valor curricular? Solicite matriculación.

De lanecc.edu, seleccione Help for Students/Ayuda para estudiantes en la columna superior izquierda y luego seleccione Admission/Matriculación en la columna "New Students/Estudiantes nuevos".

¿Ya ha tomado clases con valor curricular en Lane? Solicite readmisión si han pasado más de cuatro trimestres desde su último curso.

De lanecc.edu, seleccione Help for Students/Ayuda para estudiantes en la columna superior izquierda y luego seleccione Apply for Readmission/Solicitar Readmisión en la columna de "Former Students/Estudiantes anteriores". Si está regresando a Lane con una visa no-inmigrante, seleccione Reapply Online/Readmisión por la red.

¿Está estudiando en los Estados Unidos como estudiante internacional o con una visa de no-inmigrante?

De lanecc.edu, seleccione Help for Students/Ayuda para estudiantes en la columna superior izquierda y seleccione International Students/Estudiantes internacionales en la columna "New Students/Estudiantes nuevos".

¿Eres menor de 18 años y quieres tomar clase con valor curricular?

De lanecc.edu, selecciona Help for Students/Ayuda para Estudiantes en la columna superior izquierda y selecciona Under 18 Years/Menor de 18 años en la columna "New Students/Estudiantes nuevos".

¿Quieres obtener crédito curricular en Lane mientras cursas la preparatoria?

De lanecc.edu, selecciona "High School Connections/Conexión con preparatorias" en la esquina superior izquierda para informarte cómo puedes matricularte para College Now, RTEC, Expanded Options y otras clases en colaboración con las preparatorias.

Paso 2: Solicite ayuda financiera

De lanecc.edu, seleccione Help for Students/Ayuda para estudiantes en la columna superior izquierda y seleccione Ayuda Financiera en los cuadros de estudiante "New/Nuevo" o "Current/Actual".

Paso 3: Haga una cita para el Examen de Ubicación (después de recibir su número L).

En la página inicial de Lane, seleccione "Pasos para matricularse en clases con valor curricular: Estudiantes de nuevo ingreso o de traslado" en el cuadro de Avisos para Estudiantes.

Haga clic en el Paso 3 y siga las instrucciones para hacer su cita para el Examen de ubicación. Es necesario hacer su cita para el examen de ubicación antes de pasar al Paso 4.

Paso 4: Hacer cita para la Orientación Estudiantil, Asesoría e Inscripción (SOAR por sus siglas en inglés)

En la página inicial de Lane, seleccione "Pasos para matricularse en clases con valor curricular: Estudiantes de nuevo ingreso o de traslado" en el cuadro de Avisos para Estudiantes.

SOAR incluye asesoría académica e información para estudiantes nuevos. Un taller opcional Money Matters se ofrecerá el mismo día. Haga clic en el Paso 4 y siga las instrucciones para hacer su cita para SOAR.

Para ver los programas de certificación y de grado técnico que ofrece Lane, vaya a la página inicial de Lane y seleccione Catalog/Catálogo en la columna de lado izquierdo para revisar los programas que actualmente ofrece Lane.

Paso 5: Inscríbese a clases

Repase las clases con valor curricular que se ofrecen cada trimestre así como la disponibilidad actual de cada clase.

De lanecc.edu, seleccione el enlace con las clases del trimestre deseado, p.e. Spring Classes/Clases de primavera y seleccione Credit Class Listings by Subject/Lista de clases con valor curricular por materia para ver las clases que se ofrecen y su disponibilidad actual.

De lanecc.edu, seleccione Help for Students/Ayuda para estudiantes en la columna superior izquierda y lea las instrucciones para inscribirse a clases en la columna de "New Students/Estudiantes nuevos".

Examine la fecha límite para el reembolso y el proceso de pagos.

De lanecc.edu, seleccione Help for Students/Ayuda para estudiantes en la columna superior izquierda y seleccione Paying for Classes/Pago por clases en la columna de "New Students/Estudiantes nuevos".

Si tiene cualquier pregunta sobre los programas ofrecidos en Lane Community College, comuníquese con Counseling and Advising Center:

Por correo electrónico: coundept@lanecc.edu, llame al 541.463.3200, o visite el Centro de Consejería y Asesoría en el edificio 1, salón 103 del plantel de la Avenida 30.

Para la versión en red de los pasos anteriores, vaya a:

lanecc.edu/counseling/stepstoenroll

Overview of Academic Programs

Lane Community College is a comprehensive community college offering career and technical and lower division college classes.

The college offers classes at a number of locations in addition to the main campus. These include the Downtown Center in Eugene, Lane Community College at Florence, Lane Community College at Cottage Grove, and facilities at the Eugene Airport.

In addition to weekday classes, Lane offers some evening and Saturday classes. Evening and Saturday classes for credit are offered on the main campus and at outreach centers. By selecting from among these classes, students can earn college transfer credit or work toward a certificate or degree in one of Lane's career and technical programs. Evening courses are listed in the class schedule on Lane's website at lanecc.edu.

Lane also offers a variety of different ways students can learn ranging from traditional lecture or lecture/lab classes to open-entry/open-exit classes that permit students to begin and end the class when they wish.

Career and Technical Programs

Career and Technical Programs lead to certificates and associate of applied science degrees. Many classes required to complete two-year programs can be transferred to four-year colleges. Others do not transfer.

For a list of Career and Technical Programs offered at Lane, see pages 52-53. For information about specific programs, see pages 68 - 161.

College Transfer Classes and Degrees

The college offers lower division (freshman and sophomore) college credit classes so that a student may complete the first two years of college at Lane.

Lane offers several college transfer degrees and preparation for a number of college transfer majors. For a complete list of majors, see page 51.

Associate of Arts Oregon Transfer Degree (AAOT)

- Designed for students who want flexibility to transfer to any school in the Oregon University System (OUS).
- AAOT accepted to meet lower division general education requirements
- Ensures junior status for registration purposes
- Limited transferability of career technical courses
- Does not guarantee admission to OUS institutions

Associate of Science Oregon Transfer — Business Degree (ASOT-BUS)

- Designed for students who want flexibility to transfer to any school in the Oregon University System with business-focused general education requirements.
- ASOT - Bus accepted to meet lower division general education requirements
- Ensures junior status for registration purposes
- Limited transferability of career technical courses
- Does not guarantee admission to OUS institutions

Associate of Science

- Designed for some transfer majors to match requirements at some four year colleges
- May meet some lower level division general education requirements, but not guaranteed
- Ensures junior status for registration purposes
- Limited transferability of career technical courses

Associate of General Studies

- Designed for students not pursuing a specific transfer or career technical program
- Offers great flexibility in elective credits
- May meet some lower division general education requirements, but not guaranteed
- Limited transferability of career technical courses

Direct transfer

- Designed for students pursuing a specific transfer major at another college or university
- Contact Counseling for information on Direct Transfer

Cooperative Education

Cooperative education (Co-op) offers career/technical and college transfer credit for practical work experience related to a student's educational and career goals. Co-op education provides a student with an opportunity to apply theory learned in the classroom to work experience in a career field. The objective of co-op is to provide an on-the-job learning experience in a business or organization which adds meaning and direction to the student's total education. Cooperative education is available in all academic departments.

Advantages to the Student

- financial support through paid employment while earning credit
- guidance in career expectations and demands
- help in locating part-time or full-time employment which may lead to regular employment
- development of skills and self-confidence
- early exploration and confirmation of career choice
- development of job contacts and a work history
- increased motivation for academic achievement
- instruction in resume preparation and interviewing skills

Cooperative education is a three-way partnership which includes the student, Lane Community College, and the co-op employer. Co-op provides a way for a student to combine study at Lane with work experience under the supervision of an employer and, like classroom work, is an integral part of a student's educational preparation.

Lane Community College's Cooperative Education is the second largest among two-year colleges in the United States offering cooperative education. An outstanding model internationally, Co-op has quality learning opportunities locally, regionally, nationally, and internationally. Over 2,000 Lane students each year enroll in co-op and work in both paid and non-paid positions. More than 800 employers participate in Co-op each year. Sixty-five percent of all co-op students are retained by employers as regular employees after graduation, although employment is not guaranteed.

To participate in cooperative education, a student is usually expected to successfully complete a specified set of courses prior to the work experience. Students must consult a co-op coordinator (see the

following list) to set up a cooperative education learning experience. Student compensation is at a rate of pay comparable to employees who do similar work. In some instances, students may receive credit for volunteer or non-paid experiences.

Registration Procedures

1. meet with co-op coordinator in area of study
2. establish credits
3. complete agreement form
4. register for the co-op course

Credits Course credit may be earned for work experience if a job is related to either the student's major or occupational goal. The student enrolled in co-op receives credit and a grade for work. Normally, a maximum of 18 co-op credits will transfer as elective credit. Credit is assigned on the basis of one credit for 36 hours of work experience. Entry into co-op is by coordinator consent. Certain career and technical programs require co-op credits. Unless prior approval is received from the Cooperative Education Division chair, students must enroll for a minimum of three credits. Co-op is offered all terms and students may earn up to 12 credits in one term. Cooperative education credits may not be audited or taken pass/no pass. Co-op credits may not be earned for past work experience (see Student Records for Credit by Assessment).

The Cooperative Education Division administers co-op courses. To learn about cooperative education, visit the website: lanec.edu/cooped/ or drop by the Co-op office, Building 19, Room 231 or call 541.463.5203.

The following is a list of Cooperative Education coordinators. Students should contact the coordinator in their program prior to enrolling in a cooperative education course.

Curriculum or Transfer Area	Coordinator
Accounting	Jamie Kelsch
Administrative Office Professional	Jamie Kelsch
Aerobics	Sue Thompson
American Indian Languages	Tamara Pinkas
Anthropology	John del Nero
Art & Applied Design	Teresa Hughes
Athletic Training	Sue Thompson
Athletics	Sue Thompson
Auto Body & Fender/Paint & Collision	Marv Clemons
Automotive	Marv Clemons
Aviation Maintenance	Marv Clemons
Biology	Staff
Business Management	Jamie Kelsch
Chemistry	Staff
Coaching	Sue Thompson
Computer Specialist	Staff
Computer Network Operations	Staff
Computer Programming	Staff
Computer User Support	Staff
Construction	Marv Clemons
Corrective Fitness	Shannon Gaul
Criminal Justice	John del Nero
Culinary Arts	Joe McCully
Data Processing	Staff
Dental Assisting	Leslie Greer
Dental Hygiene	Leslie Greer
Diesel	Marv Clemons
Disney World	Jamie Kelsch
Curriculum or Transfer Area	Coordinator
Dietary Manager	Tamberly Powell
Drafting	Tamara Pinkas
Early Childhood Education	Kathleen Lloyd
Education (K-14)	Merrill Watrous

Electronics Technology	Marv Clemons
Emergency Medical Technician	Tom Brokaw
Energy Management	Staff
Engineering (Transfer)	Staff
English/Writing	Tamara Pinkas
Environmental Studies	Staff
Ethnic Studies	Beverly Farfan
Fitness	Sue Thompson
Fitness Management	Sue Thompson
Flight Technology	Marv Clemons
Florence	Marv Clemons
French	Merrill Watrous
Geography	John del Nero
Geology	Staff
GIS	Lynn Songer
Graphic Design	Teresa Hughes
Health Informatics	Staff
Health Occupations	Chuck Fike
Health Records Technology	Chuck Fike
History	John del Nero
Hospitality Management	Joe McCully
Human Services	Garry Oldham
International Work Experience	Tamara Pinkas
Japanese	Merrill Watrous
Journalism	Dorothy Wearne
Landscape	Chuck Fike
Legal Assistant	Jamie Kelsch
Manufacturing Technology	Marv Clemons
Mathematics	Staff
Medical Office Assistant	Marti Pittman
Multimedia	Teresa Hughes
Music	Teresa Hughes
Nursing	Jennifer Tavernier
Performing Arts	Teresa Hughes
Physical Education	Sue Thompson
Physical Therapist Assistant	Beth Thorpe
Physics	Staff
Political Science	Steve Candee
Pre-Law	Steve Candee
Psychology	Beverly Farfan
Recreation	Sue Thompson
Respiratory Therapy	Norma Driscoll
Retail Management	Jamie Kelsch
Sales and Marketing	Jamie Kelsch
Science Technology	Staff
Service Learning	Beverly Farfan
Simulation and Game Development	Staff
Sociology	Beverly Farfan
Spanish	Tamara Pinkas
Speech	Tamara Pinkas
Sustainability	Staff
Teacher Education Preparation	Merrill Watrous
Water Conservation Technician	Staff
Watershed Science Technician	Staff
Welding	Marv Clemons
Wellness	Sue Thompson

High School Connection

Curriculum for High School Students

Lane's High School Connections office provides assistance to high school students to make the transition from high school to college. Local students have an opportunity to earn college credit while being dually enrolled at their high school and Lane, through the College Now and RTEC programs. Lane Community College does not offer high school completion diplomas.

College Now classes are taught in the high school during regular school hours by high school instructors approved by Lane. These

classes are similar to those offered in Lane programs, including course content, textbook and length of course. Courses are taught in many subject areas including English, French, Spanish, art, social science, math, business, culinary, early childhood education, graphic design, drafting, fabrication/welding, and others. College Now credits are free for 2012-13 academic year.

RTEC provides rigorous and relevant career and technical training according to industry standards. These classes fill the gaps where high schools can no longer offer these courses. RTEC also provides accelerated career technical courses for high schools that need advanced opportunities for their students. Courses are taught at Lane, at the high schools or on line in areas such as apprenticeship, automotive technology, aviation science, drafting, health occupations and computer programming.

Additionally, the High School Connections office works with local school districts who want to sponsor high school students in academic transfer classes through the Expanded Options Program or independently. At times, school districts contract for a college level career technical class to be provided at the high school site.

For more information about High School Connections programs, visit the website at lanecc.edu/hconnections or call 541.463.5521.

Honors Program

The Lane Honors Program provides you with a transformative learning experience centered around scholarly inquiry, academic rigor, and intellectual growth. Through challenging coursework, special seminars, and a capstone project, you will develop your critical thinking skills, creativity, and intellectual curiosity.

As an honors student, you will receive many educational benefits, including:

- collaborative learning with other engaged students
- faculty mentorship
- guest speakers and honors events
- graduation from Lane with honors and a competitive edge when applying for scholarships and 4-year universities

If you are transferring to a four-year institution, you will be well-prepared for upper division coursework and university honors programs. If you are a non-transfer student, you will benefit from the program's opportunities for personal enrichment.

The majority of Lane honors classes fulfill general education requirements for transfer degrees. Most Lane honors classes are also open to any student prepared to complete honors-level coursework; however, the honors seminars are only open to students formally accepted into the Honors Program. Lane currently offers the following three types of honors classes:

Honors courses: each student in the class completes honors-level coursework; open to all students.

Honors options: traditional classes in which students can elect to complete honors-level coursework; open to all students.

Honors seminars: required for honors students; open only to students who have applied for and been accepted into the Lane Honors Program.

For a list of current classes, to learn more about the Honors Program or to apply, please visit our website at lanecc.edu/honors/ or email honors@lanecc.edu with questions.

Human Development Classes

The teaching component of Counseling is called the Human Development Department.

The Human Development Department offers classes which help students with entering college, career and life planning, decision making, maintaining productive personal and work relationships, understanding families and children, parenting skills, and coping with stress and depression. Personal awareness and growth in applied life skills is emphasized.

Some courses with CG, CPSY and HS prefixes fulfill the social science/human relations component for the associate of applied science degrees and certificates, associate of science, associate of general studies degrees and certificates, and count as electives for the associate of arts Oregon transfer degree.

The department offers both credit and noncredit classes. Methods of delivery include classroom, independent study, telecourse, and online.

International Learning Opportunities

International Cooperative Education

The International Cooperative Education program, in partnership with IE3 Global Internships, provides international work opportunities where students earn graded, elective college transfer credit. A wide variety of work experiences are available throughout the world, including Africa, Asia, Australia, North and South America, and Europe. Living and working in a different culture gives students the chance to acquire both technical and international skills that are invaluable in today's global society. For more information, look at ie3global.ous.edu or contact Tamara Pinkas, Cooperative Education Division, Building 19/ Room 231D, 541.463.5011.



Courses with International Focus

Courses with an international focus are available in many subjects including visual arts, music, literature, language, anthropology, geography, and history. Currently, these include:

ANTH 103 Cultural Anthropology	GEOG 214 Mexico and Central America
ANTH 211 Selected Topics in Ethnology: Folk Religions	GEOG 216 Geography Pacific Asia
ANTH 227 Prehistory of Mexico	HE 255 Global Health
ANTH 228 Cultures of Mexico	HST 104, 105, 106 World History
ANTH 229 Chicano Studies	HST 195 History of Vietnam War
ART 207 History of Asian Art: India	HST 261 Latin American History
ART 208 History of Asian Art: China	MUS 108 Music in World Culture
ART 209 History of Asian Art: Japan	PS 205 International Relations
ART 217 Islamic Art	PS 211 Peace and Conflict Studies: Global
D 251 Looking at Dance	REL 201 Religions of India
ECON 204 Introduction to International Economics	REL 202 Religions of China and Japan
ENG 107, 108, 109 Survey of World Literature	REL 203 Religions of the Middle East
ENG 213 Survey of Asian Literature	REL 243 Nature, Religion and Ecology
ENG 215 Latino/a Literature	SOC 216 Global Social Movements
ENVS 182 Atmospheric Environment and Population	SPAN 101, 102, 103 First Year Spanish
FR 101, 102, 103, 150, 151 First Year French	SPAN 201, 202, 203 Second Year Spanish
FR 111, 112, 113, 211, 212, 213 Conversational French	SPAN 211, 212, 213 Conversational Spanish, Intermediate
FR 201, 202, 203 Second Year French	SP 115 Introduction to Intercultural Communication
GEOG 103 Cultural Geography	
GEOG 201 World Regional Geography	

For more information, see the course descriptions in this catalog, or call the appropriate academic department.

LaneOnline (formerly Distance Learning)

LaneOnline provides courses delivered through technology to students at a distance from their instructor. The Associate of Arts Oregon Transfer (AAOT) degree can be earned through LaneOnline. Significant coursework can also be completed for the Associate of General Studies and Associate of Science degrees. There is an annual course schedule online.

Online Courses Online courses are complete courses that include lectures, notes and assignments delivered on the internet. Interaction with the instructor and other students is provided through discussion forums and email. Some online courses have on campus labs or exams, or require viewing video programs.

Telecourses Telecourses include weekly video telelessons, use of the internet, email textbooks, assignments, and examinations. Students can view telecourses on cable TV, in the Lane Library, and at LCC at Cottage Grove and Florence. Some courses can be downloaded, streamed, purchased, or rented on DVD. Exams are usually taken on campus.

Live Interactive Courses Students enroll in these courses and, depending on the course, participate by attending on campus or through videoconferencing at an off campus location, or a few courses may be viewed live on cable television.

IP Videoconferencing Services Videoconferencing services are available for both receiving and originating. The college's codec equipment is compatible with most standards.

Tuition for LaneOnline courses is the same as other courses. Additional fees may be charged.

For more information about telecourses, online, live interactive courses, or IP videoconferencing, call LaneOnline 541.463.5893 or see lanecc.edu/distance.

Learning Communities

What are Learning Communities?

Learning Communities are a great way to learn! They help you stay engaged and motivated while you pursue your college and life goals.

Learning Communities classes can be linked in several ways:

- Around a goal, such as writing a successful scholarship application, successfully making a life transition, or succeeding in college
- Around a question, such as how to approach the environment in a sustainable way
- Around a theme, such as the role of food in our culture

Students enroll in two or more classes together, creating a common cohort or "community." Faculty also work together, often attending the different classes too. Your learning experiences are enhanced by this sense of community and common understanding across disciplines. National research shows that students who take learning communities succeed at higher rates than students who take stand-alone courses. And learning communities classes fulfill the same degree and certificate requirements as stand-alones!

The actual structure of Lane's learning communities vary among classes and instructors. Some learning communities have very closely integrated curricula, so that the classes seem to "talk" to one another throughout the term. Other learning communities are more loosely organized, and the "community feel" comes from getting to know classmates well and investigating a theme across disciplines.

For more information on how to sign up for a learning community at Lane, go to our website: lanecc.edu/lc or call Anne McGrail, Learning Communities Coordinator, at 541.463.3317.

2012-2013 Learning Communities

Lane's First Year Experience Learning Communities

New Students! Get a jump start on your core classes, met new people and learn the skills to succeed in college and in life. Take a First Year learning community and get connected.

First Year Learning Communities are geared to your success. Take these linked courses and learn proven strategies to make wise choices about school and life. See detailed course offerings for this term at lanecc.edu/lc. Choose from among these options:

Fast Lane to Success

CG100	College Success
EL 115	Effective Learning
WR 095	College Writing Fundamentals
WR 115	Introduction to College Writing
WR 121	Introduction to Academic Writing

Math Success

CG100	College Success
EL115	Effective Learning for Math
MTH 020	Math Renewal
MTH 060	Beginning Algebra

Beyond the Field: Fast Lane for Student Athletes

CG100	College Success geared to the student athlete
WR 80, 90, 93, 95, 115, or 121	(Placement test determines writing class)

Visualizing Success: Fast Lane for Art Majors

CG 100	College Success
ArT 199	Introduction to the Art Major

Women in Transition

CG220	Life Transitions
CG140T	Career and Life Planning

Recommended but not required:

CG199 T	Career and Life Planning 2
CG199WSS	Life Transitions 3
BT030	Computer ABCs for Women in Transition
CG100T	College Success WIT
CG207	Life Transitions 2
EL115T	Effective Learning: Women in Transition
MTH010A	Whole Numbers: Fractions and Decimals
MTH020	Math Renewal
PE183U	Strength Training for Women
WR115T	Introduction to College Writing: Transitions
WR121T	English Composition: Transitions

Other Learning Communities**Food for Thought (fall, spring terms)**

MTH 025	Basic Math Applications (fall)
CA170	Cooking Theories and Skill Development
and/or	
WR115	Introduction to College Writing (spring)
CA 186	Restaurant and Kitchen Lab 2

BioBonds: Building Blocks for Your Body

CH 112	Chemistry for Health Occupations
BI 112	Biology for Health Occupations

Native Circles

CG101	Native Circles: It's Your Life
-------	--------------------------------

Show Me the Money (winter term)

WR105	Writing for Scholarships
CG105	Money for College

Reconnecting with Nature (spring term)

REL 243	Nature, Religion and Ecology
PS 297	Environmental Politics
BI 103G	General Biology-Global Ecology

Service Learning

Would you like to remove invasive plants from a wetland, prepare dinners at a community meal site, tutor youth at-risk in math or writing, educate others about health risks, or advocate for abused women. These are examples of service learning, a hands-on approach to learning that encourages students to increase their knowledge and skills through connections and experiences working in the community.

Students work outside their classroom in addressing real community needs. Students identify learning activities, learning objectives, and engage in reflection activities designed to promote critical thinking, problem solving, and civic awareness.

Service Learning course formats vary. Service learning activities may be required, an optional assignment, or extra credit.

For more information, visit lanecc.edu/sl or call 541.463.5395 or email farfanb@lanecc.edu

BA 195	Professional Service and Development
BI 101I	Botanical Beginnings
BI 102H	Forest Biology
BI 103F	Wildflowers of Oregon
BI 103J	Forest Ecology
COOP 280SL	Cooperative Education: Service Learning
HE 255	Global Health
HS 201	Introduction to Human Services
HS 228	HIV/AIDS and Other Infectious Diseases
SOC 108A	Selected Topics: Women's Bodies
SOC 207	Women and Work
SUST 101	Introduction to Sustainability
WATR 101	Introduction to Water Resources
WATR 105	Water Conservation Indoor
WATR 107	Water Conservation Outdoor
WS 101	Introduction to Women's Studies



Tuition, Fees, Financial Aid and Payment

Noncredit Community Education Classes

Noncredit Community Education students pay the following charges:

Tuition + fees	listed next to each class
Resource fee	\$5 per term

Credit Classes

Credit students pay the following charges:

Tuition	see below
Class fees	listed next to each class
Technology fee	\$5 per credit
Other fees	see below

Tuition

Residents of Oregon	\$90 per credit hour
Non-residents of Oregon	\$220 per credit hour
International students:	
Fall winter and spring terms	\$220 per credit hour
Summer term	\$153 per credit hour

Other Fees

ASLCC Student Activity Fee*

Credit students taking main campus classes\$48.40

OSPIRG \$3; Childcare \$8.62; ASLCC Operations \$7.44; Recreational Sports \$12; International Student Program \$2; BSU \$.50; Women's Program \$2; Torch \$2.75; Student Clubs and Organizations \$1; OSA \$2.44; Learning Garden \$1.50, Long House \$3, Student Production Assoc. (SPA) \$.50; Military Vets \$1; NASA \$.65

*This fee is subject to change pending ASLCC elections.

Credit by Examination and Credit by Assessment

Examination/assessment fee\$55 per credit hour

First Time Credit Enrollment Fee\$30

Student Health Fee\$12

Transportation Fee (nonrefundable)

Credit students on main campus\$27 per term

All noncredit classes and credit classes not held on the main campus\$5 per term

For more information, see the Locations and Transportation section in this schedule. Fee is subject to annual increases.

International credit students also pay

International student fee\$11 per credit hour

Photo ID\$5

A LCC photo ID is not required to attend Lane. It is available to all currently registered students as an alternate form of photo identification. A card may be purchased through Enrollment and Student Financial Services, Building 1.

Transcript Fee

Transcript\$5

Transcript Rush Fee**\$5

Transcripts are now available on **myLane** at lanecc.edu. Fees for transcripts ordered on **myLane** will need to be paid with VISA or MasterCard.

** Transcripts that are purchased from Enrollment and Student Financial Services or for transcript requests that indicate that they need rush service will be charged the **Transcript Rush Fee**.

Average Total Costs

Typical average yearly expenses excluding room and board, transportation, tools, and personal expenses:

Tuition	\$3,096
Books	\$1,275
Special and Miscellaneous Fees (varies by program)	\$297
Student Activity Fees	\$143.25

A mandatory ASLCC student activity fee is required of all students taking credit classes on Lane's main campus.

Tuition rates, fees and refunds are subject to change without prior notice.

Differential Pricing Program

Beginning with the 2003-04 academic year, Lane's Board of Education approved a differential pricing program to preserve some higher cost career and technical programs. Some courses in the following programs currently have differential fees: Auto Body and Fender, Automotive Technology, Culinary Arts, Diesel Technology, Manufacturing Technology, Dental Hygiene, Dental Assistant, EMT/Paramedic, Medical Office Assistant, Health Records Technology, Nursing, Practical Nursing, Physical Therapist Assistant, and Respiratory Care.

Determination of Residency

Residents of Oregon

In-District* A student at least 18 years of age or a high school graduate who has maintained a permanent residency within the college district for no less than 90 continuous days prior to the first day of the term is classified as In-District. Residency requirements must be met prior to the date that a term begins.

To change residency to In-District or In-State, the student must initiate the change by printing out a residency form available in the forms section at lanecc.edu/es/forms.html. Students must hand the form directly to an Enrollment and Student Financial Services advisor at Enrollment and Student Financial Services, main campus.

* In-District includes Lane County, Monroe Elementary District, and Harrisburg Union High School District.

In-State (Out-of-District) A student who has maintained a permanent residency within the state for no less than 90 continuous days prior to the first day of the term is classified as In-State and pays Oregon tuition. Residency requirements must be met prior to the date that a term begins.

Students who have maintained permanent residency within the states of Washington, Idaho, Nevada, or California for at least 90 days prior to the first day of the term also pay In-State tuition at Lane.

This exception in tuition does not allow for an exception in residency requirements for special or limited enrollment programs.

Out-of-State and International

There are two residency categories in addition to In-District and In-State:

- Out-of-state but a citizen of the United States or registered resident alien.
- International (not a U.S. citizen or registered alien). International students do not become residents regardless of the length of residency within the district.

Special Circumstances A student may be classified as In-District or In-State if special circumstances can be documented. The following criteria are used to define special circumstances:

- A veteran and or veteran's dependants who have established permanent residence inside the college district within 90 days prior to the first day of the term and within one year of veterans discharge from active duty will be considered in-district.
- A DD214 (military discharge papers) for the veteran or a DD-93 (record of emergency data listing dependants of veteran) may be required in order to qualify for residency status.
- A released Oregon State prisoner is considered In-District regardless of residency prior to sentencing if a state agency is the sponsor.
- A legal dependent or spouse of a person who has moved into the college district and established a residence is considered In-District.

Residency Student residency is determined from information provided by each applicant to the college. Residency does not change without some kind of student interaction. If a student wants to change residency, the student must initiate the change by visiting Enrollment and Student Financial Services, Building 1. The college may require additional documentation to clarify residency status. Only applicants who can provide sufficient documentation that the 90-day residence requirement clearly has been met will be classified In-district or In-State. Once residency has been changed to In-district or In-State, it cannot be reversed. Residency changes will not take affect until the subsequent term following the change.

Please be aware that being designated as an Oregon resident at Lane Community College does not guarantee the same status with other two-year or four-year institutions, both within and outside the state of Oregon. It is vital that you review the residency requirements at all institutions to understand their in-state residency requirements.

Noncredit Continuing Education Classes have no residency requirement.

Financial Aid

Although paying college expenses is the responsibility of students and their families, many individuals cannot assume the full financial burden of a college education. Financial aid is available to help bridge the gap between the costs of education and available student and family resources.

There are three basic types of financial aid: grants, work study and loans. Typically, students are offered a combination of these financial aid awards. Students must repay loans. Grants, earnings and scholarships are not repaid.

Who is Eligible for Financial Aid?

To be eligible to receive financial aid, a student must meet each of the following requirements:

- Be a U.S. citizen or eligible non-citizen with a valid Social Security number
- Have a high school diploma, a GED certificate, or have completed secondary school in a home school setting prior to the term the student wishes to receive aid

- Enroll as a credit student in an eligible degree or certificate program
- Not be in default on a student loan or owe an overpayment or repayment to a financial aid program
- Maintain Satisfactory Academic Progress (SAP)
- Meet additional eligibility requirements if the student has ever been convicted of sale or possession of illegal drugs while receiving federal student aid
- Complete Lane's reading test and qualify to take Reading 080 or higher
- Be registered with Selective Service if the student is male and born on or after January 1, 1960

Applying for Financial Aid

Applicants should complete a Free Application for Federal Student Aid (FAFSA) as soon as possible after January 1 regardless of when they plan to start college. A new FAFSA must be submitted for each academic year. The awarding process may take several months. Applying for financial aid is free and applicants should never pay someone to apply.

Enrollment and Student Financial Services provides assistance with completing the application process. Financial Aid also conducts workshops at area high schools and community centers each December and January.

The following programs are applied for by filing a FAFSA:

- Federal Pell Grant
- Oregon Opportunity Grant
- Federal Supplemental Educational Opportunity Grant*
- Federal Work Study*
- Federal Perkins Loan* (Subject to change for 2012-13)
- Federal Direct Stafford Loan - Subsidized
- Federal Direct Stafford Loan - Unsubsidized
- Federal Parent PLUS Loan

* Funds are limited and awarded on a first-come, first-served basis.

Applicants may choose from the following methods to file a FAFSA:

FAFSA on the Web Applicants can apply electronically at fafsa.gov, following the online instructions. It is recommended that applicants complete a FAFSA on the Web Worksheet prior to filing the application. Worksheets are available online at fafsa.gov

Paper FAFSA Applicants may download a PDF FAFSA at fafsa.gov. The completed paper application must be mailed for processing to the address printed on the FAFSA application. If internet access is unavailable, applicants may request a paper FAFSA by contacting the Federal Student Aid Information Center at (800) 4-FED-AID.

Scholarship and Private Donor Funds

A variety of funding resources provide assistance for educational expenses. Students must research and apply for these funds separately. Be wary of "scholarship scams" and organizations that charge a fee. Lane's Career and Employment Services is a great resource for finding scholarship and private donor funds. Other resources include libraries, civic and community organizations, and the internet.

Scholarships and private donor funds have their own application deadlines. Be aware of these when applying.

Receiving Aid

The amount and type of financial aid offered depend on the student's Expected Family Contribution (EFC), financial need, availability of funds, and enrollment level.

EFC and Financial Need EFC is a measure of a student and his/her family's financial strength. The EFC is determined by the federal processor using the information provided on the FAFSA application. Aid for most federal programs is awarded based on financial need. Financial need is the difference between the cost of attendance and the EFC.

Enrollment Level The amount of funding varies with the number of credits a student takes. Students may enroll full time (12+ credits), three-quarter time (9-11 credits), half time (6-8 credits) or less than half time (1-5 credits). Most financial aid programs require at least half-time enrollment.

Satisfactory Academic Progress (SAP) Standards

Students receiving financial aid must maintain SAP standards to remain eligible to receive financial aid. SAP standards apply to all terms attended regardless of whether or not financial aid is received. Regulations require students to complete their program within the Maximum Attempted Credits Allowed with at least a 2.0 cumulative GPA.

Maximum Attempted Credits Allowed (150% Requirement)

Federal regulations require the Financial Aid Office to define a maximum timeframe in which a student must be able to complete his or her program. This timeframe cannot exceed 150% of the published program length. At Lane, a student is expected to complete:

- a one-year certificate program within 70 attempted credits
- a two-year certificate program within 120 attempted credits
- a two-year associate or transfer program within 135 attempted credits

All attempted credits count toward this limit, even if financial aid was not received or there are extenuating reasons for not completing credits. Lane will allow for one program change or the completion of two programs. Additionally, credits earned at other colleges may help a student complete their degree or certificate; therefore, all credits accepted by Lane are included in the maximum credits allowed.

Developmental Credit Limit Students may be eligible to receive financial aid for 45 quarter credits (or equivalent) to complete developmental courses. This includes coursework taken at all colleges. Per regulation, there is no appeal process to extend past this limit. Developmental credits in excess of 45 may not be included in the enrollment level when determining the amount of financial aid received during the term.

Developmental courses currently offered at Lane include all courses numbered 001-099 (unless published as a requirement for the current program); and ENG 116. ESL courses are not considered developmental. Some older developmental courses may not adhere to the current numbering system.

To view Lane's complete SAP Standards, see lanecc.edu/finaid/sap.

Consequences of 100% Withdrawal Withdrawing from all classes may result in financial debt and make a student academically ineligible for future financial aid (including loans). Congress specifies that students must earn financial aid over the course of a term by attending and participating in classes for at least 60% of the term. Students who withdraw or stop attending before this point do not earn all of their aid. Lane is required to return the unearned portion to the U.S. Department of Education. As a result, the student will owe Lane for the unearned portion.

For more information about withdrawal, go to lanecc.edu/finaid/withdrawal-info.

Paying for Classes

When you register for a class, you are agreeing to pay for the class. If you cannot attend the class, you must drop the class within the timelines listed in the class schedule or the college will charge you for it. See Refunds and Financial Aid for more information.

You may pay your college bill in the following ways:

By Web

Payments can be made on the web by check or savings account, VISA or MasterCard. Log on to lanecc.edu and access myLane. Once in myLane, click on "myMoney" tab, then click on "Make an Online Payment." Contact Enrollment and Student Financial Services at 541.463.3100 if you have questions about payments on the web.

By Mail

Send your payment to Lane Community College, P.O. Box 7100, Springfield, OR 97475-0025. You can pay by check or money order payable to Lane Community College. Include your student ID number ('L' student ID number).

With a Sponsoring Agent

If a sponsoring agency is paying some or all of your educational expenses, it is your responsibility to see that the agency has provided written authorization to Enrollment and Student Financial Services before you register. If the college doesn't receive your authorization in a timely manner, finance charges will be added to your account balance.

With Financial Aid (credit students only)

Assistance from financial aid is intended to help pay your educational expenses; however, if you do not receive the aid you expect or in time to apply to each terms bill, you still owe the college for charges to your Deferred Billing Terms Agreement account and have the same financial obligations to the college as any other student. If you receive financial aid, that aid will be used to pay all or part of your Deferred Billing Terms Agreement account, depending on the amount of your financial aid awards. The college disburses any remaining financial aid funds to your HigherOne Lanecc Debit Card, direct deposit or check. You will receive written directions on how to choose your refund option according to the financial aid disbursement schedule. For more information about the "LaneCC Debit Card", go to laneccdebitcard.com.

For more information, see the sections on Deferred Billing Terms Agreement, Refunds and Financial Aid in this catalog.

If you have questions about your bill, contact Enrollment and Student Financial Services at 541.463.3100.

Deferred Billing Terms Agreement

When you register for the first time, the college sets up a college charge account to process your tuition and fees, other charges, credits, refunds, financial aid disbursements, and payments. You are responsible for paying your account in full, even if you are sponsored, expect to receive Financial Aid, think that a family member will pay, or never attend the class.

Payments On Account Using myLane at lanecc.edu Students will be able to make payments on outstanding balances using myLane. Students taking credit classes will not be mailed a billing notice until the final pink notice is mailed the month before an unpaid account

goes into collection status. Credit level students may use the Billing Statement link under Student Records in myLane to arrange to have a paper bill mailed. Non-credit level students will be mailed paper statements unless they opt not to receive them. myLane will accept partial or full payments using credit cards, checks, or savings accounts. Refunds will be credited to the student's Lane account, and any credits/balance due will be mailed to the student. If a student is eligible to receive a refund, but has a balance owed to Lane, which could be for the next term, the refund will be applied to the outstanding debt. Lane uses a third party pay system called Third Party Payment Authorization to allow you to assign access to a third party to make payments on your account. You may review the complete instructions on setting this up at lanecc.edu by clicking "Students," "Paying for Classes" and "Third Party Authorization." All transactions are handled through a secure payment system.

General Account Information

To find out how much you owe, access myLane at lanecc.edu, click on "myMoney" tab.

You must pay all money you owe the college before you can register each subsequent term.

Late Fees

- The college will assess a late fee of 2 percent on your unpaid balance from a prior billing period.
- A billing period is the time between statements.

Notify the college if your address changes by using myLane. It is your responsibility to maintain a current address, phone number and email in myLane at all times. The college will block you from registering or making any schedule changes if we receive returned mail. At the end of each term, any account with an invalid address and a balance forward will be moved to a collection status.

The college will charge you a returned item fee for insufficient funds checks or rejected VISA or MasterCard charges.

The college has the right, without prior notice, to stop or suspend the extension of financial credit, withhold services, apply

some non-payroll monies due you as a payment on your account, and/or turn your account over to a collection agency, under the following circumstances:

- The post office returns a bill the college sends you.
- The bank refuses payment on checks you write.
- Your VISA or MasterCard payment is declined.
- Failure to pay.

Withholding services means that the college may withdraw you from your current classes, block your registration for future classes and workshops, and withhold transcripts.

Consequences of Not Paying

If you fail to pay your account, the college may take any or all of the following actions:

- Require immediate payment in full
- Purge advance registration for future term
- Block enrollment for any future terms
- Decline to provide official transcripts
- Turn accounts over to a collections status for non-payment after four months*
- Garnish Oregon State Tax Return

* Students will receive a final notice for accounts that are overdue before the college assigns them to a collection status and reports them to a credit bureau. The collection agency will add additional collection fees, court and attorney costs to account.

Past Due Accounts Assigned to a Collections Status After

Four Months Accounts will be turned over to a collections status for non-payment after four months. Students will receive a final pink billing statement for accounts that are overdue before the college assigns them to a collection status and reports them to a credit bureau. Failure to maintain a correct address in myLane will result in your account going to collection status if unpaid.

Past Due Accounts Must be Paid at the Assigned Collection Agency

Students are not able to make payments to Lane for past-due accounts that have been assigned to a collection agency. Students wishing to pay off outstanding debts to Lane will be referred to the collection agency responsible for their account and will need to make payment in full to that agency.



Students who have paid their accounts in full with the collection agency will not be able to register or have a transcript released until Lane receives the funds from the collection agency and the Lane account balance has been completely cleared. Payments from collection agencies can take eight weeks to reach Lane. No exceptions will be made to allow a student to register or receive an unofficial or official transcript until the account shows paid in full in myLane at lanecc.edu.

Refunds

Tuition

When you register for a class, you agree to pay for it. If **you officially drop** the class by the refund deadline, the college will refund your tuition. If the **college cancels a class**, we will refund your tuition in full. **It is your responsibility to drop any class that you do not plan to attend. Students must use myLane to officially drop a class.** Refer to class schedule for deadlines.

Lane has an **all** or **no** refund policy. Whether or not a student receives a refund or **not** is based on the length of the class and the date that the student drops the class. Students who drop after the refund deadline **will not** receive a refund or credit for dropping the class. (Tuition is not prorated.) If a refund is applicable, the amount is automatically posted as a credit to the student's Deferred Billing Terms Agreement account.

Interpreting the table below, the class duration is the number of weeks the class is scheduled to meet. "Refund Deadline" means by midnight (11:59 p.m.) on Sunday of the first week. For workshop refunds, students need to contact the sponsoring department.

Credit and Noncredit Classes Tuition Refund Table

Class duration	Prior to start of classes	Drop Sunday week 1 by midnight
Classes 4 weeks or longer	ALL of the tuition will be refunded.	ALL of the tuition will be refunded.
Classes 2 to 3 weeks	ALL of the tuition will be refunded.	NO tuition will be refunded.
Workshops & classes, 1 week or less	ALL of the tuition will be refunded if dropped three working days or more before the workshop begins.	NO tuition will be refunded.

It is the student's responsibility to drop/withdraw from any class/ classes he or she does not plan to attend. No refunds or adjustments of tuition and fees will be granted after stated refund deadlines.

Class Fees

Refunds may be computed by myLane when the student enters the drop or withdrawal. Please check with the department if in doubt as to which of the following applies to any of the fees previously assessed for the class subsequently dropped.

myLane

Use myLane for registration, account payments, viewing schedules, class details, and grades. Check each term's class schedule for information on registration dates, getting your "L" number and going on-line in myLane.

ASLCC Student Activity and Registration Fees

If the college cancels your only credit class, or you withdraw from all your classes during the refund period, the college automatically refunds these fees.

How Refunds Are Processed

- Refunds are first applied to any outstanding balance owed.
- If financial aid or a sponsoring agency paid your account, refunds are credited either to you or to the funding source, as appropriate.
- If you have paid your account with VISA/ MasterCard, a refund will be issued to the student by check or onto the [laneccdebit](#) card.
- The college applies all other refunds as a credit to your account. **Refund checks are mailed or loaded onto the [laneccdebit](#) card, weekly.**
- The Transportation Fee is nonrefundable after the full-term refund deadline. No exceptions will be made.

If medical/emergency circumstances beyond your control prevent you from dropping your classes by the refund deadline, you may request an exception to the refund policy. You must complete the Request for Exception to Refund Policy form available at lanecc.edu/es/forms.html and attach medical/ emergency documentation of the circumstances. **Petitions received after the eighth week of the term and/ or without documentation will be denied.**

Statement of Non-Discrimination

If you have a documented medical or emergency reason why you dropped your class after the refund deadline, you can fill out the [Petition for Exception to Refund form](#) (.pdf Requires Adobe Acrobat Reader) and submit it to Enrollment Services. A committee will review your request and respond.

Contact Enrollment and Student Financial Services, 541.463.3100, 4000 E. 30th Avenue, Eugene OR 97405, for petitions about credit classes.

The deadline for submitting petitions requesting an exception to the refund policy is 5 p.m. on Friday of the eighth week of the term. Refund requests submitted after this date will only be considered when a medical emergency prevented you from using myLane to drop classes by the refund deadline. Even if your petition is approved, you may still owe fees and finance charges.

For information about exceptions to the refund policy, call Enrollment and Student Financial Services at 541.463.3100.

Contact the following departments for refund petitions about **Community Education classes**.

- Business Development Center, 1445 Willamette, Suite 1, Eugene OR 97401-4087
- Continuing Education and Educational Outreach, 1059 Willamette St., Eugene OR 97401-3113
- Workforce Development, 4000 East 30th Ave., Eugene OR 97405-0640

If a student does not plan to attend a class, official withdrawal from that class is the student's responsibility.

Academic and Student Services

Academic Advising

Building 1, Room 103, 541.463.3200, coundept@lanecc.edu

Academic advising is available through the Counseling and Advising Center. Lane Community College's academic advising model is replicated in many two- and four-year institutions, and meets the standards of the National Academic Advising Association. The model addresses the student's development from enrollment through graduation. Services encompass student retention, academic advising (student advocacy, program development, course selection, career advising, scheduling and decision-making, and referrals) as well as career and retention counseling (career and life planning, counseling and dealing with obstacles including personal issues that impede success).

Lane uses a comprehensive centralized professional advising unit, with academic advisors, counselors, faculty, and other key staff. Advising teams have shared responsibilities to provide a managed advising system for students. The advising teams are clusters or "neighborhoods" identified with: instructional programs, geographical areas and diversity services areas. An administrator oversees all advising functions.

The Counseling and Advising Center offers students several academic advising services. They help students:

- learn about Lane services and programs,
- understand college procedures,
- obtain up-to-date written information about requirements for Lane programs and degrees,
- plan course schedules to meet personal needs and program requirements,
- understand how credits from prior colleges may be used toward Lane degrees and certificates,
- select from Lane courses that meet degree requirements at Lane and at four-year schools throughout the state,
- and develop ways to do well in classes and feel satisfied about school.

A counselor and academic advisor are assigned to each academic division and to students who are undecided about a major. A list of transfer programs, counselors and academic advisors appears on page 51. A list of career and technical programs, counselors and academic advisors appears on pages 52-53. A list of counselors and academic advisors for students who are undecided is located in Counseling and Advising Center.

Students can arrange to meet with a counselor or academic advisor at the reception desk in the center, by calling 541.463.3200, or directly contacting the counselor or academic advisor. Schedules for the term are posted along with online academic advising resources by going to Lane's website at lanecc.edu, choose Moodle, choose Academic Advising, choose the Academic Advising link for your chosen major or area of interest.

Counselors and academic advisors have in-depth knowledge of academic departments' procedures and resources. New students meet with a department counselor or academic advisor during the program orientation/advisory session. These sessions orient students to their academic programs and provide help with course planning. Students are encouraged to meet with a counselor or academic advisor on a regular basis throughout their stay at Lane.

Representatives from four-year schools in the state make regular visits to Lane Community College. Students considering transfer should meet with these representatives. Schedules of these visits are available in the Counseling and Advising Center.

Class Registration The process known as Advance Registration has been discontinued. Registration for each term is now staged over four days according to the cumulative number of Lane credits earned through studies at Lane (transfer credits do not count). Students are able to easily check to see their registration date and to see if they have any holds or restrictions preventing registration, by going to myLane. For more information, visit the website at lanecc.edu/les/whentoregister. For questions, email RegistrationInfo@lanecc.edu.

Academic Learning Skills

Center Building, Second Floor, 541.463.5439

Academic Learning Skills (ALS) offers courses to improve student success in lower division, career and technical, and transfer courses. ALS courses offer clear and direct articulation with courses required for the Associate of Arts Oregon Transfer degree. ALS coordinates class sequences and outcomes with the following departments and programs: Adult Basic and Secondary Education; English as a Second Language; Language, Literature and Communication; Health Careers; Mathematics; and Women in Transition.

Academic Learning Skills includes:

- **Credit courses to develop skills** The Academic Learning Skills department helps students gain confidence and succeed in college by improving their reading, writing, vocabulary, computer, math, and study skills. Students who are attending college for the first time, who want to improve on previous school performance, or whose goals are to achieve high grades and acquire strong knowledge are provided the instructional coursework to assure their success in college classes.
- **Support for students who have specific learning disabilities** Multi-sensory approaches to learning are included in many skill-building courses. Students strengthen their basic skills through step-by-step instruction.

Credit Courses Academic Learning Skills offers courses for college credit. For more information about courses, see the Study Skills and College Prep heading in the course description section of this catalog. Other specialized courses may be found under the following headings in the course descriptions: Mathematics; Computers: Introduction/Information Systems/Computer Science; Computers: Keyboarding; Women in Transition; and Writing.

Guided Studies Program Guided Studies is designed for students whose placement test scores indicate the need to strengthen academic skills before entering college-level courses. Guided Studies students are required to take appropriate preparatory courses and are restricted from other college-level courses their first term. Students must meet with the Guided Studies counselor/advisor to set up an appropriate academic plan.

Assessment and Testing

Building 1, Room 116, 541.463.5324, lanecc.edu/testing, testingoffice@lanecc.edu

For current information about Testing Service office hours, fees, to make an appointment and other details, please visit lanecc.edu/testing.

Lane Community College offers a wide range of tests to students who want help in understanding themselves and making wise career decisions. The college uses tests as one of several counseling/advising tools, not merely as a record of performance. Testing Services tries to provide all students an opportunity to discuss their test results with a counselor/advisor who will assist them in exploring the meaning and implications of their test results.

Any current Lane student may use Testing Services, and in many cases people who expect to become Lane students may use it. Students who wish to take vocational interest surveys and personality inventories need to see a counselor to determine if a test is desirable and to get a referral. However, students do not need a referral to take GED tests, screening exams conducted for various departments, or the placement tests for new students in reading, writing and math. FAA tests require authorizations in most cases.

Occasionally, in the process of doing research, the college may also require tests of various students or groups of applicants.

Placement tests Placement tests also are available at the Cottage Grove and Florence centers, and many local high schools. Vocational interest surveys are available through counselors at Cottage Grove and Florence.

Many kinds of tests and assessments are available:

- Placement tests in reading, writing, and math
- General Educational Development (GED) tests for people wanting their high school Certificate of Equivalency
- Vocational interest surveys
- Personality inventories
- FAA computer-assisted tests for airplane pilots and mechanics
- Screening tests required for entry into some programs with limited enrollments
- FCC computer-assisted tests for radio applications licenses

Credit for Prior Learning

Generally, there is no need to take a class when a student has already learned the material, no matter where or how. Four alternative ways of earning credit are listed below:

Credit-by-Examination Credit-by-Examination (CBE) gives students the opportunity to demonstrate they have mastered material covered in a Lane course. In some cases, they take written examinations covering the content of a course. In other cases, they give performances or demonstrations of their skills in certain areas. If they are successful, Lane will award them college credit. Students must have completed at least 12 credits of non-CBE coursework at Lane and must currently be enrolled in at least six credit hours. Many courses may be challenged through the CBE process. Information on procedures and fees is available at Enrollment and Student Financial Services in the lobby of Building 1.

Credit-by-Assessment Students who have experience and knowledge in certain areas may receive college credit for many Lane courses through the Credit-by-Assessment (CBA) process. Examples of relevant experiences are work, volunteer work, travel, certain hobbies, noncredit courses, workshops, and work at schools accredited differently than Lane. If a student can describe and satisfactorily document that such learning satisfies one or more course requirements, faculty members will evaluate these accomplishments and may award course credit. Students must have completed at least 12 credits of non-CBE or CBA coursework at Lane and must currently be enrolled in at least six credit hours. CBA is different from having one's transcript evaluated, a service of the Student Records Office, and also is different from the Credit-by-Exam procedure. Information on procedures and fees is available at Enrollment and Student Financial Services in the lobby of Building 1.

The maximum CBE and CBA credit which may be applied to any degree or certificate is 25 percent.

College-Level Examination Program and Advanced Placement

Students may take exams on many college subjects through the College-Level Examination Program (CLEP) and receive credit for satisfactory scores in both general areas and various other specific subject areas. The credit Lane grants also is granted at most four-year colleges and universities. These credits do not appear on the Lane transcript. Lane accepts the following general examinations: social sciences/history, natural sciences, and humanities (arts and letters). Lane also accepts the following subject examinations: American History I and II, American Literature, Biology, Calculus with Elementary Functions, Chemistry (General), English Literature, French, Microeconomics, Macroeconomics, Spanish, and Sociology. Contact the Enrollment and Student Financial Services/Student Records Office for more information.

Students who have earned credit through the Advanced Placement (AP) program, usually through advanced high school courses, may receive credit for satisfactory scores. You need to provide Lane with an official report. To order a report, contact the College Board/Advanced Placement at 1-888-CALL-4-AP.

There is more information on Lane's website on scores and exams for both CLEP and AP.

Miscellaneous Training and Credit

Credit is granted for military training and for work completed at some proprietary schools. Such credit generally applies only toward a vocational program and does not appear on the student's Lane transcript. The student should apply for such credit in Enrollment and Student Financial Services, bringing certificates of completion, school records or other available documentation. The student is notified of the credit granted by requesting a general evaluation (request forms are in Enrollment and Student Financial Services and Student Records), and a record is kept in the student's file. A veteran student will be granted 3 credits of PE (either required or 3 credits in Open Electives) by providing the college with a copy of a DD 214 with an Honorable Discharge.

Career and Employment Services

Building 1, First Floor, Room 102 in Counseling and Advising Center, 541.463.5167, lanecc.edu/ces, ces@lanecc.edu

Career and Employment Services (CES) is the place to go for help with scholarships, job search, career exploration and planning. Many students enter Lane undecided about their educational and career plans. CES can help students with career assessments, occupational information, employment outlook, information on colleges and universities, and education and training requirements. CES staff can guide students to resources that will help them make important decisions about their educational and career goals.

Career Exploration and Planning

- Introductory career assessments for Lane students and community members
- Internet resources
- Career advisors available on a drop-in basis
- Help available for clarifying goals, career exploration/planning
- Career resources at lanecc.edu/ces/careerinfo

Scholarship Resources

- Workshops offered throughout the year
- Annual January workshop, How to Pay for College...In One Day
- Scholarship research at lanecc.edu/ces/scholarships/startingpoints.htm
- Help available for research and scholarship applications

Job Search Assistance

- Job listings for on and off campus jobs at Lane, Job Connection at lanecc.edu/ces
- Help with resumes, cover letters, and mock interviews
- Search job internet sites

Job Fair

- Annual Job fair held in mid-April
- Opportunity for students to connect and network with local employers
- Job Fair information at lanecc.edu/ces/events

Student Service Associates (SSAs) Students trained as peer mentors to work in Counseling and Advising Center and Career and Employment Services. Interested students go to lanecc.edu/ces/SSA

Child Care

Lane's Child and Family Center, Building 24, Room 114, 541.463.5519

The center is state licensed and located on the main campus. It provides care for students, staff and community families. The Child and Family Center is open from 7:00 am to 5:30 pm., Monday-Friday and serves children 30 months to five years old. Classrooms are staffed by professional teachers, Lane students and parents. The center is a lab school for students in the Early Childhood Education program and a cooperative where student parents can work to reduce their fees. Child care grant and subsidy assistance is available. For additional information and fee schedules, contact the Child and Family Education Department office.

Family Connections of Lane and Douglas Counties, Building 24, 541.463.3954, or 800.222.3290 Family Connections (FC) is a community-based program that works to ensure the children of Lane students and other families have access to safe, quality and affordable child care. FC provides the following services:

Parents Parents receive personalized referrals to child care options in Lane and Douglas Counties based on specific family needs. Trained consultants search hundreds of child care listings and offer support in making appropriate child care connections. Parents receive research-based information to help assess the quality of their child care choices.

Child care professionals Assistance in launching a child care business, training, technical assistance, and resources are offered to people who are interested in caring for children. Training topics include first aid/CPR, business development, and child guidance. Classes are offered evenings and weekends. Professional development scholarship opportunities are available on a limited basis.

Servicios en Español Servicios en Espanol son ofrecidos y disponibles a todos.

Employers FC helps employers assess the child care needs of their employees. Enhanced referral services, employer tax credits, dependent care assistance programs, and other family friendly benefit information is available.

Advocacy FC advocates for improving the child care system and produces data reports for public policy and community planning.

More information is available at lanecc.edu/lfc.

Computer Labs

All registered students have unlimited access to open computing labs on the main campus, and at the Downtown, Cottage Grove and Florence Centers. The technology resource fee paid by each student provides this access.

Lab space is available in two locations. The Library offers laptop computers, netbooks, desktop computers, and Macintosh computers. These resources are available during library open hours. The open lab in Building 2, Room 216 offers desktop and Macintosh computers. This lab is open from 9 a.m.-5 p.m., Monday through Friday.

Software includes word processing, spreadsheet, database, graphics, desktop publishing, miscellaneous educational programs, and various program languages. For more information, call 541.463.5288 or see lanecc.edu/it/.

Counseling and Advising Center

Building 1, First Floor, Room 103; 541.463.3200; lanecc.edu/counseling; coundept@lanecc.edu

Counseling provides retention and support services to help students achieve success during their learning experiences.

The counselors, academic advisors and support staff work together to present a variety of services to the diverse student population.

Counselors offer assistance with:

- providing orientation services for new students.
- returning to school and adjusting to changes.
- making career and educational decisions.
- developing academic programs.
- improving interpersonal communication skills.
- coping with stress and depression.
- resolving personal and family problems.
- strengthening student success.

During open hours, there is a counselor available to help students with crises or emergencies.

Lane counselors are highly trained professionals with a variety of credentials. All counselors engage in continuing education to maintain excellence and currency in services. All counselors subscribe to the Ethical Standards of the American Counseling Association, and Licensed Professional Counselors are bound by the Oregon Code of Ethics. These standards and laws protect student confidentiality and other rights. Personal information discussed with a counselor is private and confidential, unless the student gives written permission to share it with others; it involves potential danger to self or others; it involves child, elder or vulnerable adult abuse; a court orders the release of information; or other exceptions in accordance with Oregon statutes.

Students and prospective students may contact counselors or academic advisors directly during their posted office hours or through Counseling. The center is available to prospective students and new students for orientation and information on a drop-in basis, as well as continuing students for advising or for referral for counseling or advising.

Counseling and Advising is open Monday through Wednesday, 8 a.m.-5 p.m.; Thursday, 8 a.m.-4 p.m.; Friday, 8 a.m.-2 p.m. Summer term Monday-Thursday, 9 a.m.-5 p.m.; Friday hours vary. Counseling and advising services also are available at the Cottage Grove and Florence centers. Contact these centers for information or appointments.

Disability Resources

Building 1, Room 218, 541.463.5150, (voice); TTY Relay: 711 541.463.4739, Fax; disabilityresources@lanecc.edu; lanecc.edu/disability

Disability Resources collaborates with students, staff, faculty, and community members to create inclusive, equitable, diverse and sustainable learning environments for all.

The department is a resource for creative problem-solving to enhance access in the following areas:

- Admission/registration assistance, advising and advocacy
- Accommodations for classes, including:
 - Test accommodations (extended time, reduced distraction, reader, scribe)
 - Alternate format (computer text with digital audio, Braille)
 - Technology (computer software and hardware, and other devices)
 - Service Providers (sign language interpreter, classroom aide)
- Consultation, referral and disability awareness information
- Accessibility information, maps and basic mobility orientation

Other departments provide the following services:

Career and Employment Services Career/job/scholarship information is provided for persons with disabilities.

Health and Physical Education Department Health and PE teaches a Fitness Through Corrective Exercise course for temporarily or permanently disabled persons. The instructor sets up an individualized exercise program for each student, taking into account the student's disability, needs and goals.

Library The following technology is available for use in the library; ergo and split keyboards, large screen monitors, scanners, CCTV, headphones, recorders, closed caption decoders, Alva Braille Display, JAWS, Natural Reader and Wynn screen reading software,

Dragon Naturally Speaking speech to text software, Inspiration and Zoomtext. The library is also equipped with automatic doors and wheelchair accessible adjustable workstations.

TRiO Learning Center Students eligible for Disability Resources also may be eligible for services through Lane's TRiO Programs.

Enrollment Services/Financial Aid

Building 1, First Floor, 541.463.3100, 877.520.5391, TTY 541.463.4722, lanecc.edu/es/ or AskLane@lanecc.edu

Enrollment and Student Financial Services provides services for new and returning Lane students. These services include:

- Admission assistance
- Financial aid advising
- Cash payments
- LCC Photo ID cards (optional)
- Receiving documents from students
- Assistance with myLane on:
 - Obtaining financial aid information
 - Registration
 - Ordering official transcripts
 - Making credit card, debit, or check payments
 - Updating address, telephone and e-mail information
 - LaneCC Debit Card

Hours of operation (subject to change):

Monday-Wednesday, 9 a.m. - 5 p.m.; Thursday, 9 a.m. - 4 p.m.; Friday 9 a.m. - 2 p.m. The college is closed on Fridays during summer term.

Food Services

Foodservices provides several dining options around campus for students, faculty and staff. The Cafeteria, the main dining operation located on the first floor of the Center building, provides an assortment of choices for breakfast, lunch and dinner. The Snack Bar features traditional "grill" fare including chicken tenders, burgers, specialty sandwiches, and grab-n-go items. The Foodcourt features pizza, made-to-order sandwiches, salads, soups, Pan-Asian (Asian inspired entrees), the Carver's Station (entrees like "Mom" used to make), Veggie Ville (vegetarian and vegan entrees), and an assortment of drinks and snacks.

Also located in the Center building is Blenders Espresso Bar, which features fresh coffee beverages, blended smoothies, sandwiches, salads, grab-n-go items and fresh in-house pastries. All coffee served is fair trade certified and 100 percent organic.

Located on the first floor of the Health and Wellness Building, is the Juice Bar. The Juice Bar will feature organic coffee beverages, real fruit smoothies, handmade soups and salads, fresh baked pastries, and healthy grab-n-go snacks.

Foodservices also has two limited-service convenience operations that operate on a cash only basis. The Terrace Café located in Building 16 on the second floor serves drip coffee, fresh pastries and grab-n-go snacks. The Hot Dog Cart, located near Bristow Square and when weather permits offers made-to-order burgers, Philly cheese steaks, brats and dogs with all the fixings.

A full line of vending machines located throughout campus offer traditional vending and healthy items.

Search for Lane Community College Foodservices on Facebook for the most up-to-date information on hours of operation, daily menu items and specials.

Hours of Operation (subject to change):

	Mon-Thurs	Fri	Sat-Sun
Foodcourt	7-10:45 a.m. 11:15 a.m.-3 p.m.	7-10:45 a.m. 11:15 a.m.-3 p.m.	Closed
Snack Bar	10:30 a.m.-2 p.m.	10:30 a.m.-3 p.m.	Closed
Blenders	7 a.m.-6 p.m.	7 a.m.-3 p.m.	Closed
Juice Bar	7 a.m.-3 p.m.	7 a.m.-3 p.m.	Closed
Terrace Café	7 a.m.-3 p.m.	7 a.m.-3 p.m.	Closed
Hot Dog Cart	10:45 a.m.-3 p.m.	10:45 a.m.-3 p.m.	Closed

Health Clinic

Building 18, Room 101 541.463.5665 lanecc.edu/healthclinic/

The LCC Health Clinic provides health care services to Lane students and employees, including treatment for acute illnesses, minor injuries, and some chronic conditions. Please make an appointment. We also provide information and referrals to community resources.

The mission of the LCC Health Clinic is to provide accessible, quality health care to the students and employees of Lane Community College. Its goal is to maximize LCC community health and enable students to remain in school. The Health Clinic staff works in a collaborative partnership with the students and employees, with respect for diverse beliefs and needs, toward informed decisions about disease prevention and management of health conditions. The clinic provides education to individuals and groups to enable them to be better consumers of health care and stewards of their own health.

Services available to eligible students and employees

Students who pay the Health Clinic Fee when registering for classes and employees who pay the Health Clinic fee are eligible for these services:

Free Services

- Office visits
- X-ray referral (the clinic does not pay for x-rays)
- Limited follow-up for chronic illness
- Diagnosis and treatment of most acute illnesses
- Treatment of minor trauma including sprains, strains, cuts and abrasions
- Assistance managing mental health issues
- Tobacco cessation support
- Loan of crutches

Low Cost Services

- Specialized procedures such as spirometry, wart treatments and sutures
- Immunizations including flu vaccine
- EKGs
- Lab testing, on-site and reference lab work
- Family planning/contraceptives, pregnancy testing, pap smears
- Men's and women's sexual and reproductive health care
- Physicals for LCC programs and athletics

Oregon Contraceptive Care

- A Medicaid funded project offers limited FREE services such as birth control, exams, testing and supplies to those who are eligible. See our website: lanecc.edu/healthclinic

Services available to all students and employees regardless of eligibility

Free Services:

- Emergency response
- First aid
- Blood pressure checks
- Referrals to community agencies and health providers

Services available to individuals with disabilities

- Limited personal care assistance
- Medication assistance

Payment methods Payments for our fee-based services are **due at time of service** (cash, check or charge to an open LCC account). Reference lab costs can be billed directly to your insurance by the reference lab.

Confidentiality All services provided are confidential. A confidential medical record is established for each patient. This record is kept for 10 years. Federal and Oregon State laws govern the release of these records.

Health Insurance Lane Community College does not sell health insurance or handle any insurance claims. Brochures for a low cost health insurance plan for students and their families are available in the clinic lobby.

Referrals Patients with health problems beyond the scope and mission of the LCC Health Clinic are referred to specialists in the community, urgent care centers, or local emergency rooms at the patient's expense. If an ambulance is required, the **patient will be responsible for costs incurred.**

Health Clinic Hours The health clinic is open Monday through Friday during fall, winter, and spring terms on days that classes are in session. Appointment times are available from 8:20 a.m. until 4 p.m. The Health Clinic is closed from 12:15 p.m. to 1:15 p.m. for lunch. The clinic is also open summer term on a limited basis. Please call for times. Practitioners are not available on weekends, holidays or during school breaks. For more information, see the website, lanecc.edu/healthclinic.

Housing

The following options are available for Lane Community College students taking credit classes leading to a degree, certificate or transfer program.

Students must meet application and income criteria determined by the agency operating each complex and must complete a separate application process for each location. Once the application process is complete, space will be allocated as available.

Bagley Downs, 19th Avenue between Pearl and High, Eugene

- St. Vincent de Paul offers these units in partnership with Lane. All units are two bedroom.
- Call 541.687.5820, ext. 130 to get on the Lane Community College waiting list. As units become available students on the list will be contacted to complete application and verify income and student status.

Aurora Building, 100 East 11th, Eugene Village Oaks, 3606 West 18th, Eugene Firwood, 2139 West 12th, Eugene

- Students should apply in person at the Lane County Housing Authority, 300 West Fairview, Springfield.
- Some students may already be on the waiting list at these

places. Students also may be on lists at other HACSA complexes. Contact the Lane County Housing Authority, 300 West Fairview, Springfield, and also ask to be placed on the Lane Community College waiting list.

College Corner, 704 Mill Street, Springfield

- Contact Jennings Property Management, 541.683.2271 for more information regarding Jennings application process.

University of Oregon *housinguoregon.edu*

- Students who are dual-enrolled may access the UO Housing Office, 541.346.4277.

Many students reside in rental apartments throughout the Eugene-Springfield area. Lane's Student Life and Leadership Development office provides housing referral information to Lane students. Housing information also can be found at *registerguard.com* and at *lanecc.edu* (search housing).

Contact Lane Community College Student Life and Leadership Development, 541.463.5336.

International Programs

Admissions/Advising and Student Activities, Bldg. 11, 235

Director: Jennifer Falzerano

Administrative Coordinator: Christine Marshall

Admissions/SEVIS Information: Jane Marshall, Colby Sheldon

Advising and Student Services: Jennifer Hare, Dao Tran and Beth Schenderlein

Contact: Building 11, Room 235; 541.463.3434; *lanecc.edu/international*

Each year more than 200 international students from over 30 countries attend Lane Community College. Students who are in the United States on an F-1 student visa can study in either the IESL Program or in credit level classes. There are special admission requirements for international students and support staff is available to help with this process. International Programs help these students create a positive and successful educational experience that includes an orientation to the college and community, immigration advising, an academic schedule, assistance with housing and recreational activities. Opportunities are available throughout the school for both international and American students, including on-campus activities and enrichment trips to local, regional and statewide places of interest. Students from all over the world join together and share their cultures in activities such as Conversation Tables, Coffee Talk social hours, holiday celebrations and an annual International Day. Activities focus on making friends and learning about each other. International students are offered help in finding homestay living arrangements with local hosts, living in Lane's housing or finding housing in the community.

Assistance is offered to help international students make connections in the community and find resources on campus. Information also is available about living opportunities, bus schedules, business referrals, and other services.

Assistance also is offered to international students with academic difficulty through the International Success Program, which includes special classes, tutoring, and extra advising. This is offered to help students meet their academic goals and stay in status with

immigration rules and regulations. More information is available on the International Programs website at *lanecc.edu/international* or *blogs.lanecc.edu/international*.

Legal Services

Building 1, Room 210A, 541.463.5365

Legal advice is free and available to all credit students on main campus through the mandatory student activity fee. A practicing attorney is available 20 hours per week with limited hours during summer term. Appointments may be made through the Legal Services office.

Library

Center Building, Second Floor, 541.463.5220

The Library provides resources for instructional, research, recreational, and general information needs of students, faculty, staff and community residents. The collection includes over 65,000 volumes of books and audiovisual materials, subscriptions to print periodicals, and a wide variety of online databases and e-books. Remote access to the Library's catalog and full-text online databases is available to Lane students and staff. The Library's website is *lanecc.edu/library*.

Instruction and Services Librarians provide information assistance to individual students, faculty and staff; offer classes in library research skills; present orientations to classes; assist with the preparation of research assignments; prepare specialized bibliographies; design course-specific web pages; and work with faculty to develop the Library's collection and provide curriculum support. Lane students can borrow materials from libraries in the Pacific Northwest and beyond. The library also provides computers and equipment, group study rooms, video viewing, library classroom, and assistive technology.

Hours The Library is open 7:30 a.m.-7 p.m. Monday through Thursday and from 7:30 a.m.-5:30 p.m. Friday. The Library is closed Saturday and Sunday.

Library Class For a description of Library classes, see page 236.

Multicultural Center

Building 1, Room 201, 541.463.5276

Drop by the Multicultural Center lounge and relax, socialize and enjoy tea or coffee in a racism and homophobia-free zone. The center strives to create a space that is safe and supportive of all people, a space that inspires students to stretch and realize their potential.

The center offers support services to students of all ethnic backgrounds to ensure their academic success. Center staff can assist with admissions and financial aid information; referral to community resources including food, shelter, childcare, and medical and dental health; participation in student clubs and associations; starting your own student club; and organizing events throughout the year that promote inclusion and understanding.

Multicultural Center

Edificio 1, sala 201, 541.463.5276

Venga a la sala del Multi-Cultural Center y reláxese, socialice y disfrute de té o café en una atmósfera libre de racismo e homofobia. El

centro crea un lugar que es seguro para todas las personas, es un lugar que inspira a los estudiantes a extender y desarrollar sus potenciales.

El Centro ofrece servicios de apoyo a estudiantes de todos los étnicos para asegurarles el éxito académico. El personal del Centro puede asistirle con información sobre admisión, ayuda financiera, participación en clubes y asociaciones estudiantiles, como empezar su propio club estudiantil, organizar eventos durante el tiempo escolar para promover entendimiento e inclusión. También encontrara información sobre servicios disponibles hacia la comunidad, tales como; comida, refugio, guarderías, y servicios de salud medica y dental.

Music, Dance and Theatre Arts

Music Music students at Lane have many opportunities to perform publicly as soloists and as members of vocal and instrumental ensembles. Lane has a chamber choir, concert choir, gospel choir, vocal jazz ensemble, symphonic band, jazz ensemble, chamber orchestra, and various small ensembles. These groups perform regularly at term's end and on special occasions, including tours. Solo musicians are encouraged to perform in showcases held once or twice a term, usually at noon, on the main stage. Some of Lane's music ensembles are open to all students, others require auditions. Whether students already have some music training or want to get started, they can share the joy of making music at Lane.

Dance Lane's dance program offers a variety of performance opportunities for dance students of all levels. "Open Show" allows students to gain performance experience in a fun, informal setting at the end of each term. "The Works" Student Dance Concert is an annual concert showcasing student's choreography and dancers in a formal theatrical setting. Students move from the studio to the stage and learn about lighting, costuming, and performance skills. Advanced dancers are invited to audition for the Lane Dance Company which performs in the annual faculty concert and in several community venues. The Lane Dance Company represents the quality and breadth of our program through participation in the American College Dance Festival in the spring. "Collaborations" highlights the talents of faculty, students, and guest dancers. Hip-hop, African, modern, tap, jazz dancers come together and share their love and passion for dance.

Theatre Productions Productions are the logical outcome of class work, and Lane strongly encourages its theatre arts students to audition for shows. Public performance is the ultimate test of skill and courage. The Theatre Arts program produces several shows a year. Casting policy puts students first and often includes guest artists and performers from the greater Lane community and beyond. Lane has earned a reputation for producing some of the best shows in the area. In addition to faculty directed plays, the Student Production Association produces shows throughout the year including an evening of one act plays written by and for students. Lane faculty maintains strong relations with other producing groups in the community, often recommending students upon the request of that organization and providing students an opportunity to receive credit for their work. Talent grants and scholarships are available. For more information, call 541.463.5648.

The Native American Program

Building 1, Room 201, 541.463.5238

The Native American Program purpose is to recruit and retain Native American Indian and Alaska Native students to Lane

Community College and assist them in attaining their academic and career goals. The program aim is to help students make a smooth transition into the academic setting by helping them identify, seek and use the appropriate academic and social support services, provided by the college, necessary for them to succeed. Contact James Florendo, 541.463.5238.

Photo ID

A Lane Community College Photo ID is not required for conducting business at Lane. Many business processes will require a form of photo ID, including a valid driver's license, Lane photo ID or passport. The \$5 charge of a Lane Photo ID is not included in the ASLCC student activity fee. Any faculty/staff member or student currently registered at Lane may purchase a Lane Photo ID from Enrollment and Student Financial Services on the main campus. Replacement cards are \$5. Photo ID's are available beginning the Tuesday of the second week of each term. For information and hours, contact Enrollment and Student Financial Services at 541.463.3100.

Sports and Fitness

Fitness Education Center, Building 5, Room 101, 541.463.3987

The Fitness Education Center provides state-of-the-art exercise equipment and educational instruction in the area health and fitness. Staff and students gain access to the center during usage hours by registering for Fitness Education: Introduction and Fitness Education: Orientation. Students satisfy course requirements through attending exercise sessions during usage hours. The class is available for credit or non-credit through Continuing Education. The environment is supportive, not competitive, educational and encourages people of all fitness levels and abilities. In addition, a professionally trained and dedicated staff is always available for personal guidance.

Potential benefits of participation in a regular exercise program include: increased energy, improved ability to cope with stress, reduced risk of developing chronic diseases, increased focus and concentration, weight maintenance, and improved self-image.

Recreational and Club Sports Program, Building 5, Room 204, 541.463.5293

A current valid student ID or other proof of current term enrollment is required for participation/purchase.

The Recreational Sports program offers a selection of services at discounted rates for eligible students. These include: community sports, family activities, trips and outings. Recreational Sports special events provides a variety of opportunities for participation in individual and team activities. Eligible Lane students may participate in local athletic leagues at discounted rates. The one-day and weekend events offer an opportunity for social growth and recreational participation in a safe and fun environment. By design, the program is intended to create a climate where everyone is welcome. Participation in the program is voluntary and determined by interest. Please visit the Recreation Office in the Building 5 foyer area for current term offerings. All recreational sports activities are governed by regulations provided in the Recreational Sports Handbook and supervised by the Recreational Sports office.

Intercollegiate Athletics, Building 5, Room 205, 541.463.5599

Lane Community College sponsors intercollegiate athletics that encourage an emphasis on academics, personal development, personal enrichment, community support, career development, and

athletic excellence. The intercollegiate athletic program offers students opportunities to compete in eight varsity sports: Men's and Women's Basketball, Men's and Women's Cross Country, Men's and Women's Track and Field, Men's Baseball, and Women's Soccer. Teams participate in the Northwest Athletic Association of Community Colleges (NWAACC) Conference with 35 other Oregon, Washington, and Canadian colleges. The NWAACC governs the conference, which is divided into four main regions (north, east, south, and west). Lane competes in the southern region. Qualifiers from each region compete annually for conference championship titles.

Fall	Winter	Spring
Women's Cross Country	Women's Basketball	Men's Baseball
Men's Cross Country	Men's Basketball	Women's Track & Field
Women's Soccer		Men's Track & Field

The administration of the Athletic program is conducted through the Health, Physical Education and Athletic Division. The division chair oversees all employees of the Intercollegiate Athletic and Recreational programs. Personnel include the athletic director, head coaches, assistant coaches, athletic trainer, athletic administrative specialist, student recreation director, recreation assistants, and student academic coordinator.

Student Government: ASLCC

Building 1, Room 210, 541.463.5290

The Associated Students of Lane Community College (ASLCC) legislative body is the Senate, composed of four executive officers, ten senators, and four student staff positions (appointed, non-voting positions). The purpose of ASLCC is to represent student interests and concerns and to promote student involvement in all phases of college life. Financing for ASLCC comes from the mandatory \$45.25 student activity fee.*

Contact the ASLCC president, staff secretary or the Student Activities Office if you would like to:

- serve on a college committee.
- form an organization.
- plan an activity.
- become involved in student government.
- make suggestions and express concerns.

* This fee is subject to change pending ASLCC elections.

Student Life and Leadership Development

Building 1, Room 206, 541.463.5336

The Student Life and Leadership Development office coordinates and supervises the following areas: Student Life Programs; Black Student Union, Latino Student Union, QSA, Native American Student Association, Phi Theta Kappa, and other student clubs and organizations; Associated Students of Lane Community College (ASLCC) including the ASLCC senate and staff, ASLCC Legal Services, Cultural Events and Programs, Recreational Sports, Oregon Student Association, and the Oregon Student Public Interest Research Group.

Student Life programs provide students with opportunities to develop and enhance leadership skills and gain experiences in administration, budget development, computers, programming, and communication through participation in ASLCC, committees, cultural programs, and workshops.

Active clubs vary from year to year and represent many student interests on campus. Students are encouraged to organize new clubs and special groups compatible with the spirit of the college community. Students interested in contacting specific clubs can stop by Student Life and Leadership Development and leave a note in the club's mailbox. Groups or individuals interested in forming clubs and organizations should contact the director of Student Life and Leadership Development or ASLCC.

The Student Life and Leadership Development office is open Monday - Thursday, 8 a.m.- 6 p.m. and Friday, 8 a.m.- 5 p.m.

Black Student Union, Building 1, Room 201, 541.463.5340

The Black Student Union (BSU) is a student-based organization focused on the cultural, social and academic needs of African-American students attending Lane. It seeks to build cultural and community bridges in the general context of the academic environment. The BSU is involved with the sponsorship of three campus/community events during the academic year: Kwanzaa, the Martin Luther King, Jr. Celebration, and Black History Month.

The BSU is open to all students, regardless of race, creed, color, religious affiliation, or sexual orientation. Membership in the BSU requires a commitment to the mission of the BSU. The BSU is committed to the development of cross-cultural ties with all groups on campus and in the community at-large. The faculty advisor for the BSU is Greg Evans.

Latino Student Union, Building 1, Room 201, 541.463.3236

The goal of the Latino Student Union (LSU) is to unite, educate and empower Chicano, Mexicano, Latino, Caribbean, and Hispanic students attending Lane. LSU provides personal, social and academic support and encourages bicultural leadership skill development to serve the needs of the growing Latino community in Lane County. LSU assists with Lane's recruitment and outreach activities to high school students, including the Puertas Abiertas Leadership Academy. The faculty advisor for the LSU is Jim Garcia.

Queer Straight Alliance, Building 1, Room 206, 541.463.5331

Queer Straight Alliance (QSA) is dedicated to creating alliances between the local queer population and its straight allies. The primary objectives of the QSA include educating the college and community groups about homophobia, heterosexism, and queer experiences; raising awareness about anti-queer legislation at the state and local levels; providing a safe space for open discussions about sexuality and gender issues; and providing queer-positive outreach to local high schools and community organizations.

Native American Student Association, Building 1, Room 201A, 541.463.5238

The Native American Student Association (NASA) is an organization established to provide Native American students an environment which supports traditional cultural values and beliefs and academic achievement. NASA's priority is fostering a positive educational environment for Native American students while they are attending Lane. NASA assists all Native American students in maintaining contact with their tribal educational and financial departments, family, and the Bureau of Indian Affairs. Contacts are supported through the NASA faculty advisor and the network of Lane advisors. NASA openly welcomes all students at Lane to actively participate in NASA events and feel at ease to ask questions about tradition, heritage and the history of the Native American people. The Native American Student Advisor is James Florendo.

Phi Theta Kappa Honor Society, 541.463.5345

Phi Theta Kappa is the only honor society for students enrolled in two-year colleges. It originated in 1918 in Mississippi and has over 1,000 chapters which honor students' academic achievement in every discipline. The Sigma Zeta Chapter began at Lane in 1968 and is one of the oldest chapters in Oregon.

To join, students must currently be enrolled in a degree, certificate or transfer program, have completed 12 full-time or 18 part-time credits, have a GPA of 3.25 or better, and be recommended by two members of the faculty as being self-motivated and committed to excellence. There are one-time dues which are payable in several options.

Student Media

Denali, Building 18, Room 213, 541.463.5897

Denali is LCC's literary and visual arts magazine published once a year. Original poetry, prose, visual and graphic arts are accepted for evaluation by a student-run editorial board.

Students are employed to assist in editing and production of the magazine and can receive Cooperative Education credit in journalism, graphic design or media arts. Denali operates under the guidelines of the LCC Media Commission and is distributed free of charge to Lane students and staff and to community members of Lane County.

Students wishing to submit copy or art, or become involved in any aspect of producing the magazine may contact the Denali editor at denali@lanecc.edu.

Students interested in earning Cooperative Education credit may contact Dorothy Wearne at 541.463.5656.

Torch, Building 18, Room 212, 541.463.5655

The Torch is an award-winning, student-produced, weekly campus newspaper with an average circulation of 3,000 copies. Published by authority of the Lane Community College Board of Education through the LCC Media Commission, it is an autonomous newspaper free from censorship by the college administration, faculty and student government.

The Torch serves three purposes: it provides news and information of importance and interest to Lane students and staff; it serves as a learning laboratory for students of journalism, graphic arts, photography, publication design, web design, and advertising; and it provides a communication channel for student commentary and debate. All Lane students may submit guest commentaries and letters for publication in the Torch.

Cooperative Education credit in journalism, graphic design, photography, web design, and media arts is available for students working on the Torch. Students interested in joining the Torch staff as writers, photographers or designers may contact Paige Frank, news and editorial adviser, at 541.463.5654 or Dorothy Wearne, production adviser, at 541.463.5656.

Student Service Associates

Lane's Student Service Associate (SSA) program began in the early 1970s. Since that time, it has been a model for programs throughout the state. The SSA program was designed to improve

and supplement regular Counseling and Advising Center service delivery through the use of peer mentors. SSAs serve as liaisons between staff and students, act as role models, and improve outreach and interaction with diverse student groups. SSAs assist student and community members in the Counseling and Advising Center and Career and Employment Services and play an active role in orienting new students and promoting campus resources.

Interested students should inquire at Career and Employment Services, 541.463.5167, in April to learn about the application process for the upcoming academic year.

For more information visit lanecc.edu/ces/ssa.

Student Snack Shack

Building 1, Second Floor, 541.463.5343

The student run snack shack is offered through Student Government and sells bagels, muffins, cold drinks, chips, water, fresh fruit, yogurt, coffee, etc. for students on a daily basis. Hours vary from 8 a.m.- 3 p.m. most days. Free coffee is offered every Wednesday.

Substance Abuse Prevention

The Recovery Center, Building 1, Room 226, 541.463.5178

The Recovery Center ("Recovering Sobriety, Recovering Culture") offers comprehensive and confidential substance abuse prevention services for students and staff. Services include information, referral and individual and group support, counseling about issues which affect students, staff and their families. Support groups are available to support recovery or simply to gain information on a variety of issues including alcohol and other drug abuse, smoking cessation, eating issues, parenting, co-dependency, and related problems. The center suggests a wide variety of choices based on each individual's circumstances. The center does not advocate any particular program of recovery or self-help, other than what works.

The Recovery Center facilitates the formation of student-run support groups on topical issues such as Narcotics Anonymous and Alcoholics Anonymous. While these meetings are listed in the community as open meetings, they are facilitated by Lane students and therefore are subject to time changes from term to term. They are not held during finals week and school breaks.

All services are open to currently enrolled Lane Community College students (and their families) in credit, Adult Basic and Secondary Education, and Workforce Development classes. There is no cost to students or their families. Most services are provided by professionally trained staff. Information and referral services are provided by trained volunteers and students.

All services provided are confidential. Information is not released without student permission, except upon court order. Office hours for fall, winter and spring terms are 9 a.m. to 5 p.m., Monday through Friday. The center is closed summer term.

For more information, e-mail: harrism@lanecc.edu or call the center or visit lanecc.edu/stuser/subabus.

Sustainability

Lane's commitment to sustainability is best summarized by its sustainability core value of:

- Integrating practices that support and improve the health of systems that sustain life.

- Providing an interdisciplinary learning environment that builds understanding of sustainable ecological, social, and economic systems, concern for environmental justice, and the competence to act on such knowledge.
- Equipping and encouraging all students and staff to participate actively in building a socially diverse, just, and sustainable society, while cultivating connections to local, regional, and global communities.

Lane has many degree programs, classes, and extra curricular activities related to sustainability. Sustainability Associate of Applied Science degrees are:

- Energy Management Technician
- Renewable Energy Technician Option
- Resource Conservation Manager Option
- Sustainability Coordinator
- Water Conservation Technician

Extra-curricular activities include several student clubs:

- Global Health-Power to Change, Contact: Susie Cousar at 541.463.5271 or cousars@lanecc.edu
- Green Chemistry Club, Contact: John Thompson at 541.463.5199 or thompsonj@lanecc.edu
- Learning Garden Club, Contact: 541.463.5899
- Oregon Student Public Interest Research Group, Contact: 541.463.5166 or ospirg@lanecc.edu

To find current sustainability events and to learn more about sustainability at Lane visit the website at lanecc.edu/sustainability.

Titan Store (Bookstore)

Center Building, Third Floor, 541.463.5256 titanstore.lanecc.edu.

The Titan Store carries course materials, including textbooks, general books, art supplies, computer hardware and software. Students may also purchase clothing, gifts and school supplies at the Titan Store. Course materials may be purchased online at titanstore.lanecc.edu.

The Titan Store is open Monday - Thursday, 8 a.m.-5 p.m. and Friday, 8 a.m.-4 p.m. The college is closed Fridays during summer term. The store is open extended hours the first week of fall, winter and spring terms and during Book BuyBack at the end of each term.

TRiO Programs

TRiO Regular

Building 1, Room 219, 541.463.3131, lanecc.edu/trio/

TRiO STEM (Science/Technology/Engineering/Math)

Building 12, Room 120A, 541.463.3137

TRiO programs at Lane Community College help students succeed. These federally funded programs have the goal of helping students stay in school and successfully graduate from Lane Community College and transfer to a four-year institution. The services provided to eligible students assist in meeting varied challenges of college life and are free of charge. TRiO staff are available to assist students individually with their concerns.

TRiO offers advice, support and encouragement to students; individual and small group tutoring with emphasis in math, science, writing, and computers; computer lab; academic advising; personal and career counseling; information and referral to services on and off campus; mentoring; cultural enrichment activities; study groups; special workshops and classes; assistance with transfer planning; and visits to Oregon four-year colleges and universities.

Eligibility

The following criteria must be met to qualify for TRiO.

- enrollment or acceptance for enrollment at Lane Community College.
- working toward a degree at Lane, or planning to transfer to a four-year college or university within three years of enrollment, and have a need for academic support.
- U.S. citizen or registered permanent resident.
- one or more of the following applies:
 - neither parent received a four-year degree
 - qualify for financial aid or meet financial need guidelines
 - have a documented disability that interferes with education

Tutoring Services

lanecc.edu/tutor/

Tutoring Services coordinates free drop-in tutoring in many subject areas and centers on main campus. All tutoring is free to currently enrolled Lane students and provides one-on-one assistance in academic endeavors. **Tutors will** clarify information presented in class or textbooks, help students learn how to think about concepts in courses, engage in discussing ways to work problems, help with effective ways to study and learn, and offer support and encouragement. **Tutors will not** complete a student's homework, edit papers, help with take-home tests, rescue, or do problems without direct student involvement and critical thinking in the process of learning. Students are expected to take responsibility for their own learning, but tutors can empathize with the difficulty of a subject and offer coaching and guidance to make the process easier. For assistance in specific areas, visit the tutoring centers listed below. For general questions, contact Liz Coleman, Tutoring Services Coordinator by phone at 541.463.5783, email at colemanl@lanecc.edu or come to Tutor Central in the Center Building, Room 208.

Tutor Central, Center Building, Room 210, 541.463.5282 (Liz Coleman) lanecc.edu/tutor/tutorcent.htm

Open fall, winter and spring terms. Tutor schedules are posted on the front table. This is a great place to study independently with easy access to tutors in the following subjects:

- Academic Learning Skills
- Computer Skills (CS 120 and CIS 101, Tutor Central, Room 205)
- Math 10
- Psychology
- Speech, Voice and Articulation
- Writing Center (help with papers from any class)
- Quiet study room (Tutor Central, Room 206)
- Group study rooms (Tutor Central, Rooms 209, 214)

Business Lab, Building 19, Room 249, 541.463.5799 (Jim Chase)

The Business Lab provides assistance in Accounting and Business courses. Hours are posted on the door.

CIT Computer Lab, Building 19, Room 135A, 541.463.5823 (Pam Dodson)

The Computer Information Technology Department has tutoring available for all students enrolled in classes that use the lab. Tutors are advanced majors in the field of computing.

Math Resource Rooms, MTH 10 - MTH 97, Building 16, Room 169, 541.463.5399; MTH 105 and up, Building 16, Room 177

Peer and professional tutors are available. math.lanecc.edu/math/mrc.html

Music Lab, Building 6, Room 125, 541.463.5649 (Alberto Redondo)

Assistance is available for music theory, fundamentals, literature, history, and electronic music. lanecc.edu/perarts/music/lab.htm

Science Resource Center, Building 16, Room 193, 541.463.5041 (Star Glass)

Drop-in tutoring, microscopes, models, textbooks, and a computer tutorial for anatomy and physiology are available. Also, go to lanecc.edu/science/src/

Adult Basic and Secondary Education The ABSE Volunteer Tutor program provides individual and small group tutoring for adult students in Basic Skills, GED, and English as a Second Language. The program has been in existence since the mid 1980's and is located at the Lane Community College Downtown Center. Volunteers are trained in a free 12 hour workshop and may tutor students at any of our campus locations and outreach sites. Tutors can work one-on-one, with small groups, and as classroom assistants in the areas of reading, writing, grammar, conversation, math computers, American culture, and citizenship. To become a tutor, please contact Amy Gaudia at 541.463.5919. Basic information can be found lanecc.edu/volunteertutor/. If you need a tutor, please ask your instructor to help you submit the Tutor Request form.

Veteran Programs

Building 19, Room 233

Lane's Integration of Vets in Education (LIVE)

Building 19, Room 233A, 541-463-5497, lanecc.edu/veteranservices

The LIVE program is designed to engage student veterans more fully in their learning experience while assisting them with their transition to college. LIVE works in collaboration with others on and off campus to provide student veterans with support services, such as: academic and career advising, peer-to-peer mentoring and access to community resource people for VA-related support. In addition, LIVE offers three Career and Guidance courses (CG 151, 152, 153) that focus on student veteran issues.

Lane's Student Veterans Center

Building 19, Room 233B

Lane's Student Veterans Center includes a computer support/study area and lounge. This room can be used for studying, sharing resources, holding meetings and making connections with fellow student veterans. Off-campus veteran service providers are also welcome to arrange to meet with student veterans and join in on events at Lane.

VA Educational Benefits

Building 19, Room 233C, 541-463-5663, lanecc.edu/va

Programs at Lane Community College are approved by the Oregon Department of Education State Approving Agency as a qualified training institution for students eligible for Veterans' Administration education benefits. All applications for federal VA educational benefits and enrollment certifications are processed through the VA Regional Office in Muskogee, OK; 1-888-442-4551, 1, 0 or gibill.va.gov

Eligibility Rules to determine eligibility for VA Educational Benefits are very complex, and you may have choices to make to determine under which benefit chapter you wish to receive benefits. All who qualify for benefits need to have submitted an application to the VA through the VONAPP (VA On-line Application) process. For more information, contact the VA Educational Benefits Office at 541.463.5663.

Credit Load/Payment For payment purposes, during a standard term, 12 credits is considered full-time. A credit load less than 12 credits will be pro-rated at the rate determined by the VA Benefit Chapter under which you are eligible to receive benefits. Even though you may qualify for more than one VA Educational Benefit Chapter, you only may be certified to collect benefits under one VA Benefit Chapter.

Program of Study Students using VA educational benefits must be enrolled in an approved degree or certificate program and only courses applicable toward the degree or certificate and their prerequisites can be certified for VA payment.

Academic Standards Students using VA educational benefits will be required to follow all Lane's GPA requirements in accordance with the Academic Standards outlined in this catalog. Each student applying for VA educational benefits will receive a copy of the Standards of Academic Progress for Using VA Benefits at the time of initial certification. These standards apply to all eligible persons using educational benefits administered by the VA.

Unsatisfactory Progress The Veterans' Administration will be notified if a student fails to meet the minimum standards of academic progress for three consecutive terms, or receives all "F", "NC," or "NP" grades in any one term, in accordance with Lane's procedures for academic standards. In order to have VA educational benefits reinstated after unsatisfactory progress, a student must satisfactorily complete a subsequent term. The student will be reimbursed retroactively by the VA after completion of a successful term.

Schedule Changes, Drops and Adds

Within Drop Period If courses are dropped any time during the first four weeks of the term, the student is paid at the previous rate up to the date the course is dropped.

After Drop Period The VA allows a student to withdraw up to six credits one time only after the fourth week of the term and assumes that there are mitigating circumstances; hence, benefits will be paid at the previous rate until the date the course(s) is dropped. Outside of this one-time, six credit exclusion to the "mitigating circumstances" rule, unless mitigating circumstances are submitted and accepted by the VA, any reduction in credit load after the fourth week of the term will result in an overpayment retroactive back to the first day of the term. If there are "mitigating circumstances" involved in the reduction of credits, documentation and a statement by the student must be submitted to the Veterans Office to be forwarded to the VA for determining any overpayment.

Prior Credits (Transcripts) Students applying for Veterans' benefits at Lane who have received college credits prior to entry at Lane either using VA educational benefits or not must provide transcripts to Lane. Unless all transcripts are submitted to Lane during the student's first three terms of enrollment, subsequent enrollment periods cannot be certified.

Supplemental Information

- Students may not repeat any classes previously passed.
- Students will be paid for only those specific courses required in their declared major and any prerequisites.
- If a passing grade was not received in a program's required course, excluding electives, it can be repeated once again for VA payment.
- In order for a student to take prerequisites for major requirements for VA payment in math and writing, testing results from Testing Services must indicate they are necessary.

Women's Program

Building 1, Room 202, 541.463.5353, lanecc.edu/wp

The Women's Program provides integrated, comprehensive services and programs for women and a variety of gender equity activities and projects. The program ensures that women students have access to programs and services tailored to their needs and that the campus climate is sensitive to gender issues. Major program components include the Women's Center, Women in Transition, Career Technical Education advising, and Transiciones.

Mission Statement The mission of the Women's Program is to provide an educational environment where women are empowered to improve their lives.

Purpose The Women's Program:

- focuses on women's strengths and capacities.
- offers opportunities to women of diverse backgrounds to create community and pursue education and life goals.
- promotes the college's ability to build and sustain a welcoming and supportive learning environment for women and create gender equity throughout the college community.
- offers programs, advocacy, information, classes, advising, support services, counseling and referral, and maintains and strengthens relationships with the community.

Women's Center The Women's Center acts as a supportive entry point to the college as well as providing services to assist women to stay in school. The center provides information, resource and referral, crisis intervention, advocacy, advising, and individual support. The center maintains bulletin boards on upcoming events and groups, has computer stations for students, has a library focused on women's and gender issues, and a lounge area with coffee and tea. Both drop-in services and individual appointments are available.

Women in Transition Women in Transition empowers women in transition to become economically self-sufficient and improve their lives through access to education. The program forms a learning community that includes:

- one-term, seven-credit core classes focusing on life/career planning, decision making/goal setting, self-exploration, and esteem-building
- optional classes in effective learning, math, writing, college success, physical education, and computer skills
- limited assistance with tuition and books
- individual and small group advising
- follow-up services
- evening and online Transitions classes offered most terms
- a follow-up Life Transitions 2 class
- a follow-up Career and Life Planning 2 class

Transiciones Transiciones is a life and career-planning program for Spanish speaking women who wish to explore their self-esteem, educational options, financial assistance for school, and community resources. The program offers career and life courses, academic advising, workshops, and computer courses in Spanish. For more information, please call 541.463.3253.

Transiciones es un programa de plantación de vida y carrera para Latinas que desean explorar su auto-estima, opciones en educación, ayuda financiera para los estudios, y recursos comunitarios. El programa ofrece cursos en planificación de vida, carrera, y computación, conserjería académica, y talleres. Para mas información llama a 541.463.3253.

Career and Technical Education Advising The Career and Technical Education advisor assists Women in Transition and Transiciones students in exploring the CTE programs offered at Lane. The advisor provides information, advising, group activities, workshops and other experiences that will assist students as they learn about one- and two-year training programs and other avenues to high-wage, high-demand employment.

Other activities of the Women's Program include working with departments to develop classes and services which meet women's needs, organizing workshops and events, providing leadership on gender equity issues and assisting with sexual harassment and gender based complaints.



Degrees and Certificates

Certificates Certificates are granted for satisfactory completion of a state-approved certificate program. All English composition and math requirements must be completed with a “C-” grade or better, unless otherwise noted by the sponsoring department.

Degrees Associate degrees are granted for satisfactory completion of a prescribed program of 90 credits or more. Lane offers five associate degrees:

- Associate of Arts Oregon Transfer (AAOT)
- Associate of Applied Science (AAS)
- Associate of General Studies (AGS)
- Associate of Science (AS)
- Associate of Science Oregon Transfer: Business (ASOT-Business)

Each student should consult with a counselor or academic advisor to determine an appropriate degree or certificate program.

General Education and Core Abilities

General education helps students develop knowledge and abilities useful to all programs of study. The purpose of general education at Lane Community College is to foster wisdom through educational depth and breadth. General education at Lane has the following goals:

- to encourage exploration of the academic disciplines: liberal arts, sciences, mathematics, information sciences, and social sciences
- to promote understandings of self, society and the environment crucial to citizens of a diverse global community
- to cultivate habits of mind and heart essential to lifelong learners

Core Ability Outcomes Statements

Students completing general education will:

Communicate effectively Courses fulfilling this outcome may require students to:

- demonstrate understanding and use of effective and respectful listening, interpersonal, small group/collaborative, and public communication skills among diverse populations
- demonstrate effective writing skills through principles of clear thinking; awareness of audience; appropriate conventions of format, structure, and language; and clear thesis development
- be able to read critically for information; develop new ways of seeing and understanding the world; understand points of view and multiple perspectives
- demonstrate general information literacy: critically analyze, synthesize, and evaluate various forms of information including written texts and other media
- develop understanding of another culture through language study

Think critically and solve problems effectively Courses fulfilling this outcome may require students to:

- apply the scientific method, incorporating the appropriate mathematical skills or processes as needed in various problem solving contexts
- interpret, translate, and communicate quantitative information expressed in mathematical notation, graphs, charts, tables, symbols, or standard English
- interpret and make inferences from data; estimate outcomes where appropriate
- determine whether conclusions or solutions are reasonable, using inductive and deductive reasoning
- apply technology competently, selecting and using tools appropriate to tasks

Increase understanding of the relationship between self and community, including self-awareness and personal responsibility. Courses fulfilling this outcome may require students to:

- describe interacting facets of environmental and personal health, and identify steps to protect and preserve environmental resources
- plan, implement, and evaluate lifestyle change strategies which contribute to optimal physical and mental health
- describe core aspects of today's integrated global society, including historical perspective, cross-cultural variation, gender issues, as well as group function, interaction and change

Explore academic disciplines of liberal arts, social sciences, and physical sciences. Courses fulfilling this outcome may require students to:

- value artistic expression and human creativity
- understand fundamental concepts of physical and life sciences
- understand diverse roots of our nation and world civilizations
- understand the role and appropriate uses of technology in our global society.

Associate Degree or Certificate Requirements Candidates for an associate degree (AAOT, AAS, AS, AGS, or ASOT - Business) must meet the following requirements:

Total Credits Complete the number of credits as required for the individual degree, including Foundational Requirements and Discipline Studies

Minimum Credits at Lane Complete at least 24 credits at Lane

Grade Point Average Earn a cumulative GPA of not less than 2.00 at Lane

Pass/No Pass Students may select P/NP option up to 16 credits toward a degree/certificate, except as specified by AAS or Certificate programs. This does not include courses only offered P/NP

Credit-by-Exam and Credit-by-Assessment credits used toward a degree/certificate may not exceed 25% of total degree credits

Lane does not authorize individual departments to waive general education requirements. The Academic Requirements Review Committee will consider petitions to substitute a college General Education requirement. Petitions are available on the web at lanecc.edu/es/forms.html.

Writing courses used to meet AAOT degree requirements must meet the specific course outcomes as identified by Oregon Writing and English Advisory Council. In addition, the group of courses that is sufficient for meeting this requirement must, together, provide all of the content recommended by the Oregon Writing and English Advisory Committee (OWEAC), including a research component.

Computer Science courses used in the Science/Math/Computer Science area of the AAOT must meet Oregon Council of Computer Chairs criteria for a science course. Math courses listed in the Science/Math/Computer Science area must meet the outcomes and criteria for Mathematics.

All AAOT Foundational Requirement courses and Discipline Studies courses must meet the statewide outcomes and criteria for the specific area.

The purpose of general education

The education of undergraduate students is an essential activity of all Oregon colleges and universities. While undergraduate education needs to provide discipline-specific knowledge and skills through concentrated work in an academic major, it must also help students develop the habits of mind that lead to thoughtful and productive global citizenship. All parts of a well-designed education

encourage these habits, but an effective General Education curriculum has this as its explicit goal. To this end, it seeks to promote:

- The capacity for analytical thinking and problem solving.
- The ability to communicate effectively, including listening, observing, speaking, and writing.
- An understanding of the natural world and the role of humans in it.
- An appreciation of the arts and humanities and the richness of human experience and expression.
- An awareness of multiple perspectives and the importance of diversity.
- A sense of societal responsibility, community service, and global citizenship.
- The ability to develop a sense of direction, with the self-discipline needed for the ethical pursuit of a purposeful life.

Arts and Letters

Outcomes

As a result of taking General Education Arts and Letters* courses, a student should be able to:

- Interpret and engage in the Arts and Letters, making use of the creative process to enrich the quality of life.
- Critically analyze values and ethics within a range of human experience and expression to engage more fully in local and global issues.

* "Arts and Letters" refers to works of art, whether written, crafted, designed, or performed, and documents of historical or cultural significance.

Criteria

A course in Arts and Letters should:

- 1) Introduce the fundamental ideas and practices of the discipline and allow students to apply them.
- 2) Elicit analytical and critical responses to historical and/or cultural works, such as literature, music, language, philosophy, religion, and the visual and performing arts.
- 3) Explore the conventions and techniques of significant forms of human expression.
- 4) Place the discipline in a historical and cultural context, and demonstrate its relationship with other discipline.
- 5) Each course should also do at least one of the following:
 - Foster creative individual expression via analysis, synthesis, and critical evaluation.
 - Compare/contrast attitudes and values of specific historical periods or world cultures.
 - Examine the origins and influences of ethical or aesthetic traditions.

Human Relations

Outcomes

Courses that qualify for AAS Human Relations status will require students to demonstrate competency in at least three of the following outcomes.

- 1) Describe and utilize appropriate communication skills including non-verbal communication and active listening
- 2) Describe the characteristics of an effective work team the typical stages of team development, and how to be a capable team member
- 3) Understand the issues involved in working with people from different cultural backgrounds and how to work effectively in a diverse workplace.
- 4) Describe and demonstrate the rules of 'principled negotiation' and conflict resolution
- 5) Understand what sexual harassment is, how to prevent it and how to deal with it if it occurs
- 6) Identify character traits associated with being an ethical person and use a systematic method for making ethical decisions and behaving ethically.
- 7) Describe and give examples of how to effectively manage workplace stress and anger

- 8) Identify their individual work style (i.e. where they like to focus their attention, the way they like to take in information and the way they like to make decisions) and the strengths and weaknesses of that style

Criteria

Courses meeting the Human Relations requirement shall:

- Be a minimum of 3 credits
- Be regularly numbered offerings (not 199 or 299 temporary or 298 independent study)
- Incorporate interactive learning activities
- Be well founded in theory
- Connect course skills to practical application
- Require significant out-of-class practices of skills

Social Science

Outcomes

As a result of taking General Education Social Science courses, a student should be able to:

- Apply analytical skills to social phenomena in order to understand human behavior.
- Apply knowledge and experience to foster personal growth and better appreciate the diverse social world in which we live.

Criteria

An introductory course in the Social Sciences should be broad in scope. Courses may focus on specialized or interdisciplinary subjects, but there must be substantial course content locating the subject in the broader context of the discipline(s). Approved courses will help students to:

- 1) Understand the role of individuals and institutions within the context of society.
- 2) Assess different theories and concepts, and understand the distinctions between empirical and other methods of inquiry.
- 3) Utilize appropriate information literacy skills in written and oral communication.
- 4) Understand the diversity of human experience and thought, individually and collectively.
- 5) Apply knowledge and skills to contemporary problems and issues.

Mathematics

Outcomes

As a result of taking General Education Mathematics courses, a student should be able to:

- Use appropriate mathematics to solve problems.
- Recognize which mathematical concepts are applicable to a scenario, apply appropriate mathematics and technology in its analysis, and then accurately interpret, validate, and communicate the results.

Criteria

A collegiate level Mathematics course should require students to:

- 1) Use the tools of arithmetic and algebra to work with more complex mathematical concepts.
- 2) Design and follow a multi-step mathematical process through to a logical conclusion and judge the reasonableness of the results.
- 3) Create mathematical models, analyze these models, and, when appropriate, find and interpret solutions.
- 4) Compare a variety of mathematical tools, including technology, to determine an effective method of analysis.
- 5) Analyze and communicate both problems and solutions in ways that are useful to themselves and to others.
- 6) Use mathematical terminology, notation and symbolic processes appropriately and correctly.
- 7) Make mathematical connections to, and solve problems from, other disciplines.

Science or Computer Science

Outcomes

As a result of taking General Education Science or Computer Science courses, a student should be able to:

- Gather, comprehend, and communicate scientific and technical information in order to explore ideas, models and solutions and generate further questions.
- Apply scientific and technical modes of inquiry, individually, and collaboratively, to critically evaluate existing or alternative explanations, solve problems, and make evidence-based decisions in an ethical manner.
- Assess the strengths and weaknesses of scientific studies and critically examine the influence of scientific and technical knowledge on human society and the environment.

Criteria

A General Education course in either Science or Computer Science should:

- 1) Analyze the development, scope, and limitations of fundamental scientific concepts, models, theories, and methods.
- 2) Engage students in problem-solving and investigation, through the application of scientific and mathematical methods and concepts, and by using evidence to create and test models and draw conclusions. The goal should be to develop analytical thinking that includes evaluation, synthesis, and creative insight.
- 3) Examine relationships with other subject areas, including the ethical application of science in human society, and the relevance of science to everyday life.

In addition,

A General Education course in Science should:

Engage students in collaborative, hands-on and/or real-life activities that develop scientific reasoning and the capacity to apply mathematics, and that allow students to experience the exhilaration of discovery.

A General Education course in Computer Science should:

Engage students in the design of algorithms and computer programs that solve problems.

Cultural Literacy

Cultural Literacy outcomes will be included in courses that meet the outcomes and criteria of a Discipline Studies requirement.

Outcomes

As a result of taking a designated Cultural Literacy course, learners would be able to:

- Identify and analyze complex practices, values, and beliefs and the culturally and historically defined meanings of difference.

Criteria

A course with the Cultural Literacy designation will:

- 1) Explore how culturally-based assumptions influence perceptions, behaviors, and policies.
- 2) Examine the historical bases and evolution of diverse cultural ideas, behaviors, and issues.

Each course may also do one or more of the following:

- Critically examine the impact of cultural filters on social interaction so as to encourage sensitivity and empathy toward people with different values or beliefs.
- Investigate how discrimination arises from culturally defined meanings attributed to difference.
- Analyze how social institutions perpetuate systems of privilege and discrimination.
- Explore social constructs in terms of power relationships.

Writing

Outcomes

As a result of completing the General Education Writing sequence, a student should be able to:

- Read actively, think critically, and write purposefully and

capably for academic and, in some cases, professional audiences.

- Locate, evaluate, and ethically utilize information to communicate effectively.
- Demonstrate appropriate reasoning in response to complex issues.

Criteria

A course in Writing should:

- 1) Create a learning environment that fosters respectful and free exchange of ideas.
- 2) Include college-level readings that challenge students and require the analysis of complex ideas.
- 3) Provide guided discussion and model practices that help students listen to, reflect upon, and respond to others' ideas.
- 4) Foster students' ability to summarize and respond in writing to ideas generated by reading and discussion.
- 5) Require a substantial amount of formal and informal writing.
- 6) Emphasize writing as a recursive process of productive revision that results in complete, polished texts appropriate to audience needs and rhetorical situations.
- 7) Foreground the importance of focus, organization, and logical development of written work.
- 8) Guide students to reflect on their own writing, to provide feedback on peers' drafts, and to respond to peer and instructor comments.
- 9) Direct students to craft clear sentences and to recognize and apply the conventions of Edited Standard Written English.
- 10) Provide students with practice summarizing, paraphrasing, analyzing, synthesizing, and citing sources using a conventional documentation system.
- 11) Require appropriate technologies in the service of writing and learning.

Information Literacy

Information Literacy outcomes and criteria will be embedded in the Writing Foundational Requirements courses.

Outcomes

As a result of taking General Education Writing courses infused with Information Literacy, a student who successfully completes should be able to:

- Formulate a problem statement.
- Determine the nature and extent of the information needed to address the problem.
- Access relevant information effectively and efficiently.
- Evaluate information and its source critically.
- Understand many of the economic, legal and social issues surrounding the use of information.

Criteria

A Writing course infused with Information Literacy should include:

- 1) Instruction and practice in identifying gaps in knowledge and recognizing when information is needed.
- 2) Instruction and practice in finding information efficiently and effectively, using appropriate research tools and search strategies.
- 3) Instruction and practice in evaluating and selecting information using appropriate criteria.
- 4) Instruction and practice in research strategies that are recursive and involve multiple stages such as modification of the original strategy and revision of the topic.
- 5) Instruction and practice in the ethical and legal use of information and information technologies.
- 6) Instruction and practice in creating, producing and communicating understanding of a subject through synthesis of relevant information.

Speech/Oral Communication

Outcomes

As a result of taking General Education Speech/Oral Communication courses, a student should be able to:

- Engage in ethical communication processes that accomplish goals.
- Respond to the needs of diverse audiences and contexts.
- Build and manage relationships.

Criteria

A course in Speech/Oral Communication should provide:

- 1) Instruction in fundamental communication theories.
- 2) Instruction and practice of appropriate oral communication techniques.
- 3) Instruction and practice in the listening process.
- 4) Instruction and practice in comprehension, interpretation, and critical evaluation of communication.
- 5) Instruction and practice in adapting verbal and non-verbal messages for the listener and communication contexts.
- 6) Instruction in the responsibilities of ethical communicators.
- 7) Instruction in the value and consequences of effective communication.

Limits on Sequential Courses Lane promotes skill proficiency development. Therefore, lower level courses taken after completing a higher level course with a grade of C- or greater will not meet degree requirements, i.e., MTH 070 taken after MTH 111 completion. Students who complete courses in mathematics and writing may later elect to complete prerequisite courses, but these prerequisite courses may not then be credited toward a degree or certificate. Such “regression” may be desirable for review and relearning, but it does not count toward accumulating either required or elective credits for any degree or certificate.

Earning a Second Degree A student working toward a second degree must complete an additional 24 credit hours of course work. These additional hours must be completed at Lane and are in addition to the credits earned for a first degree. Students completing two associates degrees at Lane must complete a minimum of 114 credits. No additional credits are required for related certificates.

Suggested Course of Study Recognition awards and other evidence of program or course completion may be granted, depending upon the nature of the programs and the decision of the administration and faculty. In some cases, for example, a student can earn an award from an instructional department for completion of a suggested course of study. However, a suggested course of study is different from a career and technical program in which a student earns a degree or certificate in a vocational major issued by the Lane Board of Education and approved by the Oregon Department of Education.

To Apply for a Degree or Certificate

Students are encouraged to apply for degrees or certificates within three terms of completion. Students must have completed 6 credits at Lane to apply. Application forms are submitted online at lanecc.edu/es/forms.html or through myLane. There is a \$20 fee for the Oregon Transfer Module notation on transcript.

Applicants must apply by April 30 each year to ensure publication in the commencement booklet for that year. Review for degree/certificate completion takes approximately 20 business days following the end of each term.

Graduation Ceremony

Lane hosts one graduation ceremony each year at the end of spring term. Detailed information about the commencement ceremony is

available from the office of Student Life and Leadership Development, lanecc.edu/stuact/. All students are eligible to participate in commencement.

Degree and Certificate

All state approved degrees and career and technical programs are designed for full-time students completing at least 45 credit hours per year. However, the College recognizes many students earning degrees and certificates are not able to complete a full-time course load each term.

Program requirements evolve over time to reflect changes in knowledge, technology and professional standards. Programs also may be discontinued, depending on departmental review and budgetary decisions. Therefore, a part-time student must work closely with counselors, advisors and program coordinators to meet appropriate and current degree and certificate requirements. The following policies apply to students seeking degrees or certificates:

- Candidates for AAOT, AGS, AAS, AS, and ASOT - Business degrees or two-year certificates entering Lane credit programs prior to June 2013, and graduating by June 30, 2017, may use the requirements listed for graduation in this catalog or in any subsequent catalog. Candidates for one-year certificates who enter Lane credit programs prior to June 2013, and graduate by June 30, 2015, may use the requirements listed for graduation in this catalog or in any subsequent catalog.
- A candidate who does not complete a program within the above timeframes must meet graduation requirements and policies of the appropriate subsequent catalog. Program coordinators also may require such a candidate to repeat courses, or complete revised courses to meet updated program standards. Most courses do not expire within this timeframe.
- Students completing fewer than six credits per term should consult Counseling and Advising to determine which catalog year and program requirements to follow to achieve their goals.

Transfer Guidelines for Degrees and Certificates

The following policies apply to transfer course work:

- Lane uses course work from U.S. colleges and universities that are regionally accredited by:
 - Middle States Association of Colleges and Schools, Middle States Commission on Higher Education
 - New England Association of Schools and Colleges Commission on Institutions of Higher Education
 - New England Association of Schools and Colleges Commission on Technical and Career Institutions
 - North Central Association of Colleges and Schools the Higher Learning Commission
 - Northwest Commission on Colleges and Universities
 - Southern Association of Colleges and Schools Commission on Colleges
 - Western Association of Schools and Colleges, Accrediting Commission for Community and Junior Colleges
 - Western Association of Schools and Colleges, Accrediting Commission for Senior Colleges and Universities

Transfer Credit Process

You must be a current credit Lane Community College student enrolled in six credits or more for a transcript to be reviewed. Articulation of credits cannot be done until we have received your official transcripts(s). Articulations are completed on a first-come, first-served basis. Turn-around time is dependent upon the volume of requests and other factors, such as end of term graduation requests. All documents submitted to Lane become the property of Lane and are subject to federal law, the Family Education Rights and Privacy Act (FERPA). Courses may transfer to Lane even if there is not an

identical course offered at Lane. Not all transfer course work is eligible to meet defined degree or certificate requirements.

U.S. Transfer Credits

- Coursework must be completed at a regionally accredited institution.
- Grades of 'Pass' are only transferable when the issuing institution defines the grade as C (including C-) or better.
- Coursework at 300 levels or above is reviewed on a case-by-case basis and may require instructional department's review.
- The college or university must have been accredited or be a candidate for accreditation when the coursework was taken.

International Transfer Credits

- Coursework listed on non-U.S. transcripts may only be evaluated when accompanied by an evaluation from an approved evaluation service. Students may select an agency of their choice from the NACES website, naces.org
- A course-by-course evaluation from the evaluation service is required.

Non-Traditional Transfer Credits

- Credit-by Assessment and Credit-by-Exam may be granted for some courses. Students can use these methods to earn credits when institutions are not regionally accredited for a maximum of 25 percent of the degree or certificate. More information is available at lanecc.edu.
- Lane will evaluate any of the following learning experiences for credit depending on test and score: Advanced Placement (AP), College Level Entrance Examination Program (CLEP), International Baccalaureate (IB), DANTES (DSST), Military Service Credit, (AARTS, CCAF, CGI, and SMART) based on American Council on Education (ACE) recommendation.
- A military Veteran will be granted three credits of PE upon the submission of a DD214.

Student Outcomes Assessment

For the purpose of assuring a high quality learning environment, Lane Community College conducts outcomes assessments to measure student learning. Students may be asked to participate in satisfaction

surveys, compile portfolios of academic work, take achievement or licensure exams, or demonstrate skills in other ways. The purpose in all these activities is to monitor the quality of learning at Lane and provide evidence to evaluate and improve programs. Participants can be assured that all assessment results will be treated with strictest professional confidentiality. Results appearing in Lane assessment reports and other public documents are presented anonymously, and no student is individually identified. Students are strongly encouraged to participate to the best of their abilities in these assessment efforts.

Credit Student Outcomes

The following summary of first-time degree-seeking students entering Lane Community College in fall 2007 is provided in accordance with the federal Student-Right-to-Know act. More information about students and student outcomes at Lane is available at lanecc.edu/research/ir/index.html or from Institutional Research, Assessment and Planning, 541.463.5576.

From a 2007 cohort of 700 full-time, first-time, degree/ certificate-seeking students, 12% completed a degree by spring 2010 and 23% transferred to another higher education institution.

In 2011, Lane surveyed 2009-10 graduates and students who completed a majority of degree requirements before leaving Lane. According to the 567 survey respondents:

- 97 percent achieved their goals at Lane.
- 76 percent of students from career and technical programs were employed in jobs related to their field of study after leaving Lane.
- 52 percent of these career and technical students reported Lane's courses were "Very Relevant" or Relevant" to their jobs.
- 68 percent of students from transfer programs had continued their education after leaving Lane.
- 70 percent of these transfer students reported Lane prepared them "Well" or "Very Well" for classes at their new institution.



Associate of Arts Oregon Transfer Degree

Any student having the Associate of Arts Oregon Transfer (AAOT) degree recognized on an official college transcript will have met the lower division general education requirements of baccalaureate degree programs of any institution in the Oregon University System.

Students transferring under this agreement will have junior status for registration purposes. Course, class standing, or GPA requirements for specific majors, departments or schools are not necessarily satisfied by an AAOT degree.

Guidelines

A student must complete a total of 90 quarter credits to be awarded the AAOT.

All courses should be aligned with the student's intended program of study and the degree requirements of the baccalaureate institution to which the student plans to transfer. A student is encouraged to work with an advisor in the selection of courses.

All Foundational Requirements and Discipline Studies courses must be a minimum of 3 credits, except for Health/Wellness/Fitness courses, which may be any number of credits. All Elective courses may be any number of credits.

All courses must be passed with a grade of "C-" or better. Students must have a minimum cumulative GPA of 2.0 at the time the AAOT is awarded.

Foundational Requirements

Writing: 8 credits Students taking writing classes of 4 credits each must take WR 121 and either WR 122 or 227. Students taking writing classes of 3 credits each must take WR 121, 122, and either WR 123 or 227. Information Literacy will be included in the Writing Requirement.

Oral Communication: One course in the fundamentals of speech or communication from the list on page 44.

Mathematics: One course in college-level mathematics, for which Intermediate Algebra is a prerequisite.

Health/Wellness/Fitness: One or more courses totaling at least three credits from the list on page 44.

Discipline Studies

Cultural Literacy: Courses that satisfy the Cultural Literacy requirement are marked with an (*) in the list of approved courses on the following pages.

Arts and Letters: Three courses chosen from two or more disciplines from the list on page 42.

Social Sciences: Four courses chosen from two or more disciplines from the list on pages 42-43.

Science/Math/Computer Science: Four courses from at least two disciplines including at least three laboratory courses in biological and/or physical science from the lists on pages 43-44.

Electives

Any college-level course that would bring total credits to 90 quarter hours including up to 12 credits of Career and Technical Education. Career and Technical course prefixes are listed on this page.

Notes and Clarifications

1. Choose courses numbered 100 or higher. Although they are important in terms of preparation, courses that are developmental in nature are designed to prepare students for college-level work and are not counted in the 90 quarter hours required for the AAOT.
2. The "Foundational Requirements" above represent minimal skill competencies. As such, they may be open to demonstration of competency. Contact a counselor or advisor.
3. The second year of a foreign language, but not the first year, may be included among courses that count toward the Arts and Letters requirement. American Sign Language (ASL) is considered a foreign language.

4. WR 115 may be included in the AAOT degree as an elective providing that the WR 115 course was completed summer 1999 or later.
5. No courses numbered 198, 199, 298, or 299 may be used for Discipline Studies.
6. For transfer students graduating from high school in 1997 and thereafter, the Oregon University System has a second language admissions requirement: two terms of a college-level second language with an average grade of C- or above, OR two years of the same high school-level second language with an average grade of C- or above, OR satisfactory performance on an approved second language assessment of proficiency. Demonstrated proficiency in American Sign Language meets this second language admission requirement.

Students may include up to twelve career and technical elective credits in the Associate of Arts: Oregon Transfer (AAOT) and Associate of Science degrees from Lane Community College. Policies on accepting career and technical credits vary at the four-year colleges in Oregon, especially for students planning a direct transfer without completing the AAOT. Consult an academic adviser about taking career and technical courses as electives for direct transfer to a four-year institution.

Career technical courses are identified by the following prefixes:

AB	Auto Body
AM	Automotive
APR	Apprenticeship
AS	Aerospace Science
AUD	Audio Production
AV	Aviation Maintenance
BT	Business Technology
CA	Culinary Arts
CST	Construction
DA	Dental Assisting
DH	Dental Hygiene
DRF	Drafting
DS	Diesel
ECE	Early Childhood Education
EMT	Emergency Medical Technology
ET	Electronic Technology
FN	Food and Nutrition
FT	Flight Technology
GD	Graphic Design
GWE	General Work Experience
HDFS	Human Development and Family Studies
HI	Health Informatics
HIT	Health Information Technology
HO	Health Occupations
HS	Human Services
HRTM	Hotel, Restaurant, Tourism Management
LA	Legal Assistant
LAT	Landscape Technology
LGL	Legal Assisting
MA	Medical Assisting
MDP	Multimedia Production
MFG	Manufacturing
MUL	Multimedia
NRG	Energy
OST	Occupational Skills Training
PN	Practical Nursing
PST	Professional Skills Training
PTA	Physical Therapist Assistant
RE	Real Estate
RM	Retail Management
RT	Respiratory Therapy
RTEC	Regional Technology Education Consortium
SUST	Sustainability
VP	Video Production
WLD	Welding
WATR	Water Conservation

Approved courses for Oregon Transfer degree programs

Only the following courses meet the Oregon Transfer Module, Associate of Arts Oregon Transfer degree, and Associate of Science Oregon Transfer: Business degree requirements.

Arts and Letters

Note: Courses marked with () also will satisfy the Cultural Literacy requirement.

AIL 201,202,203	Chinuk WaWa
ART 111	Introduction to Visual Arts
ART 113,213	History of Photography 1,2
ART 115	Basic Design: Fundamentals
ART 115GD	Graphic Design
ART 116	Basic Design: Color
ART 117	Basic Design: 3-Dimensional
ART 118	Artist's Books
ART 131	Introduction to Drawing: 3D
ART 134	Field Drawing
ART 200	Graphic Design History
ART 202	Survey of Western Art
ART 203	Survey of American Indian Art and Architecture: North and Central America
ART 204,205,206	History of Western Art
ART 207*,208*,209*	History of Asian Art: India, China, Japan
ART 211	Survey of Visual Arts: Early Modern Art
ART 212	Survey of Visual Arts: Modern Art
ART 214	American Art
ART 217*	Islamic Art
ART 220	Documentary Photography
ART 231,232	Drawing: Intermediate; Perspective
ART 234	Drawing: Figure
ART 237	Illustration 1
ART 247	Sculpture: Site Specific
ART 248	Sculpture: Stone
ART 250	Ceramics: Hand Building
ART 251	Ceramics: Wheel Throwing
ART 253	Ceramics: Intermediate
ART 261,262	Photography 1,2
ART 264	Photography as Method
ART 265	Studies in Contemporary Photography
ART 270	Printmaking, Intaglio
ART 271	Printmaking, Relief
ART 272	Printmaking, Monotype, Collograph
ART 273	Printmaking, Intermediate Intaglio
ART 274	Printmaking, Intermediate Relief
ART 275	Silkscreen
ART 276	Sculpture: Introduction
ART 277,278	Sculpture: Welding; Wood
ART 281,284	Painting: Introduction; Intermediate
ART 282	Landscape & Architectural Photography
ART 285	Adv Silkscreen
ART 291	Sculpture: Metal Casting
ART 293	Sculpture: Figure
ART 294,295	Watercolor: Introduction; Intermediate
D 160	Dance Composition
D 251	Looking at Dance
D 256	Body Fundamentals/Body as Knowledge
D 260	Group Choreography
ENG 100	Children's Literature
ENG 104,105,106	Introduction to Literature: Fiction, Drama, Poetry
ENG 107*,108*,109*	Survey of World Literature
ENG 121	Detective Fiction
ENG 151*	Black American Literature
ENG 194	Literature of Comedy
ENG 195,196,197	Introduction to Film Studies
ENG 201,203	Shakespeare
ENG 204,205	Survey of British Literature
ENG 213*	Survey of Asian Literature
ENG 215*	Latino/a Literature
ENG 222*	Literature and Gender
ENG 232*	Native American Literature
ENG 240	Nature Literature
ENG 243*	Native American Autobiography
ENG 244*	Asian American Literature

ENG 250*	Introduction to Folklore and Mythology
ENG 253,254	Survey of American Literature
ENG 257*	The American Working Class in Fiction and Non-Fiction
ENG 259*	African American Poetry, Plays, and Film
ENG 260*	Introduction to Women Writers
ENG 261	Science Fiction
ENG 270	Bob Dylan: American Poet
ENG 271,272,273	Film Genre: Varied Topics
ES 244*	Native American Storytelling
FA 255	Understanding Movies: American Cinema
FA 263	Film in the Fifties
FA 264*	Women Make Movies
FA 265*	African American Film Images
FR 201,202,203	Second Year French
HUM 100	Humanities Through the Arts
J 134	Photojournalism
J 216	Newswriting 1
MUS 101	Music Fundamentals
MUS 102	Jazz Fundamentals
MUS 103*	Songwriting Techniques and Analysis 1
MUS 108*	Music in World Cultures
MUS 111,112,113	Music Theory 1
MUS 118,119	Music Technology MIDI/Audio 1,2
MUS 201,202,203	Introduction to Music and Its Literature
MUS 205*	Introduction to Jazz History
MUS 211,212,213	Music Theory 2
MUS 261,262,263	Music History
MUS 264*,265*,266*	History of Rock Music 1,2,3
PHL 201	Ethics
PHL 202	Theories of Knowledge
PHL 203	Theories of Reality
PHL 205*	Contemporary Moral Issues
PHL 221	Critical Thinking
REL 201*	Religions of India (Hinduism, Buddhism)
REL 202*	Religions of China and Japan (Taoism, Confucianism, Buddhism, and Shinto)
REL 203*	Religions of the Middle East (Judaism, Christianity, and Islam)
REL 230	Christian Beginnings
REL 243	Nature, Religion and Ecology
SP 100	Basic Communication
SP 105	Listening and Critical Thinking
SP 111	Fundamentals of Public Speaking
SP 112	Persuasive Speech
SP 115*	Introduction to Intercultural Communication
SP 130	Business and Professional Speech
SP 218	Interpersonal Communication
SP 219	Small Group Discussion
SP 220*	Communication, Gender and Culture
SP 262	Voice and Articulation
SPAN 201,202,203	Spanish, Second Year
TA 140	Acting Shakespeare
TA 141,142,143	Acting 1,2,3
TA 144	Improv
TA 241,242,243	Intermediate Acting
WR 241	Introduction to Imaginative Writing: Fiction
WR 242	Introduction to Imaginative Writing: Poetry
WR 255	The Poet in the City
WR 240	Creative Nonfiction

Social Science

Note: Courses marked with () also will satisfy the Cultural Literacy requirement.

ANTH 101	Physical Anthropology
ANTH 102*	World Archaeology
ANTH 103*	Cultural Anthropology
ANTH 227*,228*	Prehistory of Mexico; Cultures of Mexico
ANTH 229*	Chicano Culture
ANTH 231*,232*,233*	American Indian Studies
CJA 214	Introduction to Forensic Science
ECON 200	Principles of Economics: Introduction to Economics
ECON 201	Principles of Economics: Introduction to Micro Economics

ECON 202	Principles of Economics: Introduction Macro Economics
ECON 204	Introduction to International Economics
ECON 250*/ES 250*	Class, Race, and Gender in the U.S. Economy
ECON 260	Introduction to Environmental and Natural Resource Economics
ES 101*	Historical Racial and Ethnic Issues
ES 102*	Contemporary Racial and Ethnic Issues
ES 211*	Chicano/Latino Experience: Historical and Ideological Perspectives
ES 212*	Chicano/Latino Experience: Political and Ideological Perspectives
ES 213*	Chicano/Latino Experience: Contemporary Identity and Cultural Issues
ES 221*	African American Experience: Down From the Pyramids, Up From Slavery 10,000 BCE-1877
ES 222*	African American Experience: Aspiration 1877-1945
ES 223*	African American Experience: A Luta Continua: The Struggle Continues 1945 to Present
ES 231*	Asian American Experience: First and Second Generation
ES 232*	Asian American Experience: Social Movements of the 20th Century
ES 233*	Asian American Experience: Contemporary Issues in Asian America
ES 241*	Native American Experience: Consequences of Native American and European Contact
ES 242*	Native American Experience: Nineteenth Century Federal-Indian Relations
ES 243*	Native American Experience: Contemporary Native American Issues
ES 250*/ECON 250*	Class, Race, and Gender in the U.S. Economy
GEOG 141*	Natural Environment
GEOG 142*	Introduction to Human Geography
GEOG 201*	World Regional Geography
GIS 245	Maps and Spatial Information
GIS 246	Introduction to GIS
GIS 248	Applications in GIS
HST 101,102,103	History of Western Civilization
HST 104*,105*,106*	World History
HST 195*	History of the Vietnam War
HST 201,202,203	History of the United States
HST 207	History of the American West
HST 208	U.S. History Since 1945
HST 209	American History: The Civil War
HST 266*	U.S. Women's History
HUM 100	Humanities through the Arts
PHL 201	Ethics
PHL 202	Theories of Knowledge
PHL 203	Theories of Reality
PHL 205*	Contemporary Moral Issues
PHL 221	Critical Thinking
PS 104	Problems in U.S. Politics/Film 1
PS 105	Problems in U.S. Politics/Film 2
PS 201,202	U.S. Government and Politics
PS 203	State and Local Government and Politics
PS 204	Introduction to Comparative Politics
PS 205*	International Relations
PS 208	Introduction to Political Theory
PS 211	Peace and Conflict Studies: Global
PS 212	Peace and Conflict Studies: National
PS 213	Peace and Conflict Studies: Local
PS 225	Political Ideology
PS 275	Legal Processes Through Civil Rights and Liberties
PS 297	Environmental Politics
PSY 201,202,203	General Psychology
PSY 214	Introduction to Personality
PSY 215	Lifespan Developmental Psychology
PSY 216	Social Psychology
PSY 218*	Multicultural Psychology
PSY 235,236	Human Development 1,2
PSY 239	Introduction to Abnormal Psychology
REL 201*	Religions of India (Hinduism, Buddhism)
REL 202*	Religions of China and Japan (Taoism, Confucianism, Buddhism, and Shinto)

REL 203*	Religions of the Middle East (Judaism, Christianity, and Islam)
REL 230	Christian Beginnings
REL 243	Nature, Religion, and Ecology
SOC 108*	Selected Topics: Women's Studies
SOC 204	Introduction to Sociology
SOC 205	Social Stratification and Social Systems
SOC 206	Institutions and Social Change
SOC 207*	Women and Work
SOC 208*	Sport and Society
SOC 210	Marriage, Family and Intimate Relations
SOC 211	Social Deviance
SOC 213*	Race and Ethnicity
SOC 215*	Social Class
SOC 216*	Global Social Movements
SOC 218*	Sociology of Gender
SOC 225	Social Problems
WS 101*	Introduction to Women's Studies

Science, Mathematics, and Computer Science

Note: Courses marked with () also will satisfy the Cultural Literacy requirement.

Biological Sciences with laboratories

Note: Only one of the BI 101's, and one of the BI 102's, and one of the BI 103's can be used to meet the Science/Math/Computer Science requirements for any Lane degree. Any additional BI 101, 102, or 103 course credits will only be used as electives for a Lane degree. (See the course description section of this catalog for more information.)

BI 101,102,103	General Biology (See note below)
BI 102J*	Ethnobotany and BI 103G* General Biology: Global Ecology also will satisfy the Cultural Literacy requirement.
BI 112	Cell Biology for Health Occupations
BI 211	Principles of Biology (formerly BI 201, BOT 201 or Z 201)
BI 212	Principles of Biology (formerly BOT 202 or Z 202)
BI 231,232,233	Human Anatomy and Physiology 1,2,3
BI 234	Introductory Microbiology
BOT 213	Principles of Botany (formerly BOT 203)
Z 213	Principles of Zoology (formerly Z 203)

Physical Sciences with laboratories

ASTR 107	Astronomy
CH 104	Introductory Chemistry 1
CH 112	Chemistry for Health Occupations
CH 114	Introduction to Forensic Chemistry
CH 221,222,223	General Chemistry 1,2,3
CH 241,242,243	Organic Chemistry
CJA 214	Introduction to Forensic Science
ENVS 181	Terrestrial Environment
ENVS 182	Atmospheric Environment and Population
ENVS 183	Aquatic Environment
ENVS 184	Global Climate Change
G 101	Earth's Dynamic Interior
G 102	Earth's Dynamic Surface
G 103	Evolving Earth
G 146	Rocks and Minerals
G 147	National Parks
G 201	Earth Materials and Plate Tectonics
G 202	Earth's Surface Systems
G 203	Evolution of the Earth
GIS 245	Maps and Spatial Information
GIS 246	Introduction to GIS
GIS 248	Applications in GIS
GS 101	General Science (Nature of the Northwest)
GS 104,105,106	Physical Science
GS 142	Earth Science: Earth Revealed +L
GS 147	Oceanography +L
GS 148	Universe: Infinite Frontier +L
PH 101,102,103	Fundamentals of Physics
PH 201,202,203	General Physics
PH 211,212,213	General Physics with Calculus

+L must be taken for four credits to include lab

Other Science/Math/Computer Science Courses (non-laboratory)

ANTH 101	Physical Anthropology
ASTR 121	Astronomy of the Solar System
ASTR 122	Stellar Asrtonomy
ASTR 123	Cosmology and the Large-Scale Structure of the Universe
CJA 214	Intro to Forensic Science
CS 160	Orientation to Computer Science
CS 161,162	Computer Science 1,2
CS 233	Advanced Programming
CS 260	Data Structures 1
CS 271	Computer Architecture and Assembly Language
G 148	Geologic Hazards
GEOG 141*	Natural Environment
GIS 245	Maps and Spatial Information
GIS 246	Introduction to GIS
GIS 248	Applications in GIS
GS 142	Earth Science: Earth Revealed
GS 147	Oceanography
GS 148	Universe: Infinite Frontier
MTH 105	Introduction to Contemporary Mathematics
MTH 111	College Algebra
MTH 112	Trigonometry
MTH 211,212,213	Fundamentals of Elementary Math 1,2,3
MTH 231,232,233	Discrete Mathematics 1,2,3
MTH 241,242	Elementary Calculus 1,2
MTH 243	Introduction to Probability and Statistics
MTH 251	Calculus 1 (Differential Calculus)
MTH 252	Calculus 2 (Integral Calculus)
MTH 253	Calculus 3 (Infinite Series and Sequences)
MTH 254	Vector Calculus 1 (Introduction to Vectors and Multi dimensions)
MTH 255	Vector Calculus 2 (Introduction to Vector Analysis)
MTH 256	Applied Differential Equations
MTH 261	Introduction to Linear Algebra
PSY 217	Introduction to Experimental Psychology

Cultural Literacy

Courses approved for the Cultural Literacy requirement are marked with an (*) in the lists of courses on the previous pages. A course taken to meet the Cultural Literacy Requirement will also be used to satisfy Discipline Studies Requirements. The credits for such courses will only be counted once toward the 90 credits required to complete the degree.

Speech/Oral Communication

SP 100	Basic Communication
SP 111	Fundamentals of Public Speaking
SP 112	Persuasive Speech
SP 130	Business and Professional Speech
SP 218	Interpersonal Communication

Health/Wellness/Fitness

FN 225	Nutrition
HE 125	Workplace Health and Safety (summer 1997 or later)
HE 152	Drugs, Society and Behavior
HE 209	Human Sexuality
HE 222	Consumer Health
HE 240	Holistic Health
HE 250	Personal Health
HE 252	First Aid (summer 1997 or later)
HE 255	Global Health and Sustainability
HE 262	First Aid 2: Beyond the Basics
HE 275	Lifetime Health and Fitness

Or a combination of 3 credits of PE Activity classes

PE 181C	Combination Aerobics
PE 181D	Dance Aerobics
PE 181K	Kickboxing Aerobics
PE 181S	Step Aerobics
PE 181SB	Body Sculpt
PE 181SS	Step and Sculpt
PE 181Y	Yogilates
PE 183A	Conditioning
PE 183B	Exercise and Weight Control
PE 183C	Exercise Walking
PE 183CG	Group Cycling
PE 183E	Fitness Circuits
PE 183F	Fitness Education: Introduction
PE 183G	Fitness Education: Returning
PE 183J	Jogging
PE 183R	Stability Ball Fitness
PE 183S	Strength Training
PE 183U	Strength Training for Women
PE 183W	Therapeutic Exercise and Rehabilitation
PE 184N	Conditioning for Martial Arts
PE 185M	Meditation
PE 185T	Tai Chi Chuan
PE 185U	Tai Chi Chuan Intermediate
PE 185Y	Yoga Beginning
PE 185YG	Gentle Yoga
PE 185Z	Yoga Intermediate
PE 191A	Cross Country Conditioning 1
PE 191C	Cross Country Conditioning 2
PE 192I	Soccer Conditioning 1
PE 192J	Soccer Conditioning 2
PE 193A	Basketball Conditioning 1
PE 193C	Basketball Conditioning 2
PE 195A	Basketball Women's Conditioning 1
PE 195C	Basketball Women's Conditioning 2
PE 196A	Track & Field Conditioning 1
PE 196D	Track & Field Conditioning 2
PE 197A	Baseball Conditioning 1
PE 197C	Baseball Conditioning 2

Sustainability-focused courses

BI 103M	General Biology: Biodiversity & Sustainability
HE 255	Global Health and Sustainability
PS 297	Environmental Politics
REL 243	Nature, Religion and Ecology

Associate of Science Oregon Transfer: Business

For students who intend to transfer within Oregon, the Associate of Science/Oregon Transfer in Business (ASOT: Business) offers a degree accepted statewide with business-focused general education requirements and electives. Any student with an ASOT: Business degree conforming to the guidelines below, and who transfers to any institution in the Oregon University System (OUS), will have met the lower-division general education requirements of that institution's baccalaureate degree programs. Students transferring with this degree will have junior standing for registration purposes.

Each student must contact the specific OUS business school/program early in the first year of an ASOT: Business degree to be advised about additional requirements and procedures for admission consideration to the OUS institution and the Business school/program.

Admission to the Business school/program of any OUS institution is not guaranteed upon completion of the Associate of Science/Oregon Transfer in Business (ASOT: Business) degree.

I. Foundational Skills

Note: Foundational Skills are open to demonstration of proficiency. For information on waiver testing or credit for prior learning, contact a counselor or advisor.

Writing:

Students taking writing courses of three credits each must take WR121, WR122, and WR227. Students taking writing classes of four credits each must take WR121 and either WR122 or WR227. Information Literacy will be included in the writing requirement.

Oral Communications:

One course in the fundamentals of speech: SP100, 105, 111, 112, 115, 130, 218, 219, 220, 262.

Mathematics:

A minimum of MTH 105 and above, one of which must be MTH 243.

Computer Applications:

Proficiency in word-processing, spreadsheet, database, and presentation software as demonstrated by successful completion of appropriate courses. Each student must see an advisor or counselor to determine which course(s) will best meet the requirements of an intended transfer institution. CIS 101, CIS 131, CS 120.

II. Discipline Studies

Note: Courses must be at least 3 credits each.

Arts and Letters:

Three courses from approved list on page 42 chosen from at least two disciplines.

Social Sciences:

Four courses from approved list, with a minimum of two courses in "principles of economics" (to include microeconomics and macroeconomics) at the 200 level.

Science:

Four courses from at least two disciplines including at least three laboratory courses in the biological and/or physical sciences from approved list on page 43-44.

Cultural Literacy:

One course from any of the discipline studies designated as meeting the statewide criteria for cultural literacy.

III. Business-Specific Requirements

Note: The minimum is 14 credits so that 3 credit courses will be included. Each course in this section must be completed with a grade of "C" or better.

BA 101 Introduction to Business, 4 credits

BA 211 Fundamentals of Financial Accounting and

BA 213 Decision Making with Accounting Information, 8 credits

BA 226 Business Law 1 (or other advisor-approved Business course from the list below), 4 credits

Check with a business advisor if you intend to substitute one of the courses below for BA 226 Business Law. Some OUS institutions require BA 226.

BA 206 Management Fundamentals

BA 223 Marketing

BA 224 Human Resource Management

BA 227 Law of Business Transactions

BA 242 Fundamentals of Investments

BA 249 Retailing

BA 278 Leadership and Team Building

BA 280 Cooperative Education

BA 281 Personal Finance

IV. Electives and University-Specific Prerequisites

as required to bring total credits to 90, depending on choice of transfer institution. Consult Lane's Counseling and Advising department for list of university-specific prerequisites and recommended coursework. Please note: Prerequisites and recommendations of specific institutions may change without notice.

General Guidelines

Any student having the Associate of Science Oregon Transfer-Business (ASOT-Business) degree recognized on an official college transcript will have met the lower division General Education requirements of baccalaureate degree programs of any institution in the Oregon University System.

Students transferring under this agreement will have junior status for registration purposes. Course, class standing, or GPA requirements for specific majors, departments, or schools are not necessarily satisfied by an ASOT-Business degree.

For transfer students graduating from high school in 1997 and thereafter, the Oregon University System has a second language admission requirement: two terms of a college-level second language with an average grade of C- or above, OR two years of the same high school-level second language with an average grade of C- or above, OR satisfactory performance on an approved second language assessment of proficiency. Demonstrated proficiency in American Sign Language meets this second language admission requirement.

Lower-division courses taken at the community college may not meet the requirements of an upper-division course with a similar title and content offered by an Oregon University System Business School/Program. In such cases, the courses in question will normally transfer as electives.

A student must complete a total of 90 quarter credits to be awarded the ASOT-Business.

All courses should be aligned with the student's intended program of study and the degree requirements of the baccalaureate institution to which the student plans to transfer. A student is encouraged to work with an advisor in the selection of courses within the ASOT-Business degree for alignment to the institution the student intends to transfer.

All Foundational Requirements and Discipline Studies courses must be a minimum of 3 credits. All Elective courses may be any

number of credits.

All courses must be passed with a grade of "C-" or better. Students must have a minimum cumulative GPA of 2.0 at the time the ASOT-Business is awarded.

The ASOT: Business degree may include up to 12 approved career technical credits as electives.

Important: Each student is encouraged to contact an advisor or counselor to determine how to match career goals with an appropriate program. Careful advising especially is needed for this degree program, as requirements at OUS institutions vary, and elective choices will differ depending on the intended transfer institution.

Associate of Science Degree

For some transfer majors, the AS degree best matches some pre-major requirements of four-year colleges or universities. Requirements include a rigorous general education program balanced with electives. Students must work closely with an advisor or counselor (at Lane and the intended transfer institution) to determine which courses best suit plans for transfer. Award of this degree does not guarantee all lower division general education requirements have been met at an OUS institution, nor does it ensure junior status at a state four-year institution.

I. Foundational Skills:

Students must complete all General Education requirements in this section with a minimum grade of C- or "P" (Pass).

Note: Foundational Skills are open to demonstration of proficiency. For information on waiver testing or credit for prior learning, contact a counselor or advisor.

English Composition

Two courses (minimum 3 credits each):

WR 115 (summer 1999 or after), WR 121, 122, 123, 227

Mathematics

Four credits MTH 105 or higher

Physical Education or Health

Physical Education -Three credits over two or more terms One course required from the list of activity classes from the AAOT, plus two additional credits from PE 181-298. One credit from PE 186W and one credit from a Dance prefix accepted to meet this requirement.

OR

Health Education

Three credits HE 152, 209, 222, 240, 250, 255, 262, or 275; or HE 125, 252 (summer 1997 or later), FN 225

II. Discipline Studies:

In addition to courses used for foundational skills in section 1, students must select additional courses in the areas identified below.

Two courses in each discipline area below must be a minimum of 3 credits.

Some courses may be repeatable (see the course description). Repeatable courses may be used once for this requirement and up to two additional times as electives.

Choose courses numbered 100 or higher; excluding developmental courses listed below. No courses numbered 198, 199, 298 or 299 may be used for distribution areas.

Developmental Courses may not be used. Course numbers 001-099 identify these courses (e.g., RD 090 or WR 080). Additionally, the following courses are considered developmental: ENG 110, 116, 117; RD 115; WR 110, 115 (taken before summer 1999) or 120.

Arts/Letters

Three courses Choose from the following: Art, Dance, Effective Learning, Film Arts, Foreign Language, Humanities, Journalism, Literature, Music, Philosophy, Religion, Speech, Theater Arts, Writing

Social Science

Three courses Choose from the following: Anthropology, Economics, Ethnic Studies, Geographic Information Science (GIS), Geography, History, Human Relations (CG and HS prefixed courses), Philosophy, Political Science, Psychology, Religion, Sociology, Women's Studies.

Science/Math/Computer Science

Nine Courses Choose from the following: Biology (see Note on page 43 for instruction), Astronomy, Botany, Chemistry, Computer Science (CS prefix courses only, not CIS), Engineering, Geographic Information Science (GIS), Geology (G or ENV), Mathematics (MTH 105 and higher), The Natural Environment (GEOG 141), Physical Anthropology (ANTH 101), Physical Science (GS prefix), Physics, Zoology; Advanced Technology courses: ET 129, 130, 131, 145, 146, 151, 152; DRF 205, 207; FT 113; Health Professions courses: DA 110, HO 150, HO 152.

III. Electives

Any college-level course that would bring total credits to 90 quarter hours with the following limitations:

Developmental courses may not be used.

Career Technical courses a maximum of 12 additional credits may be used. Courses are identified by prefixes listed on page 41.

Physical Education activity courses a maximum of 12 credits for the entire degree

Cooperative Education a maximum of 18 credits. See list, pages 205-206

Individual Music Lessons (MUP) a maximum of 12 credits

Additional Information: See "Degrees and Certificates," page 36-40.

Associate of General Studies

For students not pursuing specific transfer or professional programs, the AGS degree provides an alternative to meet individual goals, balancing general education and elective transfer or career and technical coursework. Students must work closely with an advisor or counselor (at Lane or the intended transfer institution) to determine which courses best suit their plans. Award of this degree does not guarantee all lower division general education requirements have been met at an OUS institution, nor does it ensure junior status at a state four-year institution.

I. Foundational Skills:

Students must complete all requirements in this section with a minimum grade of C- or "P" (Pass).

Note: Foundational Skills are open to demonstration of proficiency. For information on waiver testing or credit for prior learning, contact a counselor or advisor.

English Composition

Two courses (minimum 3 credits each):

WR 115 (summer 1999 or after), WR 121, 122, 123, 227

Mathematics

Four credits complete one of the following options:

MTH 105 or higher

OR

MTH 052 or higher and one of the following: CIS 101 or CS 120 (all credits are counted in this area).

Physical Education or Health

Physical Education - Three credits over two or more terms One course required from the list of activity classes from the AAOT, plus two additional credits from PE 181-298. One credit from PE 186W and one credit from a Dance prefix accepted to meet this requirement.

OR

Health

Three credits HE 152, 209, 222, 240, 250, 255, 262 or 275; or HE 125, 252 (summer 1997 or later), FN 225

II. Discipline Studies:

In addition to courses used in section 1, students must select additional courses in the areas identified below.

Some courses may be repeatable (see the course description). Repeatable courses may be used once to fulfill this requirement.

Choose courses numbered 100 or higher; excluding developmental courses listed below. No courses numbered 198, 199, 298 or 299 may be used for distribution areas.

Developmental Courses may not be used. Course numbers 001-099 identify these courses (e.g., RD 090 or WR 080). Additionally, the following courses are considered developmental: ENG 110, 116, 117; RD 115; WR 110, 115 (before summer 1999) or WR 120.

Arts/Letters

Twelve credits Choose from the following: Art, Dance, Effective Learning, Film Arts, Foreign Language, Humanities, Journalism, Literature, Music, Philosophy, Religion, Speech, Theater Arts, Writing.

Social Science

Twelve credits Choose from the following: Anthropology, Economics, Ethnic Studies, Geographic Information Science (GIS), Geography, History, Human Relations (CG and HS prefixed courses), Humanities (HUM 100) Through the Arts, Philosophy, Political Science, Psychology, Religion, Sociology, Women's Studies.

Science/Math/Computer Science

Fourteen credits Choose from the following: Biology (see Note on page 43 for instruction) Astronomy, Botany, Chemistry, Computer Science (CS prefix courses only, not CIS), Engineering, Geographic Information Science (GIS), Geology (G or ENVS), Mathematics (MTH 105 and higher), The Natural Environment (GEOG 141), Physical Anthropology (ANTH 101), Physical Science (GS prefix), Physics, Zoology; Advanced Technology courses: ET 129, 130, 131, 145, 146, 151, 152; DRF 207, 205; FT 113; Health Professions courses: DA 110, HO 150, HO 152.

III. Electives

Any college-level course that would bring total credits to 90 quarter hours with the following limitations:

Developmental courses may not be used.

Physical Education activity courses a maximum of 12 credits for the entire degree

Cooperative Education a maximum of 18 credits. See list, page 205-206.

Individual Music Lessons (MUP) a maximum of 12 credits

Additional Information: See "Degrees and Certificates," page 36-40.



Associate of Applied Science Degree

The goal of AAS programs is to train graduates for immediate employment and direct entry into the workforce. Many career and technical programs require cooperative education or internships and may require licensure exams or certifications.

Career and Technical courses do not necessarily transfer to other institutions. See course prefixes listed on page 41.

Some programs offer certificates of completion for certificate requirements, see program listing pages.

I. Foundational Skills:

Students must complete all General Education requirements in this section with a minimum grade of C- or "P" (Pass), unless otherwise noted by the sponsoring department that the course requires a letter grade or a higher grade.

Note: Foundational Skills are open to demonstration of proficiency. For information on waiver testing or credit for prior learning, contact a counselor or advisor.

English Composition

Three credits (one class) specified by the program, or if not specified, WR 115 (completed Summer 1999 or later)

Mathematics

One course, minimum three credits as specified by the program, or if not specified: MTH 025 (Math courses must be completed for the full number of credits offered. For example, all four credits of MTH 060 must be completed.)

Physical Education or Health

Physical Education: Three credits over two or more terms One course required from the approved list of PE activity classes from the AAOT, plus two additional credits from PE 181-298. One credit from PE 186W and one credit from a Dance prefix accepted to meet this requirement.

OR

Health: Three credits HE 152, 209, 222, 240, 250, 255, 262 or 275; or HE 125, 252 (summer 1997 or later), FN 225

II. Discipline Studies:

A minimum of twelve credits is required with at least three credits in each discipline area.

See the individual programs for specific course requirements. If no specific courses are listed, see the information below.

Some courses may be repeated (see course description). Repeatable courses may be used once as a distribution requirement.

Choose courses numbered 100 or higher; excluding developmental courses listed below. Course numbers 001-099 identify these courses (e.g., RD 090 or WR 080). Additionally, the following courses are considered developmental: ENG 110, 116, 117; RD 115; WR 110, 115 (before summer 1999) or WR 120.

No courses numbered 198, 199, 298 or 299 may be used for distribution areas.

Arts/Letters

Three credits minimum from one subject prefix specified by program, or if not specified, chosen from: Art, Dance, Effective Learning, English, Film Arts, Foreign Language, Humanities, Journalism, Literature, Music, Philosophy, Religion, Speech, Theater Arts, Writing

Human Relations/Social Science

Three credits minimum from one subject prefix specified by program, or if not specified, chosen from the approved list in the previous pages. Additional social science credits may be from any of the social science areas as follows: Anthropology, Economics, Ethnic Studies, Geographic Information Science (GIS), Geography, History, Human Relations (CG, formerly HD and HS prefixed courses), Philosophy, Humanities (HUM 100) Through the Arts, Political Science, Psychology, Religion, Sociology, or Women's Studies.

Science/Math/Computer Science

Three credits minimum from one subject prefix specified by program, or if not specified, chosen from: Astronomy, Biology, Botany, Chemistry, Computer Science (CS prefix only, not CIS), Engineering, Geographic Information Science (GIS), Geology (G or ENVS), Mathematics (must be a higher level course than the minimum required by the program), GEOG 141, ANTH 101, Physical Science (GS prefix), Physics, Zoology or Advanced Technology courses: ET 129, 130, 131, 145, 146, 151, 152; DRF 205, 207; FT 113; Health Professions courses: DA 110, HO 150, HO 152.

III. Program Core Requirements

Core course work varies from program to program. Not all programs offer a degree. See the individual program descriptions for specific requirements and limitations, pages 68-161.

Additional Information: See "Additional Information" under Certificate, page 49.

Human Relations*

Three credits from this list will meet the Human Relations component for the AAS degrees and certificates.

ANTH 103	Cultural Anthropology
BA 278	Leadership and Team Dynamics
BT 146	Team Building Skills
CG 100	College Success
CG 140	Career and Life Planning
CG 144	Introduction to Assertive Behavior
CG 145	Coping Skills for Stress and Depression
CG 203	Human Relations at Work
CG 204	Eliminating Self-Defeating Behavior
CG 211,212	Dreikursian Principles of Child Guidance 1,2
CG 213	Improving Parent-Child Relations
CPSY 200	Understanding Addictive Behavior
GEOG 142	Introduction to Human Geography
HO 102	Diversity Issues in Healthcare
PHL 201	Ethics
PHL 205	Contemporary Moral Issues
PS 204	Introduction to Comparative Politics
PS 213	Peace and Conflict Studies: Local
PSY 110	Exploring Psychology
PSY 205	Applied Psychology
SP 218	Interpersonal Communication
SP 219	Small Group Discussion
SOC 108A	Selected Topics in Women's Studies
SOC 204	Introduction to Sociology
SOC 205	Social Stratification and Social Systems
SOC 206	Institutions and Social Change
SOC 207	Women and Work
SOC 210	Marriage, Family and Intimate Relations
SOC 211	Social Deviance
SOC 225	Social Problems
WS 101	Introduction to Women's Studies

* Note: If additional Social Science courses are needed in addition to the three credits of Human Relations as required, see the list of Social Science courses on page 42-43.

Certificate (One-Year and Two-Year)

Students are encouraged to contact an advisor or counselor to determine which certificate is appropriate to meet their goals.

Lane awards certificates to students who meet the listed certificate requirements for Lane's career and technical programs. Refer to the individual programs for more specific requirements.

I. Foundational Skills:

Students must complete all General Education requirements in this section with a minimum grade of C- or "P" (Pass), unless otherwise noted by the sponsoring department that the course requires a letter grade and/or a higher grade.

Note: Foundational Skills are open to demonstration of proficiency. For information on waiver testing or credit for prior learning, contact a counselor or advisor.

English Composition

Three credits (one class) as specified by the program, or if not specified, WR 115W

Mathematics

Three Credits or more (one class) - as specified by the program, or if not specified: MTH 025 or higher (Math classes must be completed for the full number of credits offered. For example, MTH 060 is four credits and all four credits must be taken.)

Human Relations

Three credits (one class) - specified by program, or if not specified from the approved list on page 48.

II. Program Core Requirements

Core course work varies from program to program. Not all programs offer a certificate. See the individual program descriptions for specific requirements and limitations, pages 68-161. See Degree and Certificate Limitations, page 36-40.

Additional Information: See "Degrees and Certificates," page 36.

- The requirements listed in Section I are minimums. Some career and technical programs may have higher general education course and/or grade requirements. Only the Academic Requirements Review Committee may waive a college General Education requirement. Petitions are available from Enrollment and Student Financial Services at lanecc.edu/es/forms/html.
- Programs may have specific courses listed to fulfill the General Education Requirements in Section I. For the Human Relations area, a department may substitute another course from the approved course list.
- A maximum of 18 credits of Cooperative Education listed on pages 205-206 may be used.
- A maximum of 12 credits of Physical Education listed on page 44 may be used.
- Developmental courses may be used only when listed specifically by certificate program requirements. Course numbers 001 through 099 usually identify these courses. However, WR 115 taken prior to summer 1999 may not be used.

Oregon Transfer Model

A state-approved Transcription Notation (not a degree or certificate)

For students who intend to transfer within Oregon, the Oregon Transfer Module offers a program of general education requirements and elective credits accepted statewide, and ensures sophomore status for registration purposes.

Any student holding an Oregon Transfer Module that conforms to the guidelines below will have met the requirements for the Transfer Module at any Oregon community college or institution in the Oregon University System. Upon transfer, the receiving institution may specify additional course work that is required for a major or for degree requirements or to make up the difference between the Transfer Module and the institution's total General Education requirements. Oregon Transfer Module credits also may not match program requirements in the receiving school. Students are encouraged to meet with a counselor or advisor for planning their courses. The Oregon Transfer Module includes 45 credits of course work, equivalent to 3 academic quarters.

I. Foundational Skills:

Note: Foundational Skills are open to demonstration of proficiency. For information on waiver testing or credit for prior learning, contact a counselor or advisor.

Writing Two courses of college-level composition (WR 121, WR 122, WR 123, or WR 227)

Oral Communications One course of fundamentals of speech or communication (SP 100, SP 111 or SP 112)

Mathematics One course of college-level mathematics, for which at least MATH 095 is a prerequisite (MTH 105 or higher)

II. Discipline Studies: (must be at least 3 credits each)

Arts and Letters 3 courses from approved list, page 42

Social Sciences 3 courses from approved list, pages 42-43

Science/Math/Computer Science 3 courses from the approved list on pages 43-44 including at least one biological or physical science with a lab

III. Additional Requirements:

Electives As required to bring the total credits to 45. Courses must be from the Introduction to Disciplines areas (Arts and Letters, Social Sciences, or Science/Math/Computer Science). No developmental courses may be used.

Grades All courses must have a grade of "C-" or better. Students must have a minimum cumulative GPA of 2.0 at the time the module is posted to the students transcript.

Developmental Courses Courses that are designed to prepare students for college transfer courses are not applicable to the Oregon Transfer Module.

Notes and Limitations

When choosing courses in science and mathematics, students/advisors should check specific requirements at receiving schools. Courses that include a lab component, or that deal with specific subjects, may be required for majors or degrees.

All Oregon community colleges and Oregon University System institutions will offer students the opportunity to complete an Oregon Transfer Module and the OTM designation will be posted on the transcript by the issuing institution upon request. Regionally accredited private colleges and universities within the state may also offer and issue Transfer Modules, which will be accepted at any Oregon public college or university.

Transfer

Lane Community College offers courses for students who wish to pursue a four-year degree at a public or private college or university. A student who attends Lane can complete lower division general education requirements of the four-year colleges and begin work on the requirements for a specific major. The advantages of beginning college studies at Lane include small classes, lower costs, individual help from instructors, and an opportunity to improve writing, reading, math, and study skills.

Planning to Transfer

General education and graduation requirements for specific majors vary among colleges and universities.

Lane's Counseling and Advising Center is a complete resource for students who plan to transfer credit from Lane. The center has information on colleges and universities and the degree programs they offer. Counselors and advisors are available to help students with academic planning to ensure that course work is appropriate for programs at the four-year colleges they plan to attend. In addition, Counseling offers several transfer workshops each term to help students obtain up-to-date transfer information.

Planning is important because it helps students prepare for further studies in their programs. For instance, it may be important that a student begin mathematics studies as early as possible. For certain majors, students need to be attending the four-year school after the first year of study because specific major requirements are part of the second-year curriculum. Students who have taken advantage of Lane's advising opportunities have a smooth transfer process and continue on to complete their bachelor's degrees. Students have several choices for transfer planning. Transfer requirements change often. In addition to information presented here, please be sure to consult with a counselor or advisor.

Second Language Requirement for Admission For transfer students graduating from high school in 1997 and thereafter, the Oregon University System has a second language admission requirement: two terms of a college-level second language with an average grade of C- or above, OR two years of the same high school-level second language with an average grade of C- or above, OR satisfactory performance on an approved second language proficiency. Demonstrated proficiency in American Sign Language meets this second language admission requirement.

Direct Transfer This option is for any student who has selected a transfer school, major and degree and who wishes to satisfy the specific requirements for that college or university. It is especially important that a student who chooses this option works closely with a counselor or advisor at Lane.

It is the responsibility of students to learn the program requirements of their intended transfer school. Students should periodically contact Counseling for academic advising and to learn of any possible changes in a program.

Dual Enrollment Program/Lane Community College and University of Oregon Students may take advantage of this agreement between the two institutions to take classes concurrently. Students must be admitted to both institutions and complete an additional application insert that is available at the Admissions Office at the UO and in the Counseling/Advising Center at Lane.

Dual Enrollment admission will allow students to use financial aid to take courses at both campuses. For students with 0-89 eligible credits, the financial aid award is administered by Lane; for students with 90 or more eligible credits, the financial aid award is administered by the University of Oregon.

Degree Partnership Program (DPP)/Lane Community College and Oregon State University Students can be Jointly admitted and enrolled at Lane and OSU. Students must be admitted to both institutions and complete an additional application for DPP available through OSU.

DPP will allow students to use financial aid to take courses at both campuses. For students with 0-89 eligible credits, the financial aid reward is administered by Lane; for students with 90 or more eligible credits, the financial aid is administered by OSU.

Oregon Transfer Module (OTM) For students intending to transfer within a year to an Oregon University System Institution, this transcript notation ensures the 45 credits of specific general education requirements and electives will be accepted at any state institution, and ensures sophomore status for registration purposes. Upon transfer, the receiving institution may specify additional course work required for a major or for degree requirements or to make up the difference between the Transfer Module and the institution's total General Education requirements.

Associate of Arts: Oregon Transfer Degree (AAOT) This degree is designed for students who wish to obtain an associate of arts degree and want the flexibility to attend any school in the Oregon University System. Institutions in the Oregon University System accept the associate of arts Oregon transfer degree to meet that university's lower division general education requirements. (See the AAOT degree requirements on page 41.) A student selecting this transfer option still must meet that university's grade point average admission requirement and complete the coursework required for a major and degree with junior standing.

The principal advantage of the AAOT is that it fulfills the lower division (freshman/sophomore) General Education requirements for Baccalaureate degrees at all OUS institutions. It does not necessarily meet all of the degree requirements that an OUS institution might have beyond the requirements for majors. The AAOT guarantees that all general education credits that a student earned will be accepted as the general education requirements at the receiving institution.

In some cases, students may also be able to use AAOT General Education courses to meet certain lower-division requirements in their intended majors. Here, caution is required, however, since the AAOT degree was not intended for this purpose. Students who have a major in mind, and also want to maximize the amount of AAOT coursework that will count toward it, should work closely with an academic adviser and make use of the ATLAS system when designing their AAOT degrees. General transfer information is available at: ous.edu/stucoun/prospstu/transfer.php

For students intending to become teachers, specific recommendations on structuring their AAOT degrees are given at: How to become an Oregon Teacher, ous.edu/programs/teached/files/AdvisingGuide2008Final.pdf

Because the amount of coursework required for an AAOT degree corresponds to 2 academic years, degree recipients are considered juniors for purposes of registration at an Oregon University System institution. Students should keep in mind, however, that the AAOT does not guarantee that 2 additional years will suffice to earn a Baccalaureate degree. That is because the AAOT does not give students junior standing in their majors. Neither does it guarantee entrance into a competitive major. Students may need to take additional introductory work to prepare for certain majors and should check with an advisor regarding availability at their local community colleges. In addition, it's not uncommon for students to change their majors and find that they must go back and take introductory work in the new area.

Students and academic advisers should recognize that although the AAOT provides an excellent structure for many students — particularly, those who are unsure of their primary academic focus — it is not ideal for everyone. Students contemplating certain majors cannot easily accommodate their highly-specific pre-requisite coursework into the AAOT framework. In general, an AAOT recipient who is pursuing any course of study that is credit-heavy at the major lower division level may have to take additional lower-division coursework, specifically for the major. Students contemplating such majors should consult closely with an advisor.

Associate of Science Oregon Transfer: Business (ASOT: Bus)

For students who intend to transfer to an Oregon University System institution, this degree offers business-focused general education requirements and electives. Students who meet the transfer institution's admission requirements and transfer to an Oregon University System with this degree are guaranteed to have met that institution's lower-division general education requirements. They will have junior status for registration purposes.

Associate of Science (AS) (Transfer) For some transfer majors, this degree best matches pre-major requirements of specific colleges or universities. Requirements include a rigorous general education program balanced with electives. However, this degree does not carry the same transfer guarantees of meeting all lower-division general education requirements as the OTM, AAOT, or ASOT: Business described above. It does not ensure junior status upon transfer to a state four-year institution. Students seeking this degree must work closely with advisors at Lane and the intended transfer institution to determine which courses best match plans for transfer majors.

Associate of General Studies (AGS) (Transfer) For students not pursuing specific transfer or professional programs, this degree provides an alternative to meet individual goals, including general education and elective transfer or career and technical coursework. However, this degree does not carry the same transfer guarantees of meeting all lower-division general education requirements as the OTM, AAOT, or ASOT: Business described above. It does not ensure junior status upon transfer to a state four-year institution.

Degrees

For information about degrees and limitations, see pages 36-40.

Transfer Majors Students can begin preparing for many careers at Lane. The following is a list of majors and the counselor/advisor for Lane courses that may transfer to a university in the Oregon University System. (Not all majors are offered at every university.)

Major	Counselor/Academic Advisor
Agriculture	Debby Ganser/Gerry Meenaghan
Anthropology	Anthony Hampton/Cindy Lott
Architecture	Christina Salter
Area and Ethnic Studies	Anthony Hampton/Cindy Lott
Art	Christina Salter
Biology	Debby Ganser/Gerry Meenaghan
Business Administration.....	Marva Solomon/Deb Hupcey
Chemistry.....	Debby Ganser/Gerry Meenaghan
Computer and Information Sciences	Debby Ganser/Gerry Meenaghan
Criminal Justice	Anthony Hampton/Cindy Lott
Dance.....	Christina Salter
Dental Hygiene.....	See Counseling Dept.
Dentistry.....	Debby Ganser/Gerry Meenaghan
Drama, see Theatre Arts	
Economics	Anthony Hampton/Cindy Lott
Elementary Education	Marva Solomon/Deb Hupcey
Engineering; Engineering Tech.....	Debby Ganser/Gerry Meenaghan
English.....	Anthony Hampton/Cindy Lott
Environmental Sciences	Debby Ganser/Gerry Meenaghan
Exercise Sci/Movement	See Counseling Dept.
Foreign Languages.....	Anthony Hampton/Cindy Lott
Forestry	Debby Ganser/Gerry Meenaghan
General Physical Science.....	Debby Ganser/Gerry Meenaghan
General Social Science	Anthony Hampton/Cindy Lott
Geographic Information Science.....	Anthony Hampton/Cindy Lott
Geography.....	Anthony Hampton/Cindy Lott
Geology.....	Debby Ganser/Gerry Meenaghan
Health and Health Education; Health Care Administration	See Counseling Dept.
History	Anthony Hampton/Cindy Lott
Home Economics.....	See Counseling Dept.
Hotel, Restaurant and Tourism Management.....	Carolyn Litty/Claudia Riumallo
Journalism.....	Christina Salter
Law (pre-professional)	Anthony Hampton/Cindy Lott
Life Sciences (biology, botany, zoology)	Debby Ganser/Gerry Meenaghan
Literature (English)	Anthony Hampton/Cindy Lott
Mathematics.....	Debby Ganser/Gerry Meenaghan
Medicine (pre-professional)	Debby Ganser/Gerry Meenaghan
Medical Technology (pre-professional).....	Debby Ganser/Gerry Meenaghan
Music.....	Christina Salter
Nursing (four-year degree).....	See Counseling Department
Occupational Therapy (pre-professional).....	Debby Ganser/Gerry Meenaghan
Performing Arts (dance, music, theatre)	Christina Salter
Pharmacy (pre-professional).....	Debby Ganser/Gerry Meenaghan
Philosophy	Anthony Hampton/Cindy Lott
Physical Education	See Counseling Dept.
Physical Therapy (pre-professional program)	Debby Ganser/Gerry Meenaghan
Physics	Debby Ganser/Gerry Meenaghan
Political Science	Anthony Hampton/Cindy Lott
Psychology	Anthony Hampton/Cindy Lott
Public Administration.....	Anthony Hampton/Cindy Lott
Recreation.....	See Counseling Dept.
Religion	Anthony Hampton/Cindy Lott
Secondary Education	Counseling Staff
Social Science	Anthony Hampton/Cindy Lott
Sociology	Anthony Hampton/Cindy Lott
Speech	Anthony Hampton/Cindy Lott
Sustainability.....	Carolyn Litty/Claudia Riumallo
Theatre Arts.....	Christina Salter
Veterinary Medicine (pre-professional program)	Debby Ganser/Gerry Meenaghan

Transfer Hotline If a student has a problem in transferring classes to a college or university, the student should first try to resolve it with his or her advisor. If the problem cannot be solved at that point, the student may call the Transfer Problem Hotline at the Oregon Department of Education for additional help. The hotline number is 541.378.8609.

Counselors for "Undeclared" Students A counselor is assigned to each academic department and to each student who is undecided

about or is exploring a major. Students can receive guidance in taking initial courses, using career center resources, and setting educational goals.

Schedules for Undeclared counselors and academic advisors are available by calling 541.463.3200 and also can be found along with online academic advising resources by going to Lane's website at lanecc.edu, choose Moodle, Academic Advising, and Undeclared.

Career and Technical Programs

The career and technical programs described on the following pages appear in alphabetical order on the list below. Curriculum requirements are listed for each program and descriptions of required and elective courses can be found in the Course Descriptions section of this catalog. Curriculum information for Lane programs is updated annually. The most current information is available from a Lane counselor/advisor or the department offering a particular program. Current counselors/ advisors for each program are listed with each program.

Depending on the career and technical program in which they are enrolled, students can earn a two-year Associate of Applied Science degree or a one- or two-year certificate of completion.

Lane offers noncredit opportunities for career training and continuing education. These are described on page 271.

The notations next to each program indicate the following:

AASTwo-year Associate of Applied Science Degree Program

1-yr certOne-year Certificate of Completion Program

2-yr certTwo-year Certificate of Completion Program

CPCCareer Pathways Certificate

Accounting (AAS).....Marva Solomon/Deb Hupcey

Accounting Clerk (CPC) Marva Solomon/Deb Hupcey

Payroll Clerk (CPC) Marva Solomon/Deb Hupcey

Administrative (AAS).....Marva Solomon/Deb Hupcey

Legal Office Skills (CPC) Marva Solomon/Deb Hupcey

Office Software Specialist (CPC) Marva Solomon/Deb Hupcey

Small Business Ownership (CPC) Marva Solomon/Deb Hupcey

Auto Body and Fender Technology

(AAS and 2-yr cert) Carolyn Litty/Claudia Riumallo

Auto Paint Option (AAS) Carolyn Litty/Claudia Riumallo

Auto Collision Option (AAS) Carolyn Litty/Claudia Riumallo

Automotive Technology

(AAS and 2-yr cert) Carolyn Litty/Claudia Riumallo

Aviation Maintenance Technician

(AAS and 2-yr cert) Carolyn Litty/Claudia Riumallo

Business Assistant (1-yr cert) Marva Solomon/Deb Hupcey

Computer Information Systems -

Health Informatics (AAS)..... Debby Ganser/Gerry Meenaghan

Computer Network

Operations (AAS) Debby Ganser/Gerry Meenaghan

Network Security (CPC)

Computer Programming (AAS) Debby Ganser/Gerry Meenaghan

Geographic Information

Science (CPC)..... Debby Ganser/Gerry Meenaghan

Web Programming (CPC) Debby Ganser/Gerry Meenaghan

Computer Simulation and Game

Development (CPC) Debby Ganser/Gerry Meenaghan

Computer Game Programming in

C++ (CPC) Debby Ganser/Gerry Meenaghan

Computer Specialist

(1-yr cert) Debby Ganser/Gerry Meenaghan

Construction Technology

(AAS and 1-yr cert) Carolyn Litty/Claudia Riumallo

Construction Trades, General Apprenticeship

(AAS, Certificate) See Counseling Dept.

Culinary Arts and Food Service

Management (AAS)..... Carolyn Litty/Claudia Riumallo

Baking and Pastry (CPC) Carolyn Litty/Claudia Riumallo

Dietary Manager (CPC)

Food Preparation and

Production (CPC)..... Carolyn Litty/Claudia Riumallo

Dental Assisting (1-yr cert).....See Counseling Dept.

Dental Hygiene (AAS).....See Counseling Dept.

Diesel Technology (AAS, 2-yr cert) Carolyn Litty/Claudia Riumallo

Lift Truck/Material Handling Equipment Technician Option (AAS)

Drafting (AAS, 1-yr cert) Carolyn Litty/Claudia Riumallo

Early Childhood Education

(AAS and 1-yr cert).....Marva Solomon/Deb Hupcey

Electrician Apprenticeship

Technologies (AAS, cert) See Counseling Dept.

Limited Electrician Apprenticeship Technologies (cert)

Electronic Technology (AAS) Carolyn Litty/Claudia Riumallo

Emergency Medical Technician

(1-yr cert) See Counseling Dept.

Emergency Medical Technology - Paramedic

(AAS) See Counseling Dept.

Employment Skills Training (less than 1-yr cert) Co-op

Energy Management

Technician (AAS)..... Debby Ganser/Gerry Meenaghan

Renewable Energy Technician

Option (AAS) Debby Ganser/Gerry Meenaghan

Resource Conservation

Management Option (AAS) Debby Ganser/Gerry Meenaghan

Exercise and Movement Science (AAS) See Counseling Dept.

Fitness Specialist (2-yr cert).....See Counseling Dept.

Fitness Technician (1-yr cert) See Counseling Dept.

Fabrication/Welding Technology

(AAS and 1-yr cert) Carolyn Litty/Claudia Riumallo

Welding Processes (1-yr cert) Carolyn Litty/Claudia Riumallo

Flight Technology (AAS) Carolyn Litty/Claudia Riumallo

Graphic Design (AAS and 2-yr cert).....Christina Salter

Health Records Technology (1-yr cert) See Counseling Dept.

Medical Coding (CPC) See Counseling Dept.

Medical Transcriptionist (CPC) See Counseling Dept.

Hospitality Management (AAS) Carolyn Litty/Claudia Riumallo
 Food Service
 Management (1-yr cert) Carolyn Litty/Claudia Riumallo
 Restaurant Ownership (CPC) Carolyn Litty/Claudia Riumallo
 Human Services (AAS) Anthony Hampton/Cindy Lott
 Adult Development and
 Aging (CPC) Anthony Hampton/Cindy Lott
 Human Services:
 Criminal Justice (AAS) Anthony Hampton/Cindy Lott
 Human Services: Juvenile
 Corrections (1-yr cert) Anthony Hampton/Cindy Lott
 Industrial Mechanics and Maintenance
 Technology (AAS, Cert) Carolyn Litty/Claudia Riumallo
 Manufacturing Technology
 (AAS and 2-yr cert) Carolyn Litty/Claudia Riumallo
 Computer Numerical Control Technician Option (AAS)
 Massage Therapy (Certificate of Completion) Kathy Calise
 Medical Office Assistant (1-yr cert) See Counseling Dept.

Multimedia Design (AAS and 1-yr cert) Christina Salter
 Nursing (AAS) See Counseling Dept.
 Occupational Skills Training (1-yr cert) Co-op
 Physical Therapist Assistant (AAS)
 (pending accreditation candidacy) See Counseling Dept.
 Respiratory Care (AAS) See Counseling Dept.
 Retail Management
 (AAS and 1-yr cert) Marva Solomon/Deb Hupcey
 Retail Management (CPC) Marva Solomon/Deb Hupcey
 Sustainability Coordinator (AAS) See Counseling Dept.
 Water Conservation Technician
 (AAS) Debby Ganser/Gerry Meenaghan

Noncredit Programs

Business Development Center Continuing Education

Farm Business Management	Massage Therapist
Non-Profit Management	Nursing Assistant
Small Business Management	

Procedures and Policies

Definitions

Academic Requirements Review Committee The Academic Requirements Review Committee is commissioned to act in an advisory capacity to the Vice President for Academic and Student Affairs on the subject of academic rules and regulations for Lane Community College. Part of the responsibility of the council is to insure that a high academic standard is maintained. The Academic Requirements Review Committee will not accept petitions solely for the purpose of improving a Grade Point Average or other cosmetic reasons. Typically, the Academic Requirements Review Committee meets once during fall, winter and spring terms to review student petitions. However, meetings may be held as needed throughout the year. Examples of petitions that will be considered by the Academic Requirements Review Committee include:

- substitutions to requirements for AAOT, AS, or AGS degrees
- waiver of requirements for AAS degrees and certificates

Academic Requirements Review Committee petitions are available from Enrollment and Student Financial Services at lanecc.edu/es/forms/html.

Academic Standards and Probation A student who does not achieve satisfactory academic progress according to administrative regulations will be placed on academic probation. Students on academic probation will be encouraged to meet with a counselor or advisor. Students who are on academic dismissal will need to seek the help of a counselor or advisor for readmission to the college. Lane's Academic Standards and Alert System are described on page 58.

Attendance Instructors will announce the attendance policy for each class. Students entering late who may have missed this announcement should contact the instructor for the attendance rules. Students are required to be in attendance during the first week of class unless they have contacted the instructor and received permission for the absence. Otherwise, their place in the class may be given to another student who is waiting for space in the class,

and the original student may not be permitted to continue in the class. Sitting in on classes without registering is a violation of college policy.

Students will be held accountable for attending each class in which they have enrolled. A grade or a withdrawal notation will be assigned for each class unless the student drops the course during the refund period.

Class Schedule The quarterly class schedule is available on the web at lanecc.edu about one week before Staged Registration begins. Staged Registration usually begins the fourth week of the preceding term except fall term, which occurs the preceding spring term.

Transfer Credits Students with prior college course work are eligible for an official review after completing six credits in their program or course of study. For more details, see Transfer Process on page 39.

Students are encouraged to use the Transfer Equivalency Look-up tool (lanecc.edu/es/transferringcredits.html) in order to see how their prior college classes transfer to Lane. The evaluations provided by the Look-up tool are unofficial and not binding. Transfer equivalent information is updated regularly; some transfer partners will have more extensive listings than others. Students may request an instructional department review of any transfer course work. Please provide an unofficial copy of your transcript showing the grade received and a course syllabus from the academic year you completed the course to the instructional department.

Miscellaneous Training and Credit Credit also may be granted for military training as listed on the ACE/AARTS report or work completed at regionally accredited schools. Institutions that are not regionally accredited may be reviewed using the Credit-by-Assessment process.

Cooperative Education Cooperative education provides students with the opportunity for on-the-job education while offering college credit for the experience.

Students enrolled in co-op receive help locating part-time and full-time jobs and internships, guidance about career expectations and demands, instruction in resume preparation and job interviewing skills, and financial benefit from paid positions. Unless prior approval is received from the Cooperative Education Division Chair, students must enroll in a minimum of three credits of co-op per term.

Course A course is any class or subject (e.g., English Composition WR 121, Biology BI 101) for which a student may register.

Course Numbers Course numbers at Lane help students identify which courses count toward degrees and financial aid.

- **Credit courses** have a course ID that consists of a prefix of letters that identify the subject area followed by digits that identify the level of the course. In the example of WR 121, WR identifies the subject of writing and the 100-level number identifies it as a first year college level course. All credit courses, including pre-college courses, may count toward the minimum course load for financial aid, provided the student meets financial aid criteria.
- **Honors Courses** span a range of disciplines and topics. Honors courses are designated with _H following the course ID, e.g. Anth 102_H. Any Lane student can enroll in an honors course or request the honors option for courses designated as honors option classes. Admission into the Lane Honors Program, however, requires a formal application. For more information, visit lanecc.edu/honors.
- **Pre-college credit courses** have numbers below 100. Pre-college courses may be required as prerequisites to college level courses or as part of a career and technical certificate or applied degree. Pre-college courses do not transfer to a four-year institution.
- **College level transfer credit courses** count toward completion of a degree or certificate and are generally accepted for transfer by other institutions.
- Career and technical credit courses count toward Associate of Applied Science degrees or certificates. With some limits, career and technical courses may count as electives for transfer degrees. Career and technical courses are not automatically accepted for transfer by other institutions. Prefixes for career and technical courses are listed on page 41.
- **Noncredit courses** have numbers in the format XART 5785. The "X" before the discipline in the prefix and the four-digit numbers identify the course as noncredit. Noncredit course offerings are listed and described each term in the class schedule. Under the state's definition, a noncredit course "does not offer college credit for completion and generally cannot be used as part of a credit based degree or certificate program. No assessment of learning generally takes place." Noncredit courses will not be counted for financial aid, and will not transfer to another institution.

Credits Credits are granted in recognition of work successfully completed in specific courses. The average load for a full-time student is 12-15 credits per quarter. Part-time students carry fewer than 12 credits per quarter.

Credit Hour Credit granted at Lane is in terms of quarter hours, since Lane is on a quarter-system calendar. Three quarter hours are equal to two semester hours. The average amount of credits for a full-time student is 12 to 15 per term.

One credit hour equates to approximately thirty hours of student involvement over the quarter. For lecture classes, this means ten hours of instruction and twenty hours of preparation on the student's part. For lab classes, thirty hours in the lab are required per credit.

Classroom Hours There are 12 classroom hours per lecture (credit) hour, 24 classroom hours per lecture/lab (credit) hour and 36 classroom hours per lab (credit) hour.

Graduation Ceremony There is one college graduation ceremony held each year in June. See the Academic Calendar on page 2.

All graduates and prospective graduates for the year are invited to attend and bring their friends and relatives. Contact Student Life and Leadership Development for ceremony details.

Since grades have not yet been recorded at the time of graduation, it is not known at that time whether students have completed their programs. Students receive one empty binder during the graduation ceremony. The actual parchments are mailed after degree/certificates have been verified, in ten to twelve weeks. Students applying for degrees or certificates and completing their programs fall or winter terms will receive their degrees earlier in the year. There is a \$10 fee for duplicate or additional copies of diploma parchment.

Students who do not attend the graduation ceremony may pick up a binder at the Student Life and Leadership office anytime after the graduation ceremony.

Degree Progress Lane is in the process of piloting a way for students to view their progress toward degree and certification completion. Results will be available to students in myLane and will be updated at the end of each term. Watch myLane for future announcements.

Oregon Transfer Module The Oregon Transfer Module and OTM designation will be posted in the student's transcript by request and upon completion. Students must submit the form "Application for Diploma" to verify completion of the requirements. There is a \$20 processing fee for the OTM.

Direct Transfer Evaluation Direct transfer evaluation is done by Counseling when a student is in transit to another institution. Unofficial copies of transcripts may be used. Students must take copies of transcripts to Counseling for their review of transfer course work.

Enrollment and Student Financial Services Building 1, First Floor, 541.463.3100, (877) 520-5391, or TTY 541.463.4722

Process online admissions, provides registration and billing assistance to all students, and responds to all questions and issues regarding financial aid. Hours are Monday, Tuesday and Thursday 9 a.m.-5 p.m., Wednesday 10 a.m.-5 p.m., Friday 9 a.m.-2 p.m.

Full-Time Student A full-time student is anyone carrying 12 or more credit hours per term at Lane. The Social Security Administration defines full-time as 12 or more credit hours per term. Veterans are required to carry 12 credit hours per term to receive full benefits. In most cases, students receiving scholarships are required to complete 12 credit hours per term.

Half-Time Student A half-time student is anyone carrying between six and 11 credits hours per term at Lane. It is important to know that the definition of a half-time student varies with different institutions. Also, it is important to know that a majority of student loans require a student be registered for at least six credits or more per term.

Honor Lists Lane honors students who achieve high academic standards. Honor list requirements are:

- **President's List:** A student must complete a minimum of 12 graded (A,B,C,D,F) credit hours with a term GPA of 4.00.
- **Vice President's List:** A student must complete a minimum of 12 graded (A,B,C,D,F) hours with a term GPA of 3.55 through 3.99.

Students wishing to receive a letter reflecting this honor should make request to Student Records, Enrollment and Student Financial Services by calling 541.463.3100.

Hybrid A course combining traditional classroom activities with online learning so that time spent in the classroom is reduced but not eliminated. Hybrid courses have traditional class sessions, but some classroom hours are replaced by online interactions, assignments and projects. The ratio of classroom activities and online interactions in hybrid courses may vary, but the expectation is that each credit will require approximately 33 hours of student involvement during the quarter, including class time, homework, research projects, studying for exams, online work in hybrid courses, or other out-of-class activities. Hybrid sections of a course are coded with *hyb* in the term schedule and technical requirements for class participation are clearly explained in notes in the schedule.

“L” Number (User ID) Lane provides all students with a computer generated “user ID” for myLane. This number begins with an uppercase “L” followed by eight digits. The “L” number used with a PIN number will give students access to their student information in myLane, including registration, account payments, schedules, grades, and financial aid information. Refer to each term’s class schedule for information about obtaining an “L” number.

myLane Lane Community College students use web registration on myLane. Using the web, students register for classes from any computer connected to the Internet. For information about myLane, visit Lane’s website at lanecc.edu.

Program A program is state approved curriculum arranged to provide career and technical training leading toward an Associate of Applied Science degree or certificate of completion. The courses required for each program are listed under Programs in this catalog.

Student Grades Students access term grades through myLane. See the section on grades in each term’s class schedule for more information on grade availability. An unofficial copy of student grades can be printed from myLane for advising purposes. Students can request an official transcript through myLane or in person from Enrollment and Student Financial Services for a \$5 transcript fee plus an additional \$5 **rush service fee** for each transcript requested.

Term A term, or quarter, is approximately an eleven-week period of study. The academic year is summer term through the end of spring term with fall, winter and spring terms being the primary terms. Summer term begins the third week of June and lasts until the second week of September and consists of several sessions. Fall term begins the last week of September and lasts until mid-December. Winter term begins around the second week of January and lasts until approximately the middle of March. Spring term begins the last week of March and lasts until the middle of June. (See the academic calendar in the front of the catalog.)

Procedures

Lane publishes regulations in addition to those in this catalog (class schedule, course syllabus, etc.). Students are responsible for knowing these regulations.

Schedule Changes Students may change their schedule after their original registration by using myLane. The deadline to make schedule changes to full-term classes (adds/drops, pass/nopass, audit options) is midnight Friday of the eighth week of the term. A “full term” is 11 to 12 weeks. Exceptions to this policy are classes that begin and end at times other than the first and last day of the term. Contact Enrollment and Student Financial Services for deadline information

for classes shorter than 11 weeks. Students who drop classes after the first week of the term (refund period) will have a withdrawal notation recorded for the class.

Students registered in variable credit courses may add or drop credits through midnight Friday of the last week of classes (before finals week begins).

Course grade options for students after the eight-week deadline are: 1) the grade earned, 2) “NC” (no credit), or 3) “I” Incomplete with instructor approval.

Dropping Classes When a student does not attend classes, it is the student’s responsibility to drop the classes using myLane. To drop from classes, use myLane by midnight Friday of the eighth week of a full-term class.

Administrative Withdrawal Students may be administratively withdrawn for nonattendance or failure to meet prerequisites. Instructors have the right to administratively withdraw/drop students who do not attend at least 50 percent of the class meetings the first week of the term. This period coincides with the refund period.

Do not assume that an instructor will administratively drop you from your class. Students are still responsible for dropping classes they do not plan to attend by using myLane. To receive a refund of paid tuition or a cancellation of tuition not yet paid, students must complete the drop procedure within the refund period. If the class is not dropped during the refund period, the student is responsible for paying the tuition and fees even if he or she did not attend the class. Students who plan to remain enrolled but have attendance difficulties during the first part of the course should notify the instructor to avoid administrative withdrawal.

Prerequisites Not Met Students enrolled in classes for which they do not have prerequisite skills, test scores, or courses may be administratively withdrawn prior to the start of the term or after grades have been submitted for the previous term.

Social Security Number

Generally, social security number disclosure is voluntary. The college no longer uses social security numbers as a student identification number. Refer to Enrollment and Student Financial Services for further information.

Lane provides all students with a nine digit “L” number as user ID for myLane. This number begins with an uppercase L followed by eight computer generated numbers. A student’s “L” number with a PIN (personal ID number) will be used for myLane functions.

Students who apply for financial aid must supply their social security number on the Free Application for Federal Student Aid (FAFSA). For web access on myLane, financial aid students will be able to use their “L” number and PIN.

Disclosure Statement

Required for use in collecting social security numbers

See OAR 581-41-460(2)

Department of Community Colleges and Workforce Development

Revised, January 2001

Providing your social security number is voluntary. If you provide it, the college will use your social security number for keeping records, doing research, reporting, extending credit, and collecting debts. The college will not use your number to make any decision directly affecting you or any other person. Your social security number will

not be given to the general public. If you choose not to provide your social security number, you will not be denied any rights as a student. Please refer to the Disclosure Statement listed under the social security heading in your class schedule which describes how your number will be used. Providing your social security number means that you consent to the use of your number in the manner described.

On the back of the same form, or attached to it, or in the schedule of classes, the following statement shall appear:

OAR 589-004-0400 authorizes Lane Community College to ask you to provide your social security number. The number will be used by the college for reporting, research and record keeping. Your number also will be provided by the college to the Oregon Community College Unified Reporting System (OCCURS), which is a group made up of all community colleges in Oregon, the State Department of Community Colleges and Workforce Development, and the Oregon Community College Association. OCCURS gathers information about students and programs to meet state and federal reporting requirements. It also helps colleges plan, research and develop programs. This information helps the college support the progress of students and their success in the workplace and other education programs. OCCURS and the college may provide your social security number to the following agencies or match it with records from the following systems:

- state and private universities, colleges and vocational schools, to find out how many community college students go on with their education and to find out whether community college courses are a good basis for further education
- Oregon Employment Department, which gathers information, including employment and earnings, to help state and local agencies plan education and training services to help Oregon citizens get the best jobs available
- Oregon Department of Education, to provide reports to local, state and federal governments used to learn about education, training and job market trends for planning, research and program improvement
- Oregon Department of Revenue and Collection agencies only for purposes of processing debts and only if credit is extended to the student by the college

State and federal law protects the privacy of student records. Social security numbers will be used for the purposes listed above.

Student Records/Enrollment and Student Financial Services Student Records maintains and processes academic records for Lane. This includes but is not limited to online applications for admission, transfer institution transcripts, course substitution forms, grade change forms, student identification documentation, evaluations, and degree/certificate applications. Academic Requirements Review Committee petitions and Progress Review petitions are processed through Enrollment Services along with registration and graduation records, refund petitions, and probation/dismissal documentation.

Except for the Lane transcript record and current registration, most of this material is archived digitally for all Lane students. Lane transcripts are available on myLane for current students. Most records will be kept indefinitely. If you are a former student and do not know your identification number, you may order your transcripts through the National Student Clearinghouse at studentclearinghouse.org.

Release of Records In accord with Federal Law (The Family Education Rights and Privacy Act, Public Law 93-380) "FERPA", students may see and review all official records, files, and data pertaining to themselves with these exceptions: confidential financial

information reported by the parent/guardian unless the parent/guardian has explicitly granted permission for the student's review; and medical, psychiatric, or similar records used for treatment purposes. Access to a student's own records will be provided as early as possible, but no longer than 45 days from the time of the student's official request.

A student may challenge the content of a record that she or he considers inaccurate, misleading or in violation of the student's privacy or other rights. If such a challenge is not resolved with the custodian of the records, the student has the right to an appeal. Further information is available in the Enrollment and Student Financial Services/Student Records Office.

Release of Records/Student Information Per a federal privacy law, called the Family Educational Rights and Privacy Act of 1974 (FERPA), the college has identified "directory" information that can be released without the student's written permission. The following information is considered "directory information" and may be released without written permission from a student:

- Student name(s)
- Dates of attendance (not daily)
- Degree program/major field of study
- Honors
- Enrollment status (half-time/full-time only)
- Date of graduation
- E-mail address
- Participation in official activities/sports
- Most recent previous school attended
- Weight/height of athletic team members

If you do not want this "directory" information released, you must access the student information release links within myLane. Completing this process will place a confidential block indicator on your records at lane. This block will:

- When you call Lane, the person answering will say "There is no information available on that person"
- If you come for service in person, you will be asked for a photo identification to verify your identity
- Your name will not appear on honor roll listings or in the graduation booklets
- When employer or other individuals use the National Clearinghouse service to verify attendance or degrees, your information will not be available

If you would like some individuals to access limited information such as your account information, you may also use the Student Information Release process within myLane to provide Lane with a password that you can share with others. Individuals with these passwords must offer these when contacting Enrollment and Student Financial Services and the password must match exactly what you have provided. We can not assist individuals without this password or without having the exact amount owed given.

Information necessary to determine student eligibility for athletic participation and for financial aid granted by state or federal agencies which provide a student's tuition will be released for those purposes only. This may include term schedules, grades, credit hours of enrollment, and past academic records. A written request from the aid-granting agency is required.

Transcript Records Official transcripts may be ordered using myLane at lanecc.edu, or through the National Student Clearinghouse at studentclearinghouse.org. The fee is \$5 per transcript through myLane and \$7.25 through the National Student Clearinghouse. Official transcripts can also be requested via mail by providing

name, student identification number, period of enrollment, where the transcript is to be sent, student's signature and payment of the \$5 fee per transcript ordered.

No other person may receive a copy of the student's transcript or undertake to pick it up for the student unless the student authorizes release of records in writing. Transcripts mailed to other colleges may be ordered via myLane, by mail or in person at Enrollment Services.

The college reserves the right to withhold official transcripts from students who owe monies to Lane. If an official transcript is requested by a student who owes monies, the student is notified that there is a balance owing and given information on how to resolve the issue.

Transfer Transcripts If a student has taken course work at another college that applies to a program at Lane, the student must see that Enrollment Services receives an official (sealed) transcript of that work. Only official transcripts from regionally accredited U.S. institutions and international institutions with an evaluation agency will be considered. Once received, transcripts become the property of Enrollment Services. Lane cannot provide anyone, including the student, a copy of a transcript from another school. Students should order a copy from their transfer institution for their personal use.

Courses from other schools and colleges are never part of a student's Lane Community College transcript. Transfer institutions may be noted on the Lane transcript. Such records are not required for admission to Lane, but may be required for financial aid, veterans' reporting, admission to a special program, or meeting a course prerequisite.

Grades At the end of each term, grades are recorded and made available to students using myLane. Unofficial advising transcripts also may be printed from myLane.

Grade Changes If an error has been made in recording or reporting grades, the instructor may initiate a grade change. If a student believes an error occurred, the student should contact the instructor. If the number of credits is increased or a course is added, the additional tuition, fees and any other charges will be charged to the student's account and the student will be billed at current tuition rates. Late add fees may be applied. Refer to class the schedule for more information. If the student owes money to Lane, the added grade will not be processed until the balance is paid in full.

Grades and Notations The following grades and notations are recorded on transcripts and grade records at Lane:

Grade	Points	Definition
A	4.0	Excellent Performance
B	3.0	Good Performance
C	2.0	Satisfactory Performance
D	1.0	Less than Satisfactory Performance
F	0.0	Unsatisfactory Performance
+ or -		Plus or minus 0.30 points, effective July 1, 1999
P	0.0	Pass (equal to A- thru C-)
NP		No Pass (D and below)
I		Incomplete
U		Audit
W		Withdrawal (Prior to 1991)
Y		No Basis for Grade (Prior to 1997)
NC		Not Completed (no credit)
XN		Enrolled
EN		Enrolled
CM		Completed
NCM		Not Completed
XCG		Conversion Grade

Immediately following the grade:

@	Credit By Assessment or CEU By Assessment
<	Academic Renewal (not calculated in cumulative GPA)
*	Withdrawal after Refund Deadline (no grade recorded)
E	Repeated Course Points earned not included in the cumulative grade point average (GPA)
~	Credit by Exam or CEU By Exam

Please Note: @ Credit by Assessment and ~ Credit by Exam are limited to 25 percent of a degree or certificate. Students may do more than 25 percent, but only 25 percent may be used toward requirements.

Grade Point Average (GPA): Included in GPA computation are grades of A+, A, A-, B+, B, B-, C+, C, C-, D+, D, D-, and F. Grades of P are included in earned credit, but not in GPA credit. I, NC, Y, U, *, EN, and W are considered administrative marks rather than grades and have no effect on a student's earned credit or GPA credit. The grades included in the computation have the following weights:

A+ = 4.30	B+ = 3.30	C+ = 2.30	D+ = 1.30
A = 4.00	B = 3.00	C = 2.00	D = 1.00
A- = 3.70	B- = 2.70	C- = 1.70	D- = 0.70
			F = 0.00

The total points for a class are calculated by multiplying the points for the grade times the credits for the class. The GPA is then computed by adding all GPA credits, adding all points, and dividing the total points by the total credits. Example:

	credits	grade	points
BA 226-Business Law	3	A	12
PE 170-Beginning Tennis	1	B	3
EL 115-Effective Learning	3*	P	0*
FE 207 Coop Ed	2	C+	4.60
TOTAL GPA Credit	6	TOTAL POINTS	19.60
			19.60 ÷ 6 = 3.264 GPA

* Points are not included in calculation, because of P grade. Total credits earned in this example are nine.

Term GPAs are calculated using grade points earned only during that term. Cumulative GPA is calculated using all grade points from all terms.

Plus (+) and Minus (-) grades Issuing a "+" or "-" is at the instructor's discretion. Students with questions regarding an instructor's grading policy, must contact the instructor.

NC (No Credit) Issuing a "NC" is at the instructor's discretion when the instructor believes the student has not participated enough in the class to earn a grade. It is not meant to and should not be used to replace an "F" grade or an "I."

Academic Standards and Alert System The college believes it has an obligation and a responsibility to help students meet their educational goals. To meet this responsibility, the college will provide assistance to students who, for whatever reason, fail to meet the academic standards necessary to meet their educational goals.

Academic Standards* Academic standards will be determined based on the total credits you have earned. As the number of credits earned increases, the cumulative GPA and percent of credits completed increases as well, according to the charge below:

Cumulative Credit Hours Earned	Cumulative GPA	Percent of Credits
0 - 36	1.70	50%
37 - 100+	2.00	50%

In addition to the cumulative grade point average, students must complete 50 percent of their enrolled credits as of the eighth week.

Following is the resulting action for each consecutive term in which a student fails to meet academic standards:

- A student who fails to meet the academic standards will receive an Academic Warning notification. That notification will provide information covering the services of the college that might be helpful.
- A student who fails to meet the academic standards a second consecutive term will be placed on Academic Probation 1, and a notification will be sent encouraging a counselor/advisor conference.
- A student who fails to meet the academic standards a third consecutive term will be placed on Academic Probation 2, and again a notification will be sent encouraging a counselor/advisor conference.
- A student who fails to meet the academic standards a fourth consecutive term will be dismissed from college credit classes and programs for one calendar year.

* Academic Standards may change for the 2012-13 academic year. Policies were not finalized at the time of this printing.

Petitions to the Academic Progress Review Committee The student is provided the opportunity to petition the Academic Progress Review Committee for reinstatement into the college earlier than the one year dismissal period. Petitions are available from Enrollment and Student Financial Services at lanecc.edu/es/forms/html and must be turned in with a student planner by the sixth week of the subsequent term of dismissal.

Removal of Probation A student who is placed on probation can be removed by exceeding the cumulative grade point average standard. Once removed from probation, students who do not meet the academic standards start again at the warning step.

Pass/No Pass When a P/NP option has been selected, the instructor still grades on the regular ABCDF system. If the instructor records an A+ or A, the student will receive the A+ or A grade and it will be calculated in the Grade Point Average (GPA). If the grade is A-, B+, B, B- or C+, C, C-, the student will receive a grade of P. If the grade is D+, D, D- or F, the student will receive a grade of NP. Pass and No Pass grades are not calculated in the student's GPA. A P/NP option must be chosen in myLane by the end of the eighth week of the term for full-term classes. Information on limitations is listed with the individual degree and certificate outlines.

Audit The audit option allows the student the right to sit in the class, but the instructor has no obligation to grade or record the student's work. The only grade or mark granted is U (audit). An audit option may be requested during registration and through the eighth week of the term for full-term classes. Audit rates are the same as the tuition rates. The audit counts as an attempted credit.

Request for Incomplete A student and instructor may fill out a Request for Incomplete form when a student has completed satisfactorily 75 percent or more of the work in a course, but is unable to finish the remaining required, scheduled work due to circumstances beyond the control of the student (serious illness, death in family, and natural disaster are common examples). Some departments may establish a work completed guideline other than 75 percent. An incomplete is not used to avoid a failing grade in a course, or when the remaining scheduled work is not time convenient for the student. A Request for Incomplete is a contract between the student and the instructor which indicates the work to be finished, the time limit within which the work must be completed, and the grade earned if the work is not completed. A student does not need to reregister to finish course work the next term. Sitting in on a class

without registering is a violation of college policy. General college policy limits the time for finishing an Incomplete to one year, but the instructor may require a shorter time period. An Incomplete that is over one year old must be approved by the Vice President before it can be changed to a grade with the exception of the grade earned if the work is not completed. When the work has been completed and given to the instructor for evaluation, it is the instructor's responsibility to see that a grade change form is sent to Student Records, changing the student's record from Incomplete to the grade earned. If no grade change form is received from the instructor, the grade remains an Incomplete or the instructor may assign a grade if the work is not completed. If the instructor with whom the student completed the Request for Incomplete form is no longer available, the department may assign someone else to evaluate the work and complete the change of grade.

Petition to Absolve for Repeated Courses A student can have the grade points removed from the cumulative grade point average if the first grade was B, B-, C+, C, C-, D+, D, D- or F and the class has been repeated at Lane. A course can be retaken only once for this purpose. If a course is retaken more than once, only the oldest course credits will be removed from the grade point average under this policy. The repeated course credits must all be taken in one term at Lane, be taken for a letter grade, and must be equal to or greater than the number of credits completed in the original course.

Upon completion of a course, a student can exercise this option by filling out a Petition to Absolve Credit from the Cumulative Grade Point Average form. The form is available at lanecc.edu/forms/html. The Student Records Office will mark the student's record, noting the repeated course, and remove the credits and grade points of the original course from the cumulative grade point average. The original course and grade will remain on the student's transcript. This cannot be reversed once it is applied to the student's record.

Academic Renewal Policy

Academic Renewal Academic renewal is an opportunity for students whose initial effort at Lane resulted in poor grades. After an absence of at least four years, a student who maintains a 2.5 or higher G.P.A. may request that prior grade records be removed from the calculation of the cumulative grade point average. This policy applies only to Lane transcripts and is on a one-time only basis. See the criteria and procedures listed below.

To be eligible for academic renewal, a student must:

- have been absent from Lane for four or more years.
- have completed 24 credits with a GPA of 2.5 upon returning to Lane.
- have completed the academic renewal application.
- not have been granted academic renewal in the past.

Application of the academic renewal policy results in the following:

- All course and grade information will remain on the transcript along with a notation about being granted academic renewal.
- All applicable course work including courses that have been excluded from the GPA will be used to meet graduation requirements if course work meets current degree/certificate standards.
- None of the excluded grades will be calculated in the GPA.

The Academic Renewal cannot be reversed once applied to the student's record.

Note: Many institutions will not recognize the Academic Renewal process when calculating a GPA for admission purposes.

Student Policies and Complaint Procedures

Lane Community College policies and procedures are subject to change without prior notice.

Board Policies Directly Affecting Lane Students

Treatment of Learners A.020

With respect to interactions with learners, the president shall assure that procedures and decisions are safe, respectful and confidential.

Accordingly, the president shall assure that:

1. The institution represents itself accurately and consistently to prospective students through its catalogs, publications and official statements.
2. Admissions information forms avoid eliciting information for which there is no clear necessity.
3. Methods of collecting, reviewing, transmitting, or storing information about learners will be protected against improper access in compliance with federal and state regulations.
4. Facilities provide a reasonable level of privacy, both visual and aural.
5. The college environment is welcoming and accepting to all learners.
6. Learners have a clear understanding of what may be expected from the services offered.
7. Learners are informed of their rights and responsibilities and are provided a process to address grievances.
8. There is adequate provision for the safety and security of learners.

Harassment Policy D.020

Lane has a zero tolerance policy regarding all forms of harassment. Any proven harassment will result in immediate and appropriate action to stop the harassment and prevent its recurrence, including employee discipline consistent with collective bargaining agreements, or student sanctions. Remedial action will be designed to stop the harassing behavior. Any remedial action will be in keeping with the educational mission of the college. Whether or not the alleged harassing behavior is sufficiently severe or pervasive to be judged a violation of this policy, the college may take action to address a complainant's concerns and to ensure that Lane, as a workplace and as an academic institution, maintains a respectful environment. All forms of harassment, including student-to-student harassment, are covered by Lane's harassment policies. Incidents of harassment may bring about sanctions up to and including termination of employment or expulsion from the college.

Sexual Harassment

Sexual discrimination in the form of sexual harassment is prohibited. Sexual harassment is defined as unwanted sexual advances, requests for sexual favors, and/or other verbal, written, visual, or physical sexual conduct that makes the terms or conditions of employment contingent on the acceptance of unwanted sexual advances, that negatively affects employment or educational opportunities, or that creates an intimidating, hostile, or offensive environment for one of the parties.

Harassment Based on Race/Ethnicity or National Origin

Harassment based on race, ethnicity or national origin is defined as unwelcome verbal, written or physical conduct based on a person's actual or perceived race, ethnicity or national origin that unreasonably interferes with an individual's work or academic performance, adversely affects the targeted individual's or others' work or

learning opportunities, or creates an intimidating, hostile or offensive environment.

Possession of Firearms D.030

No person, including students, employees, college patrons and vendors may bring, possess, conceal, brandish, use or be in possession of a firearm, destructive device, or other dangerous weapons as defined by law, or give the appearance of being in possession on college-owned or controlled property or at activities under the jurisdiction or sponsorship of the college, except as provided by ORS 166.370 and federal law. As authorized by ORS 659A.001(4), the exceptions provided by state and federal law do not apply to Lane employees while engaged in work activities. Permitted exceptions include use in conjunction with approved instructional demonstration.

Use of Intoxicants and Controlled Substances D.050

No person may bring onto college property or into any college-owned facility or to any college-sponsored class or activity any intoxicating beverage, controlled substances, volatile inhalants, for the purpose of mind or mood alteration, except in the situations specified in this policy. No person may appear on college property or in any college-owned facility or in any college-sponsored class or activity under the influence of any of the above mentioned substances.

Exceptions to this policy are as follows:

1. Alcohol may be used/served
 - a. for cooking and/or instructional purposes in food preparation labs or classes related to the science and/or service of alcohol; or
 - b. at college-sponsored activities using procedures specified in administrative rules; or
 - c. at college activities catered by legally licensed and insured businesses or agencies, using procedures specified in administrative rules (see lanec.edu/cops/foodalc.htm); or
 - d. under no circumstances shall alcohol be served at college-sponsored activities to underage minors as defined by state law.
2. With appropriate documentation, medical marijuana, prescription opiates, or other psychoactive medications, may be used as legally prescribed by a licensed practitioner. However, according to statute, marijuana may not be ingested on campus even with a medical marijuana card.
3. Glue and thinners may be used in class-related lab environments and in facilities construction and maintenance.

Equality of Opportunity in Admissions D.070

Anyone who is at least 18 years of age for credit classes and at least 16 years of age for continuing education classes may enroll at Lane Community College. Under no circumstances shall an applicant who is otherwise qualified be denied admission or given a preference for admission to the college based on an individual's race, color, national origin, sex, age, marital status, familial relationship, sexual orientation, gender identity, pregnancy, disability, religion, expunged juvenile record, or veteran's status.

Also, see general Equal Opportunity statement on the inside back cover of this catalog.

Tuition D.110

In order to maintain a constant tuition rate relative to inflation each December, the board will adjust the per credit tuition rate to reflect changes in an appropriate index for two-year public colleges since the last tuition adjustment. The rate will be rounded to the nearest half-dollar and become effective the following academic year (summer term).

Periodically and as needed, the board will review Lane's tuition rates

to ensure: a) that tuition revenues are appropriate for the needs of the district and, b) that Lane's tuition is comparable with other Oregon community colleges that are similar to Lane in terms of student FTE and instructional programs.

Student Complaint Procedures and Accommodations

Lane Community College is committed to providing a respectful working and learning environment that is free from discrimination, harassment and retaliation. Lane Community College is committed to equal opportunity, affirmative action, cultural diversity and compliance with the Americans with Disabilities Act. The college prohibits discrimination in admissions, employment and access to college programs, activities and services. Sexual harassment and other conduct which creates a hostile, intimidating or offensive environment is prohibited by the college.

For assistance, support or help in resolving problems or information about complaint procedures, please contact the following people:

Harassment

- Jill Bradley, Women's Center, Bldg. 1/Rm. 202, 541.463.5353
- Barbara Delansky, Student Life and Leadership, Bldg. 1/Rm. 206, 541.463.5337
- Mark Harris, Counseling, Bldg. 1/Rm. 226, 541.463.5178
- Jim Garcia*, Multicultural Center, Bldg. 1/Rm. 201, 541.463.5144
- Jerry deLeon*, Counseling, Bldg. 1/Rm. 103A, 541.463.5870

* bilingual in Spanish

Employment Discrimination

- Dennis Carr, Human Resources, Bldg. 3/Rm. 114, 541.463.5585

Disability Issues

- **Student disability accommodations, assistance and disability related problems:** Lynn Lodge, Disability Resources, Building 1, Room 218, 541.463.5059, TTY Relay: 711
- **Problems with access to Lane's facilities:** Dave Willis, Director, Facilities Management and Planning, Building 7, Room 204B, 541.463.5566
- **Employee workplace accommodations:** Darcy Dillon, Human Resources, Building 3, Room 114, 541.463.5589
- **Disability related complaints/Section 504 Coordinators:** Nancy Hart, Disability Resources, Building 1, Room 218, 541.463.3010, TTY: 711 (student and program issues); Dennis Carr, Human Resources, Building 3, Room 114, 541.463.5585 (staff and employment issues)
- **Student rights, responsibilities and conduct:** Helen Garrett, Executive Dean of Student Affairs, ASA, second floor, Administration Building, 541.463.5732, Barbara Delansky, Student Life and Leadership, Building 1, Room 206, 541.463.5337.
- For any other issues, including those covered by board of education policy, use the student complaint process. For copies of the complete student code and complaint process and for more information, visit or call the Office of Academic and Student Affairs, second floor, Administration Building, main campus, phone 541.463.5732.

Substance Abuse Statement

In keeping with the intent of U.S. Public Law 101-226, Section 22: Drug-Free Schools and Campuses, it is Lane's obligation to inform you of the health risks associated with use of various illicit drugs and abuse of alcohol. Any substance used through needle-sharing increases risk of AIDS and Hepatitis B.

Type of Drug and Possible Health Risks

Stimulants Speed up action of central nervous system. (A.)

Amphetamines ("speed," "crank," "uppers") heart problems; paranoia; death. Affects fetus. (B.) Cocaine ("coke," "crack") confusion; physical tolerance; dependency; damage to lungs and nasal membranes; heart problems; paranoia; convulsions; death. Affects fetus.

Depressants Relax the central nervous system. (A.) Barbiturates ("downers"). (B.) Tranquilizers (valium, librium). (C.) Methaqualone ("ludes") confusion; loss of coordination; tolerance; dependency; seizures, coma; death. In combination with alcohol, especially dangerous.

Cannabis Alters perception and mood. (A.) Marijuana ("grass," "pot"). (B.) Hashish lung damage; dependence; tolerance; confusion, loss of coordination; decreased sex drive.

Hallucinogens Distort reality. (A.) Lysergic Acid Diethylamide ("LSD," "Acid"), Mescaline, MDA, MDMA, DMT, STP, Psilocybin hallucinations; panic; tolerance; "flashbacks"; possible birth defects in user's children. (B.) Phencyclidine ("PCP," "Angel Dust") depression; irrational behavior; confusion; convulsions; hallucinations; coma; death.

Narcotics Lowers pain perception. (A.) Heroin. (B.) Morphine. (C.) Codeine. (D.) Opium lethargy; apathy; loss of judgment and self-control; tolerance; dependence; convulsions; coma; death.

Deliriants Mental confusion. (A.) Aerosol products (B.) Lighter Fluid (C.) Paint Thinner and other Inhalants damage to brain, lungs; convulsions; death.

Alcohol A sedative drug tolerance; dependence; depression; coma; death. Alcohol abuse is linked to cancer, heart and liver damage. Fetal alcohol syndrome.

School Policy

For Student Code of Conduct, including drug and alcohol violations and sanctions, see code above.

State Laws

The trend in the State of Oregon is toward stiffer drug penalties. The following describes the penalties for POSSESSION of key drugs: Schedule I Class B Felony (heroin, LSD, marijuana, others) Max. prison time is 10 years. Max. fine is \$100,000.

Schedule II Class C Felony (amphetamine, cocaine, morphine) Max. prison time is 5 years. Max. fine is \$100,000.

Schedule III Class A Misdemeanor (other stimulants, some depressants) Max. prison time is 1 year. Max. fine is \$2,500.

Schedule IV Class C Misdemeanor (valium-type tranquilizers, others) Max. prison time is 30 days. Max. fine is \$500.

Schedule V Violation (dilute mixtures, compounds with small amounts of controlled drugs) No max. prison time. Max. fine is \$1,000.

Delivery of less than 5 grams or possession of less than one ounce of Marijuana is a violation. Oregon HB 2479 established mandatory evaluation, education and treatment services for those under 18 years old. If services are successfully completed, the charge will be dropped. Oregon also has strong new laws allowing cars, boats, etc., that transport illegal drugs to be seized and forfeited.

Alcohol is an illegal drug for those under 21 years of age. For drivers under 18, ANY detectable amount of alcohol (above .00 BAC) is grounds for losing their license until they are 18.

There are many more laws pertaining to alcohol and other drugs.

This is a sample to demonstrate that the penalties for illegal drug involvement are real, and criminal conviction may bar a student from his or her chosen career path.

Where to Get Help

For help or more information, contact the Substance Abuse Prevention Office, Building 1, Room 226, 541.463.5178. Counselors are available to any student who may be experiencing alcohol/drug problems. Contact or referral can also be made through Counseling or the Health Clinic. Besides offering support, assessment and referral, these counselors have information on community treatment programs, support groups, private counselors as well as information regarding Lane's on-campus 12-step meetings (A.A., N.A., ALA-NON, etc.). Students also can call "INFO LINE" at 541 342-4357 for referral suggestions. Lane offers classes on addiction and related topics. See class schedule index under "drugs." In addition, the Substance Abuse Prevention program conducts weekly support groups, classes and seminars to interested students.

Student Rights and Responsibilities and Student Code

Student Rights and Responsibilities

I. Freedom of Access to Higher Education

Lane Community College is open to all persons who are qualified according to its admission and good standing requirements.

Anyone age 18 or older may enroll. No high school diploma is necessary. Individuals younger than 18 may attend if they complete and submit the "Under 18 Students Parent/Guardian form" or if they have already received their high school diploma. Community education classes generally are open to anyone 16 or older.

Under no circumstances will an applicant be denied admission to the College because of age; sex; race; color; religion; physical or mental disability; national origin; marital status; sexual orientation; gender identity; pregnancy; veteran's status; familial relationship; expunged juvenile record; association with anyone of a particular race, color, sex, national origin; nor will preference for admission be based on economic status.

A. Financial Aid

A student applying for or receiving financial aid has the right to know:

- The financial aid assistance available
- The procedures and deadlines for applying
- The cost of attendance
- The criteria used in awarding aid and how financial need is determined
- The terms and conditions of any aid accepted
- How and when aid will be disbursed
- The College's refund policy
- The repayment consequences of withdrawing from the College
- How satisfactory academic progress is evaluated and what happens if it is not maintained
- How to appeal decisions concerning aid

A student applying for or receiving financial aid has the responsibility to:

- Complete applications accurately and on time
- Read and follow instructions when submitting information
- Read and retain copies of all signed forms

- Choose an academic program and understand the requirements for such program
- Comply with the terms of any Federal Work Study job accepted
- Maintain satisfactory academic progress

For more information about financial aid, go to lanecc.edu/finaid

B. Admissions

The College will be open within budgetary limitations to all applicants who are qualified according to its admission requirements. Students who enroll for high school or alternative school credit must comply with the Oregon Compulsory School Attendance Laws. While previous academic status at other institutions will not constitute criteria for denial of admission, not every program is open to every student. Priority to enter classes of limited enrollment will be given to indistrict students who have finished high school and/or are at least 18 years of age. However, the College will assist each student to develop a program of study which meets his or her individual needs and is consistent with feasible College operation. The College is committed to equality of opportunity, affirmation action, and nondiscrimination in admissions. No applicant shall be denied admission to the college because of protected class status.

C. Financial Responsibility

It is the student's responsibility to pay monies owed the college in a timely manner. The College's policies regarding payment of tuition and fees are described in the term schedule as well as the College catalog.

II. Evaluation Criteria

A. Academic

Lane Community College instructors will encourage free discussion, inquiry and expression where relevant and appropriate to the educational objectives of the course. It is the instructor's responsibility to publish educational objectives and to make available to each class the criteria to be used in evaluating student success in that class. It is the responsibility of the students to become aware of these objectives and criteria as published and set forth by the College. Student opinions and behavior outside of class will not be the basis for determining class grades unless such evaluation is specifically related to course requirements.

B. Protection of Freedom of Expression

Students are responsible for learning the substance of any course of study for which they are enrolled. However, students are free to state any reasoned exception to data or views offered in any course of study and to reserve judgment about matters of opinion.

C. Protection Against Improper Academic Evaluation

Students have protection through orderly procedures against unfair academic evaluation. Students' grades will be based solely on academic achievement, unless otherwise specified by the professor in writing at the first class meeting. Complaints about class requirements and grades must first go through the instructor and the department division dean. Students may appeal grades received by following the Grade Appeals process. Grade appeals are filed with the Academic Requirements Review Committee. Contact Enrollment and Student Financial Services, Building 1, 541.463.3100.

D. Protection Against Improper Disclosure

Information which staff acquire in the course of their work as instructors, advisors and counselors about student views, beliefs

and political associations should be considered confidential. Protection of the student against improper disclosure is a serious staff obligation.

E. Utilization of Special Aids for Study

Disability Resources is committed to providing opportunities to all students with disabilities in order for them to have meaningful access to College programs and services in a barrier-free environment.

Lane's Disability Resources offers advocates for the removal of attitudinal and architectural barriers, and provides in-class accommodations, advising, resource/referral information, and adaptive equipment. These services are available to students with disabilities who are attending credit courses, Adult High School, Adult Basic Education, and Continuing Education classes on any of the LCC campuses. Students must request services at least two weeks in advance.

F. Academic Dishonesty

Students are expected to conduct their academic affairs in a forthright and honest manner. In the event that students are suspected of classroom cheating, plagiarism or otherwise misrepresenting their work, they will be subject to due process as outlined in the Student Code of Conduct.

G. Standards of Academic Progress

Lane Community College has established standards for academic progress which are applicable to all students. Failure to maintain satisfactory academic progress will result in loss of financial aid and warning, probation, suspension, or dismissal from the College.

H. Complaint Procedures See page 60.

I. Additional Rights of Petition and Appeal

For grade and academic appeals process, contact Enrollment and Student Financial Services, Building 1, 541.463.3100.

III. Student Records

Lane Community College will abide by federal and state regulations regarding the privacy of student records and comply with the law regarding access procedures. The condition of access to records is set forth in explicit statements.

Transcripts of academic records contain only information about academic status. Information from disciplinary or counseling files will not be available to unauthorized persons on campus or any person off campus without the express written consent of the student involved, except under legal compulsion or in cases where the safety of persons or property is involved. Administrative staff and faculty members will respect confidential information about students which they acquire in the course of their work.

With regard to official documents and student records, information acquired by Lane Community College employees about a student's views, beliefs, and political associations is confidential and is not to be disclosed unless required by state or federal law. All student records will be maintained in strict compliance with state and federal regulations and Lane personnel procedures defining privacy and confidentiality.

IV. Student Affairs

The College has the responsibility and obligation to establish certain

standards in order to preserve the freedom of students.

A. Freedom of Association

Students will be free to organize and join associations to promote their common interests as long as they do not disrupt the College or violate its rules and regulations.

1. Procedures for recognition of student organizations Students who would like to start a new organization, or to join an existing organization should contact the ASLCC (student government) offices for information. The process is simple and, once student groups receive official recognition from ASLCC, they are eligible to reserve space on campus, conduct activities, and co-sponsor events.
2. Advisors All student organizations must have a staff advisor. Upon approval of the Associate Dean, any Lane staff member is eligible to serve as advisor for student organizations.
3. Non-discrimination policies Student organizations must abide by existing College and ASLCC policies and may not restrict membership or participation in events.
4. A recognized club or organization may lose its official recognition and be suspended if actions of its officers or members, or activities of the organization as a whole, violate College policy and procedures.

B. Freedom of Inquiry and Expression

Students and student organizations will be free to examine and discuss all items of interest and to express opinions publicly and privately. Students will always be free to support causes by orderly means, in ways which do not disrupt the operation of the institution or violate College policies and procedures.

C. Use of Facilities

The facilities and services of the College will be open to all of its enrolled students, provided the facilities and services are used in a manner appropriate to the academic community and in compliance with College procedures. The Student Life and Leadership Development Office reserves table space and assists student organizations in scheduling space with the College.

D. Student Participation in College Policies

Students are free to express their views, individually and collectively, on issues of institutional policy and on matters of general interest to the student body. Student representatives are welcome on College committees and councils, and the ASLCC president represents student interests to the Board.

E. Student Publications

With respect to student publications, the Media Commission, as established under board policy, shall be responsible for the appointment of editors, dismissal of editors for cause, recommendation of policies, professional advice, and informal guidance.

The Media Commission is the board of first appeal and review for all questions concerning publications policy and operation. Final appeal is through the President and then the Board.

The student press is to be free of censorship and advance approval of copy. The editors and managers shall not be arbitrarily suspended, suppressed or intimidated because of student, student government, employee, alumni, or community disapproval of editorial policy or content. Similar freedom is assured for oral statements of views on College-controlled and/or student-operated radio or television stations and student-produced programs. This editorial freedom entails a corollary obligation under the canons of responsible journalism and

applicable regulations of the Federal Communications Commission. Neither the Commission nor the President is involved in day-to-day decisions or operations of the student media. Responsibility for the content of publications and for compliance with established policies rests with the student editors and their staffs. Editors and their staffs are guided by the Professional Standards of the Oregon Code of Journalistic Ethics, and by state and federal laws. Advisors are not responsible for content of student publications.

Guidelines for the Media Commission shall be contained in administrative rules and procedures.

F. Distribution of Literature

First Amendment freedom of the press is applicable to the campus of Lane Community College. Therefore, students, off-campus publications, and the distribution of these publications are protected on the main campus and outreach centers. Distribution may be restricted only if it can be shown that such activity would cause a disturbance or disruption of normal College activities.

Materials to be posted require authorization for such distribution from the Associate Dean, Student Life and Leadership Development. Once authorized, distribution will take place in the prescribed locations on campus, should not disrupt the normal operation of the institution, and should not cause a litter problem.

In case a student, employee, or organization is denied the right to distribute materials on campus, the decision is subject to appeal. All appeals or complaints are subject to the College complaint procedure.

The College reserves the right to designate specific areas for the distribution of printed materials. A listing of these areas is maintained by the Associate Dean, Student Life and Leadership Development on the main campus and by the designated building administrator at each of the following outreach centers: Downtown Center, LCC at Florence and LCC at Cottage Grove.

G. Visiting Speakers

The College has the responsibility to develop informed, critical, and objective thinking; and such thinking can best be encouraged in an atmosphere assuring a free interchange of ideas. Therefore, Lane Community College students may invite to the campus and hear any person(s) of their choosing in compliance with administrative regulations governing scheduling, publicity, and management of campus activities.

The education of students is not limited to classroom activities. Students have the right to hear a variety of outside speakers. The Student Activities Office and ASLCC are the primary program sources for outside speakers. Individual students or student organizations may request that ASLCC sponsor speakers or may contact Student Activities about other possibilities. All outside speakers must be scheduled through the Student Activities Office to insure that there is proper scheduling of facilities and other preparations for the event and that the event is conducted in an orderly manner appropriate to the academic community. Institutional control of campus facilities will not be used to censor activities. Sponsorship of guest speakers may be withheld if there are reasonable concerns that the controversial nature of the speaker or content of the speech would lead to disruptions on campus. It is the responsibility of the students sponsoring the event to make it clear to the campus

community and the local community that all views expressed are not necessarily those of the students, staff or administration of Lane Community College.

H. Grievance Procedures for Alleged Discrimination or Harassment

Students who feel they have been discriminated against or treated in some unfair manner have access to formal and informal grievance procedures. See specific procedures outlined in the complete student code: General Student Complaint Process. Contact Office of Academic and Student Affairs, 541.463.5732.

V. Discipline

The Student Code of Conduct applies to anyone accepted for admission, registered for one or more classes, and/or enrolled in any special program approved by Lane Community College.

Students are required to provide identification such as a photo identification card or class schedule on demand to campus safety personnel, faculty or administrators.

Students deserve fair and equal treatment, so instructors and administrators must employ discretion when initiating disciplinary actions and procedures. Action is warranted for protection of individuals, property and a positive learning climate.

Faculty members may dismiss a student from the class for the day for in-class behavior they judge to be disruptive or inappropriate. Such actions include, but are not limited to: racial, sexual or religious slurs; verbal or physical interruption; offensive language; chewing tobacco or spitting; smoking; and littering or creating unsanitary conditions.

If a student is dismissed for inappropriate behavior, faculty must submit a written report to their Division Dean and to the Executive Dean, Student Affairs detailing the student's name, date and time of class, and the improper behavior.

Students may be dismissed only for the day of the misbehavior, but may be dismissed from subsequent classes for a new or repeated behavioral offense. Dismissal as a result of faculty action is counted toward the maximum number of absences allowed in the class.

Campus Public Safety may be called to assist in any disciplinary situation. The assisting security officer must file a report on all situation involvement with the Office of Academic and Student Affairs.

Instructors, administrators and classified staff are authorized to employ physical restraint when immediate restraint will prevent injury to the student or others. Physical restraint is not considered a form of physical discipline. The instructor, administrator or classified staff should send a reliable person to the nearest telephone to request emergency assistance from campus safety.

VI. Off-Campus Students

Students enrolled at Lane Community College satellite campuses (Cottage Grove, Florence, Downtown Center, and community outreach sites) will enjoy the same rights and responsibilities as the students at the main campus and must comply with the Student Code of Conduct and any additional rules for conduct which are specific to the site.

Student Code of Conduct

The purpose of this Code of Conduct is to protect the individual rights of students and staff and to control those actions that go beyond the exercising of such rights.

The College recognizes its obligation to develop intellectual curiosity as well as social and cultural awareness. Further, Lane Community College responsibly provides for the safety and well-being of students and staff, property protection, record security, and other education-related services.

Through this Code of Conduct, Lane Community College describes conduct interfering with the responsibilities and obligations of the College. This document also outlines the penalties imposed for prohibited conduct and explains the procedural due process for alleged student violations and the protection of student rights.

Students charged with code violations are entitled to due process as described in this code and students may appeal certain penalties imposed for violations.

Article I: Definitions

1. The term "College" means Lane Community College.
2. The term "student" includes all persons taking courses at the College, both full-time and part-time, pursuing credit or noncredit classes or enrolled in any special program approved by the college. Persons who are not officially enrolled for a particular term, but who have a continuing relationship with the College, are considered "students."
3. The term "faculty member" means any person hired by the College to conduct classroom activities.
4. The term "College official" includes any person employed by the College, performing administrative or professional responsibilities.
5. The term "judicial advisor" means a College official authorized by the Executive Dean, Student Affairs on a case-by-case basis to impose sanctions upon students found to have violated the Code of Conduct. The Executive Dean, Student Affairs or designee may serve as the judicial advisor or authorize a judicial advisor to serve simultaneously as a judicial advisor and sole member or one of the members of a judicial body. Nothing shall prevent the Executive Dean from authorizing the same judicial advisor to impose sanctions in all cases.
6. The term "member of the College community" includes any student, faculty member, College official, or any other person employed by the College. A person's status in a particular situation shall be determined by a judicial advisor.
7. The term "College premises" includes all land, buildings, facilities, and other property in the possession of, or owned, used, or controlled by the College (including adjacent streets and sidewalks).
8. The term "organization" means any number of persons who have complied with the formal requirements for College recognition.
9. The term "judicial body" means any person or persons authorized by the judicial advisor to determine whether a student has violated the Code of Conduct and to recommend imposition of sanctions.
10. The term "appellate board" means any person or persons authorized by the Executive Dean, Student Affairs to consider an appeal from a judicial body's finding that a student has violated the Code of Conduct, or from sanctions imposed by the judicial advisor.
11. The term "shall" is used in the imperative sense.
12. The term "may" is used in the permissive sense.
13. The Executive Dean, Student Affairs is that person designated by the College President and Vice President to be responsible for the administration of the Code of Conduct.
14. The term "policy" is defined as the written regulations of the College as found in, but not limited to, the Code of Conduct, College board policies, the ASLCC Constitution and By-Laws, and the College Catalog.
15. The term "cheating" includes, but is not limited to: 1) use of any unauthorized assistance in taking quizzes, tests, or examinations; 2) dependence upon the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments; or 3) the acquisition, without permission, of a test or other academic material belonging to a member of the College faculty or staff.
16. The term "plagiarism" includes, but is not limited to, the use, by paraphrase or direct quotation, of the published or unpublished work of another person, without full and clear acknowledgment. It also includes the unacknowledged use of materials such as term papers or other academic materials prepared by a person other than the submitting student.

Article II: Judicial Authority

1. The Executive Dean, Student Affairs or designee shall determine the composition of judicial bodies and appellate boards, determining which judicial body, judicial advisor and appellate board shall be authorized to hear each case.
2. The Executive Dean, Student Affairs or designee shall develop policies for the administration of the judicial program and the procedural rules for the conduct of hearings which are consistent with the provisions of the Lane Community College Student Code of Conduct.
3. Decisions made by a judicial body and/or judicial advisor shall be final, pending the normal appeal process.
4. A judicial body may be designated as an arbiter of disputes within the student community in cases which do not involve a violation of the Code of Conduct. All parties must agree to arbitration, and to be bound by the decision, with no right of appeal.

Article III: Proscribed Conduct

A. Jurisdiction of the College

Generally, College jurisdiction and discipline shall be limited to conduct which occurs on College premises and College-sponsored activities which take place off-campus including placements and internships. This code applies to all students.

B. Conduct - Rules and Regulations

Any student found to have committed the following misconduct is subject to the disciplinary sanctions outlined in Article IVB:

1. Acts of dishonesty, including but not limited to the following:
 - a. Cheating, plagiarism, or other forms of academic dishonesty.
 - b. Furnishing false information to any College official, faculty member or office.
 - c. Forgery, alteration or misuse of any College document, record or instrument of identification.
 - d. Tampering with the election of any College recognized student organization.
2. Disruption or obstruction of teaching, research, administration, other College activities, including public-service functions on or off campus, or other authorized activities, when the act occurs on College premises.
3. Sexual assault, physical abuse, verbal abuse, threats, intimidation, harassment, coercion and/or other conduct which threatens or endangers the health or safety of any member of the College community.
4. Attempted or actual theft of and/or damage to property of the College or property of a member of the College community or other personal or public property.
5. Hazing, defined as an act which endangers the mental or physical health or safety of a student, or which destroys or removes public or private property, for the purpose of initiation, admission into, affiliation with, or as a condition of continued membership in, a group or organization.
6. Failure to comply with orders or directions of College officials or law enforcement officers acting in performance of their duties and/or failure to identify oneself to these persons when requested to do so.

7. Unauthorized possession, duplication or use of keys to any College premises or unauthorized entry to, or use of, College premises.
8. Violation of published College policies, rules or regulations.
9. Violation of federal, state, or local law on College premises, or at College sponsored and supervised activities including but not limited to:
 - a. Use, possession or distribution of narcotic or other controlled substances except as expressly permitted by law.
 - b. Illegal or unauthorized possession of firearms, explosives, other weapons, or dangerous chemicals on College premises.
10. Public intoxication, use, possession or distribution of alcoholic beverages except as expressly permitted by law and College regulations.
11. Participation in a campus demonstration which disrupts the normal operations of the College and infringes on the rights of other members of the College community; leading or inciting others to disrupt scheduled and/or normal activities within any campus building or area; intentional obstruction which unreasonably interferes with freedom of movement, either pedestrian or vehicular, on campus.
12. Obstruction of the free flow of pedestrian or vehicular traffic on College premises or at College sponsored or College supervised functions.
13. Conduct which is disorderly, lewd, or indecent; breach of peace; or aiding, abetting or procuring another person to breach the peace on College premises or at functions sponsored or participated in by the College.
14. Sexual discrimination in the form of sexual harassment is prohibited. Sexual harassment is defined as unwanted sexual advances; requests for sexual favors; and/or other verbal, written, visual, or physical sexual conduct that makes the terms or conditions of employment contingent on the acceptance of unwanted sexual advances, that negatively affects employment or educational opportunities, or that creates an intimidating, hostile, or offensive environment for one of the parties.
15. Theft, or other abuse of computer time, including but not limited to:
 - a. Unauthorized entry into a file to use, read, or change contents, or for any other purpose.
 - b. Unauthorized transfer of a file.
 - c. Unauthorized use of another individual's identification and password.
 - d. Use of computing facilities to interfere with the work of another student or College official.
 - e. Use of computing facilities to send obscene or abusive messages.
 - f. Use of computing facilities to interfere with normal operation of the College computing system.
16. Abuse of the judicial system, including but not limited to:
 - a. Failure to obey the summons of a judicial body or College official.
 - b. Falsification, distortion, or misrepresentation of information before a judicial body.
 - c. Disruption or interference with the orderly conduct of a judicial proceeding.
 - d. Knowingly initiating a judicial proceeding without cause (i.e., filing a false report).
 - e. Attempting to discourage an individual's proper participation in, or use of, the judicial system.
 - f. Attempting to influence the impartiality of a member of a judicial body prior to, and/or during, the course of a judicial proceeding.
 - g. Harassment (verbal or physical) and/or intimidation of a member of a judicial body prior to, during, or after the course of a judicial proceeding.
 - h. Failure to comply with the sanction(s) imposed under the Code of Conduct.
 - i. Influencing or attempting to influence another person to abuse the judicial system.

C. Violation of Law and College Discipline

1. College disciplinary proceedings may be instituted against a student charged with violation of a law which is also a violation of this Code of Conduct. This would apply if both violations result from the same factual situation, without regard to pending civil litigation in court, or criminal arrest and prosecution. Proceedings under the Student Code of Conduct may be carried out prior to, simultaneously with, or following civil or criminal proceedings off campus.
2. When a student is charged by federal, state or local authorities with a violation of law, the College will not request, or agree, to special consideration for that individual because of his or her status as a student. If the alleged offense is also the subject of a proceeding before a judicial body under the Code of Conduct, the College may advise off-campus authorities of the existence of the Code of Conduct and of how such matters will be handled internally within the College community. The College will cooperate fully with law enforcement and other agencies in enforcement of criminal law on campus and in the conditions imposed by criminal courts for the rehabilitation of student violators. Individual students and staff members, acting in their personal capacities, remain free to interact with governmental representatives as they deem appropriate.

Article IV: Judicial Policies

A. Charges and Hearings

1. Any member of the College community may file charges against any student for misconduct. Students should deal with their concerns either through Campus Public Safety or by filing a student complaint. Staff should prepare charges in writing and direct them to the Executive Dean, Student Affairs and/or designee. Charges shall be submitted within 90 days after the incident.
2. The judicial advisor may conduct an investigation to determine the merit of the charges and/or if they can be disposed of administratively by mutual consent of the parties involved on a basis acceptable to the judicial advisor (see Informal Report and Resolution Process). If the charges cannot be disposed of by mutual consent, the judicial advisor may later serve in the same manner as the judicial body or a member thereof (see Formal Complaint Process).
3. All charges shall be presented to the accused student in written form. A time of not less than five nor more than fifteen calendar days after the student notification shall be set for a hearing. Time limits for scheduling a hearing may be extended at the discretion of the judicial advisor.
4. Hearings shall be convened by the judicial advisor and conducted by a judicial body according to the following guidelines:
 - a. Hearings shall be conducted in private. Hearings will be chaired by the judicial advisor or his or her designee.
 - b. Admission of any person to the hearing shall be at the discretion of the judicial body and/or its judicial advisor.
 - c. In hearings involving more than one accused student, the chairperson of the judicial body, at his or her discretion, may permit separate hearings for each student.
 - d. The complainant and the accused have the right to be assisted by any advisor they choose, at their own expense. The advisor may be an attorney. The complainant and/or the accused is responsible for presenting his or her own case. Therefore, advisors are not permitted to speak or to participate directly in any hearing before a judicial body.
 - e. The complainant, the accused and the judicial body shall have the right of presenting witnesses, subject to the right of cross examination by the judicial body.
 - f. Pertinent records, exhibits and written statements may be accepted as evidence for consideration by a judicial body at the discretion of the chairperson.
 - g. All procedural questions are subject to the final decision of the judicial body chairperson.
 - h. After the hearing, the judicial body shall determine (by majority vote if the body consists of more than two people) whether the student has violated the code(s) of conduct as charged.

- i. The judicial body's determination shall be made on the basis of whether it is more likely than not that the accused student violated the Code of Conduct.
 - j. The judicial body shall report its findings to the judicial advisor who will impose sanctions.
5. There shall be a single record of all hearings before a judicial body. The record shall be the property of the College.
 6. Except in the case of a student charged with failing to obey the summons of a judicial body or College official, no student may be found to have violated the Code of Conduct solely because the student failed to appear before a judicial body. In all cases, the evidence in support of the charges shall be presented and considered.

B. Sanctions

1. The following sanctions may be imposed by the judicial advisor upon any student, group or organization found to have violated the Code of Conduct.
 - a. Counseling, educational activities, and/or training - For violations involving substance abuse the student will be required to work with the Substance Abuse Prevention Coordinator.
 - b. Warning - A notice in writing to the student that the student is violating or has violated institutional regulations.
 - c. Probation - A written reprimand for violation of specified regulations. Probation is for a designated period of time and includes the probability of more severe disciplinary sanctions if the student is found to be violating any institutional regulation(s) during the probationary period.
 - d. Loss of Privileges - Denial of specified privileges for a designated period of time.
 - e. Fines - Fines may be imposed.
 - f. Restitution - Compensation for loss, damage or injury. This may take the form of appropriate service and/or monetary or material replacement.
 - g. Discretionary Sanctions - Work assignments, service to the College or other related discretionary assignments.
 - h. Deactivation - Loss of all privileges, including College recognition, for a specified period of time (applies to student groups or organizations).
 - i. College Suspension Separation of the student from the College for a definite period of time, after which the student is eligible to return. Conditions for re-admission may be specified.
 - j. College Expulsion - Permanent separation of the student from the College.
2. More than one of the sanctions listed above may be imposed for any single violation.
3. Disciplinary sanctions shall not be made part of the student's permanent academic record, but shall become part of the student's confidential record. Upon graduation, the student's confidential record may be expunged of disciplinary actions other than College suspension or expulsion, upon application to the Executive Dean, Student Affairs. Cases involving the imposition of sanctions other than College suspension or expulsion shall be expunged from the student's confidential record, consistent with the College's schedule of record disposition.
4. In each case in which a judicial body determines that a student has violated the Code of Conduct, the sanction(s) shall be determined by the judicial advisor. In cases in which persons other than, or in addition to, the judicial advisor have been authorized to serve as the judicial body, the recommendation of all members of the judicial body shall be considered by the judicial advisor in determining and imposing sanctions. The judicial advisor is not limited to sanctions recommended by members of the judicial body. Following the hearing, the judicial body and the judicial advisor shall advise the accused in writing of its determination and any sanction(s) imposed.

C. Interim Suspension

In certain circumstances, the Executive Dean, Student Affairs or designee may impose a College suspension pending a hearing before a judicial body, or imposition of sanctions.

1. Interim suspension may be imposed only: a) to ensure the safety and wellbeing of members of the College community or the preservation of college property; b) to ensure the student's own physical or emotional safety and well-being; or c) if the student poses a threat of disruption to, or interference with, the normal operations of the College.
2. During interim suspension, students shall be denied access to the campus (including classes) and/or all other College activities or privileges for which the student might otherwise be eligible, as the Executive Dean, Student Affairs or designated judicial advisor determines appropriate.

D. Appeals

1. A decision reached by a judicial body, or a sanction imposed by the judicial advisor, may be appealed by the accused student or complainant to an appellate board within five (5) school days of the decision. Such appeals shall be in writing and shall be delivered to the Executive Dean, Student Affairs or designee.
2. Appeals shall be limited to review of the record of the initial hearing and supporting documents, except as required to explain the basis of new evidence for any of the following:
 - a. To determine whether the original hearing was conducted fairly in light of the charges and evidence presented and in conformity with the prescribed procedures, giving the complaining party a reasonable opportunity to prepare and present evidence that the Code of Conduct was violated, and giving the accused student a reasonable opportunity to prepare and to present a rebuttal of those allegations.
 - b. To determine whether the decision reached regarding the accused student was based on substantial evidence; that is, whether the facts in the case were sufficient to establish the fact that a violation of the Code of Conduct had occurred.
 - c. To determine whether the sanction(s) imposed were appropriate for the violation of the Code of Conduct which the student was found to have committed.
 - d. To consider new evidence sufficient to alter a decision or other relevant facts not brought out in the original hearing because such evidence and/or facts were not known to the person appealing at the time of original hearing.
3. The appellate board will submit a written report of its findings and recommendations to the Executive Dean, Student Affairs or designee within 20 working days. The appellate board's report may include both majority and dissenting opinions. The Executive Dean, Student Affairs or designee will make the final decision on the appeal and notify the accused student and/or complainant in writing within 10 working days. If the Executive Dean, Student Affairs was the judicial advisor in the original complaint, the appellate board's report will be submitted to the Vice President for Academic and Student Affairs for final decision.
4. In cases involving appeals by a student accused of violating the Code of Conduct, review of the sanction by an appellate board may not result in more sanction(s) for the accused student. Instead, following an appeal, the Executive Dean, Student Affairs may upon review of the case, reduce, but not increase, the sanctions imposed by the judicial advisor.
5. In cases involving appeals by persons other than the student accused of violating the Code of Conduct, the Executive Dean, Student Affairs may, upon review of the case, reduce or increase the sanctions imposed by the judicial advisor or remand the case to the original judicial body and judicial advisor.

Article V: Interpretation and Revision

A. Code Interpretation

Any question of interpretation regarding the Code of Conduct shall be referred to the Executive Dean, Student Affairs or designee for final determination.

B. Code Revision

The Code of Conduct shall be reviewed every five years under the directions of the Executive Dean, Student Affairs.

Smoking Policy

Effective the beginning of fall term, 2010, the College smoking policy was amended as follows:

Smoking and other tobacco use is prohibited in all core areas of LCC campuses; smoking and tobacco use may be allowed in some designated peripheral areas.

Security and Safety at Lane

The Federal Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act, requires colleges to publish information about crime on their campuses. A copy of Lane's Clery Report is located on the Public Safety web page at lanecc.edu/psd/services.html or may be obtained in writing at the Public Safety office. At Lane, security and safety are college-wide efforts. With students, faculty and staff committed to prevention, crime can be minimized.

The Lane Community College Public Safety department provides direct services to the 30th Avenue campus and to the Downtown Center and Wildish Building. All other college centers including Cottage Grove, Florence and the community learning centers are served by their local law enforcement agencies, which report incidents at college sites to the college's Public Safety department.

Lane Community College Public Safety Officers are certified under Oregon Department of Public Safety Standards and Training. They maintain an atmosphere conducive to education, contribute to a safe campus environment, enforce parking and traffic regulations, conduct investigations of reported crimes, and make reports to local law enforcement agencies.

Public Safety officers are authorized to enforce motor vehicle and parking laws on campus. Officers are charged with responding to crimes, medical emergencies and violations of college policy/rules and may cite or arrest perpetrators of criminal acts or college policy violations. In addition, officers utilize law enforcement tools such as the Criminal Justice Information System.

Preventing Crimes

Education The majority of criminal incidents on campus result from leaving property unattended, lockers unlocked and valuable property visible in cars. The Public Safety department provides speakers on crime prevention, self-defense, personal safety, and other criminal justice and safety topics.

Intoxicants Drugs and intoxicants are not permitted on campus, except under very specific circumstances which are spelled out in detail in the Student Policies section.

Lighting and Landscaping College staff work constantly to maintain good lighting and to clear undergrowth to improve visual access on campus.

Patrol Service Public Safety conducts patrols of the campus by squad car, motorized T-3, bicycle, and by foot. This comprehensive patrol policy promotes community policing and crime prevention activities. In addition to patrol service, Public Safety works closely with Lane County Sheriff's Department, Eugene Police Department, and federal agencies such as ATF and FBI.

Emergency Assistance

There is always a Public Safety Officer on campus. To contact Public Safety:

Red Telephones Use one of the 40 red telephones on main campus and at the Downtown Center and Wildish Building. These emergency phones automatically ring in the Public Safety department when the receiver is lifted.

Dial 5555 On campus dial or ask a staff member to dial 541.463.5555 for emergencies from other college phones to reach Public Safety.

Non-emergency Dial 541.463.5558 for non-emergency calls.

After Hours From 5 p.m. - 8 a.m. Monday through Friday, on weekends and holidays, the college's emergency after-hours law enforcement agency will answer. Give your name, location and phone number, and the service will contact the on-site officer to return your call and respond to your location.

Emergency Car Services Emergency car booster pack service is offered 24 hours a day. Call or visit Public Safety. Public Safety does not assist in vehicle entry, but will assist in contacting local locksmiths or other help.

Emergency Escorts If your safety is threatened, contact Public Safety and an officer will be dispatched.

Reporting and Response

Anyone knowing of or suspecting a crime should promptly report it to Public Safety in Building 13, Room 107. When a suspect is apprehended, the suspect may be served an order to appear at a Student Conduct Code hearing, given into custody of a law enforcement agency or both. Public Safety Officers may facilitate contact between victim and local law enforcement agencies.

Services

Counseling and the Women's Program Counseling provides limited services to crime victims and/or makes referrals to other resources in the community. The Women's Program provides services and referral to victims of sex and domestic violence offenses.

Other Services Public Safety provides numerous other services including: criminal background checks, keyless entry system maintenance, campus key control, alarm monitoring and response, safety escorts, personal body alarms, and personal safety instruction.

Reported Crimes

The number of crimes reported to Public Safety and local law enforcement in the categories set forth in the Crime Awareness and Clery Act may be found at the Public Safety web site: lanecc.edu/psd/clery.html.

For more information about Lane's Public Safety Department, contact 541.463.5558.

Career and Technical Programs

Accounting

Offered by the Business Department, 541.463.5221

Two-Year Associate of Applied Science Degree, Accounting

Career Pathway Certificate of Completion, Payroll Clerk

Purpose To prepare graduates to enter the field of accounting. The program offers two directed elective sequences. The student can choose to prepare for employment in full-cycle bookkeeping or specialize in payroll accounting. Upon successful completion of first year courses, students will be prepared for employment as an accounts receivable or payable clerk, and will be eligible for the Business Assistant One-Year Certificate of Completion.

Learning Outcomes The graduate of the Associate of Applied Science program will be able to:

- understand accounting as the "language of business."
- use computerized and manual systems to record data and prepare accounting statements and reports.
- organize and manage the daily business functions of an organization.
- use research and analytical skills to support the activities of the organization.
- apply critical thinking and analytical skills in decision-making and problem solving.
- formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them.
- apply accounting theory to analyze accounting information.
- anticipate and actively explore innovative solutions to technological and organizational challenges.
- use software including word processing, spreadsheets, and databases to input, manage, and interpret information to meet organizational needs.
- provide basic training and technical support for users of office equipment and software systems.
- create professional, accurate documents.
- make effective presentations to internal and external audiences.
- work independently within diverse business environments; apply individual strengths and critical thinking to collaborative efforts.
- engage customers and co-workers in a purposeful manner – listening to and accurately interpreting their responses within diverse cultural contexts.
- perform on the job in ways that reflect professional ethics, legal standards, and organizational expectations.

Job Openings Projected through 2018

Lane County openings - 55 annually

Statewide openings - 600 annually

Wages

Lane County average hourly - \$16.55; average annual - \$34,112

Oregon average hourly - \$17.31; average annual - \$36,009

Costs (Estimate based on 2011 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees.....	\$9,152
Books and materials.....	\$2,878
Laptop computer	\$1,500
Total Estimate	\$13,530

Accounting course fees and other course fees may change during the year - see the online credit class schedule for fees assigned to courses.

Note All Business Department majors must have a computer that meets minimum system requirements. Contact the department or advisor for details.

Cooperative Education (Co-op) Co-op offers students graded college credit for on-the-job work experience related to educational and career goals. Through Co-op, students connect theory and practice, develop skills, expand career knowledge, and make contacts for future job openings. Three credits of Co-op are required for the AAS degree. Additional Co-op credit is strongly recommended as an elective. Contact Jamie Kelsch, Accounting Co-op Coordinator, Bldg. 19, Rm. 253A, 541.463.5540, kelschj@lanecc.edu

Accounting

Two-Year Associate of Applied Science Degree

Recommended Prerequisites

BT 010 Computer Keyboarding ^{1,G}	3
BT 020 10-Key Calculator ^{1,G}	3
BT 108 Business Proofreading and Editing ^{2,G}	4
MTH 065 Elementary Algebra ³	4
WR 115 Introduction to College Writing ³	4
Total Recommended Prerequisite Credits	18

First Year

BT 112 Team Building Skills ^{4,G}	3
BT 120 MS WORD for Business ^{*,1,4,G}	3
CS 120 Concepts of Computing: Information Processing ^{4,G}	4
WR 121 Introduction to Academic Writing ^{*,4,G}	4
Total Credits	14

Winter

BA 101 Introduction to Business ^{4,G}	4
BT 123 MS EXCEL for Business ^{*,1,4,G}	4
BT 165 Introduction to the Accounting Cycle ^{4,G}	4
MTH 095 Intermediate Algebra or higher ^{*,4,G}	5
Total Credits	17

Spring

BA 206 Management Fundamentals ^{*,4,G}	3
BA 214 Business Communications ^{*,4,G}	4
BA 281 Personal Finance ^{4,G}	4
BT 163 QuickBooks ^{*,4,G}	4
BT 206 Co-op Ed: Business Seminar ^{*,4,G}	2
Total Credits	17

Second Year

BA 211 Financial Accounting ^{4,G}	4
BT 170 Payroll Records and Accounting ^{*,G}	4
BT 272 Tax Concepts and Preparation ^{*,4,G}	4
Directed elective ^{4,6,G}	3
Total Credits	15

Winter

BA 226 Business Law ^{4,G}	4
Directed elective ^{4,6,G}	3-4
Directed elective ^{4,6,G}	3-4
Speech course ^D	4

Total Credits 14-16

	Spring	
BA 278 Leadership and Team Dynamics ^{4,G}	4	
BA 280AC Co-op Ed: Accounting ^{4,G}	3	
Directed elective(s) ^{4,6,G}	4-7	
Choice of:.....	3	
Physical Education Activity requirement ^{5,R}		
Health requirement ^{5,R}		
Total Credits	14-17	
Bookkeeper Directed Elective Sequence	Fall	
ECON 200 Principles of Economics:		
Introduction to Economics ^{4,G}	3	
	Winter	
BT 223 MS EXCEL for Business – Expert ^{*,4,G}	3	
Choice of:.....	3-4	
BT 124 MS ACCESS for Business ^{*,4,G}		
BT 221 Budgeting for Managers ^{*,4,G}		
	Spring	
BT 286 Professional Bookkeeping ^{*,4,G}	4	
Payroll Directed Elective Sequence	Fall	
Recommend Physical Education Activity or		
Health course(s) ^{5,R}	3	
	Winter	
BA 224 Human Resource Management ^{*,4,G}	3	
Choice of:.....	3-4	
BT 124 MS ACCESS for Business ^{*,4,G}		
BT 230 Paperless Office Practices ^{*,4,G}		
	Spring	
BA 251 Supervisory Management ^{4,G}	3	
BT 171 Payroll Laws and Regulations ^{4,5,G}	4	

Accounting Clerk

Career Pathway Certificate of Completion

This Career Pathway Certificate has been suspended. Please see a counselor or advisor for other choices.

Payroll Clerk

Career Pathway Certificate of Completion

Purpose This Career Pathway Certificate of Completion is designed for professional office personnel who are interested in career enhancement, or for current Business students with office experience who wish to expand their options to enter the field of accounting as payroll clerks. The program provides the foundation necessary to prepare for the Fundamental Payroll Certification Test (FPC) offered by the American Payroll Association.

Learning Outcomes The graduate of the Payroll Clerk Certificate of Completion will be able to:

- understand accounting as the “language of business.”
- use computerized and manual systems to record data and prepare accounting statements and reports.
- use research and analytical skills to support the activities of the organization.
- apply critical thinking and analytical skills in decision-making and problem solving.
- formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them.

- use software including word processing, spreadsheets, and databases to input, manage, and interpret information to meet organizational needs.
- provide basic training and technical support for users of office equipment and software systems.
- create professional, accurate documents.
- make effective presentations to internal and external audiences.
- work independently within diverse business environments, apply individual strengths and critical thinking to collaborative efforts.
- engage customers and co-workers in a purposeful manner – listening to and accurately interpreting their responses within diverse cultural contexts.
- perform on the job in ways that reflect professional ethics, legal standards, and organizational expectations.

	Fall	
BT 123 MS EXCEL for Business ^{*,4,G}	4	
BT 165 Introduction to the Accounting Cycle ^{4,G}	4	
BT 170 Payroll Records and Accounting ^{*,4,5,G}	4	
	Winter	
BA 224 Human Resource Management ^{*,4,G}	3	
BT 163 QuickBooks ^{*,4,G}	4	
	Spring	
BA 226 Business Law ^{4,G}	4	
BT 171 Payroll Laws and Regulations ^{4,G}	4	
Total Credits	27	

- 1 Before enrolling in BT 120 MS WORD for Business or BT 123 MS EXCEL for Business, students are expected to have a basic knowledge of the Windows operating system and the ability to type 30 words per minute accurately and key 130-132 strokes per minute on an electronic calculator (or numeric keypad). The Business Department offers free placement tests to assist students in determining their skill levels. Additional testing information and schedule details are available at: lanecc.edu/business/testing
- 2 Before enrolling in BA 214 Business Communications, students must pass a Language Skills and Proofreading test in the Testing office or pass BT 108 Business Proofreading and Editing.
- 3 Students must place at least into WR 121 and MTH 065, or take classes to reach these levels before enrolling in program courses.
- 4 Must be passed with grade of “C” or better to satisfy program requirement.
- 5 Can be taken any term.
- 6 Students must choose a minimum of 12 credits in one or more areas from the Directed Electives lists (can be from more than one category).

Administrative Office Professional

Offered by the Business Department, 541.463.5221

**Two-Year Associate of Applied Science Degree,
Administrative Office Professional**

**Career Pathway Certificate of Completion,
Legal Office Skills**

**Career Pathway Certificate of Completion,
Office Software Specialist**

**Career Pathway Certificate of Completion,
Small Business Ownership**

Purpose To train administrative office professionals for a wide variety of office support duties. They may handle correspondence, maintain electronic and manual files, assist with financial record keeping, operate a variety of office equipment, assist

Standard footnotes:

* Prerequisite required

B Must be passed with grade of “B” or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of “C-” or better

G Must be taken for a grade, not P/NP; major requirement

R Required for AAS degree—see page 48

customers, answer telephones, act as a receptionist, perform general office duties, and use personal computers for internet research, word processing, and financial analysis. They are capable of assuming some executive decision-making responsibilities. This program provides the foundation necessary to prepare for the Certified Professional Secretary examination. Upon successful completion of the first year courses, students will be eligible for the Business Assistant One-Year Certificate of Completion.

Learning Outcomes The graduate of the Associate of Applied Science program will be able to:

- organize and manage the daily business functions of an organization.
- use software including word processing, spreadsheets, databases, and presentation tools to input, manage, and interpret information to meet organizational needs.
- perform on the job in ways that reflect professional ethics, legal standards, and organizational expectations.
- create professional, accurate documents.
- anticipate and actively explore innovative solutions to technological and organizational challenges.
- provide basic training and technical support for office equipment and software systems.
- understand accounting as the "language of business."
- engage customers and co-workers in a purposeful manner – listening to and accurately interpreting their responses within diverse cultural contexts.
- use research and analytical skills to support the activities of the organization.
- work independently within diverse business environments, apply individual strengths and critical thinking to collaborative efforts.
- make effective presentations to internal and external audiences.
- use appropriate library and information resources to research business topics.
- apply critical thinking and analytical skills in decision-making and problem solving.
- perform administrative, management, financial, and Web support functions using technology.
- apply and integrate advanced computer software applications to complete complex projects and documents.
- use communication, teamwork, and interpersonal skills for internal and external customer support.
- perform in office management level positions after additional office experience.
- have enhanced employment opportunities based on selection of directed electives, such as accounting, E-Business, legal, and medical.
- formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them.
- use good keyboarding skills to prepare documents quickly and accurately according to employer standards.

Job Openings Projected through 2018

Lane County openings - 29 annually

Statewide openings - 340 annually

Wages

Lane County average hourly - \$19.88; average annual - \$41,355

Oregon average hourly - \$21.00; average annual - \$43,676

Costs (Estimate based on 2011 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees.....	\$9,006
Personal Computer.....	\$1,500

Books and supplies..... \$2,550

Total Estimate \$13,056

Administrative Office Professional fees and other course fees may change during the year - see the online credit class schedule for fees assigned to courses.

Note All Business Department majors must have a computer that meets minimum system requirements. Contact the department or advisor for details.

Cooperative Education (Co-op) Co-op offers students graded college credit for on-the-job work experience related to educational and career goals. Through Co-op, students connect theory and practice, develop skills, expand career knowledge, and make contacts for future employment. Three credits of Co-op are required for the AAS degree. Additional Co-op credit is strongly recommended as an elective. Contact Jamie Kelsch, Administrative Office Professional Co-op Coordinator, Bldg. 19, Rm. 253A, 541.463.5540, kelschj@lanecc.edu

Administrative Office Professional

Two-Year Associate of Applied Science Degree

Recommended Prerequisites

BT 010 Computer Keyboarding ^{1,G}	3
BT 020 10-Key Calculator ^{1,G}	1
BT 108 Business Proofreading and Editing ^{2,G}	4
MTH 060 Beginning Algebra ³	4
WR 115 Introduction to College Writing ³	4
Total Recommended Prerequisite Credits	16

First Year

-BT 112 Team Building Skills ^{4,G}	3
BT 120 MS WORD for Business ^{*,4,G}	3
CS 120 Concepts of Computing: Information Processing ^{4,G}	4
WR 121 Introduction to Academic Writing ^{*,4,G}	4
Total Credits	14

Winter

BA 101 Introduction to Business ^{4,G}	4
BT 123 MS EXCEL for Business ^{*,4,G}	4
BT 165 Introduction to the Accounting Cycle ^{4,G}	4
MTH 065 Elementary Algebra or higher ^{*,4,G}	4
Total Credits	16

Spring

BA 206 Management Fundamentals ^{*,4,G}	3
BA 214 Business Communications ^{*,4,G}	4
BT 144 Administrative Procedures ^{*,4,G}	4
BT 163 QuickBooks ^{*,4,G}	4
BT 206 Co-op Ed: Business Seminar ^{*,4,G}	2
Total Credits	17

Second Year

BA 224 Human Resource Management ^{*,4,G}	3
BT 220 MS WORD for Business – Expert ^{*,4,G}	3
Directed Elective ^{4,6,G}	4-8
Speech course ^G	4
Choice of:.....	3
Physical Education Activity requirement ^{5,R}	
Health requirement ^{5,R}	
Total Credits	17-21

	Winter	
BA 226 Business Law ^{4,G}	4	
BT 228 Integrated Office Applications ^{*,4,G}	4	
BT 230 Paperless Office Practices ^{*,4,G}	4	
Directed Elective ^{4,6,G}	4-8	
Total Credits	16-20	

	Spring	
BA 278 Leadership and Team Dynamics ^{4,G}	4	
BA 280AA Co-op Ed: Administrative Office ^{4,G}	3	
Directed Elective ^{4,6,G}	4-8	
BT 271 Administrative Professional Practicum ^{*,4,G}	4	
Total Credits	15-19	

- 1 Before enrolling in BT 120 MS WORD for Business or BT 123 MS EXCEL for Business, students are expected to have a basic knowledge of the Windows operating system and the ability to type 30 words per minute accurately and key 130-132 strokes per minute on an electronic calculator (or numeric keypad). The Business Department offers free placement tests to assist students in determining their skill levels. Additional testing information and schedule details are available at: lanecc.edu/business/testing
- 2 Before enrolling in BA 214 Business Communications, students must pass a Language Skills and Proofreading test in the Testing office or pass BT 108 Business Proofreading and Editing.
- 3 Students must place at least into WR 121 and MTH 065, or take classes to reach these levels before enrolling in program courses.
- 4 Must be passed with grade of "C" or better to satisfy program requirement.
- 5 Can be taken any term.
- 6 Students must choose a minimum of 12 credits in one or more areas from the following Directed Electives lists (can be from more than one category):

Accounting Directed Electives

BT 170 Payroll Records and Accounting ^{*,4,G}	4
BT 171 Payroll Laws and Regulations ^{4,G}	4
BT 221 Budgeting for Managers ^{*,4,G}	4
BT 223 MS EXCEL for Business – Expert ^{*,4,G}	3

E-Business Directed Electives

BT 150 Business Web Pages ^{4,G}	3
BT 252 Web Tools: Photoshop and Dreamweaver ^{4,G}	4
BT 253 Internet Marketing ^{4,G}	4

Legal Office Directed Electives

BA 211 Financial Accounting ^{*,4,G}	4
LA 100 Legal Procedures ^{4,G}	4
LA 101 Introduction to Paralegal Studies ^{*,4,G}	3
LA 102 Legal Terminology ^{4,G}	3
LA 105 Civil Litigation ^{*,4,G}	3
LA 128 Legal Procedures 2 ^{*,4,G}	4
LA 132 Ethics for the Legal Professional ^{*,4,G}	3

Medical Office Directed Electives

HIT 196 Medical Transcription 2 ^{*,4,G}	3
HO 100 Medical Terminology 1 ^{4,G}	3
HO 110 Admin Medical Office Asst ^{4,G}	3
HO 112 Medical Insurance Procedures ^{*,4,G}	3
HO 195 Medical Transcription 1 ^{*,4,G}	3

Additional Electives

BA 223 Marketing ^{*,4,G}	4
BA 250 Small Business Management ^{*,4,G}	4
BA 280AA Co-op Ed: Admin Office ^{4,G}	3
BA 281 Personal Finance ^{4,G}	4
BT 015 Keyboard Skillbuilding 1 ^{4,G}	3
BT 016 Keyboard Skillbuilding 2 ^{4,G}	3
BT 017 Keyboard Skillbuilding 3 ^{4,G}	3
BT 122 MS POWERPOINT for Business ^{*,4,G}	3

BT 124 MS ACCESS for Business ^{4,G}	3
4 Must be passed with grade of "C" or better to satisfy program requirement.	

Legal Office Skills

Career Pathway Certificate of Completion

Purpose This Career Pathway Certificate of Completion is designed for those with office experience who wish to expand their options for employment in law-related business and government offices. It also prepares students for transfer into the second year of Umpqua Community College's AAS Degree in Paralegal Studies, which is offered completely online. Legal careers require criminal and personal background checks.

Students who transfer to UCC to complete the second year of the AAS Degree in Paralegal Studies will then receive financial aid through Umpqua. The Umpqua courses are all offered online. Please be aware that the Umpqua AAS program is not eligible for financial aid at Lane Community College, and federal regulations do not permit students to receive financial aid for the same term enrollment at more than one institution simultaneously. Therefore, it is the student's responsibility to ensure that (s)he does not accept any financial aid at Lane Community College while enrolled in the Umpqua degree program.

Learning Outcomes Students earning the Legal Office Skills Certificate of Completion will be able to:

- use and understand basic legal terminology and concepts.
- demonstrate an understanding of the role of lawyers in the legal system.
- demonstrate an understanding of the roles and duties of all levels of legal support personnel in the legal environment.
- prepare accurately formatted legal documents, letters, and pleadings and compose correspondence commonly used in legal settings.
- draft basic pretrial documents.
- demonstrate an understanding of pretrial and trial procedures.
- develop questions for gathering information and facts in preparation for trial.
- evaluate and practice rules of ethics as they would apply to civil litigation.
- demonstrate an understanding of ethics as they relate to confidentiality, competence, fees, billing, conflicts of interest, and UPL.
- demonstrate an understanding of the purposes and functions of court rules, schedules, and procedures.
- demonstrate a basic knowledge of requirements for recording and filing documents with the proper court offices.
- demonstrate an understanding of and use a variety of legal office systems including document management and calendaring.
- demonstrate an understanding of and practice basic functions of legal billings and timekeeping, client relations, and litigation support.
- use law library, computing and communication services to obtain legal forms, information, and data from regional, national, and international networks.
- work independently within diverse business environments; apply individual strengths and critical thinking to collaborative efforts.

Standard footnotes:

* Prerequisite required

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

R Required for AAS degree—see page 48

- use research and analytical skills to support the activities of the organization.

Prerequisites

BT 017 Keyboard Skillbuilding 3 ^{4,9,G}	3
BT 165 Introduction to the Accounting Cycle ^{4,G}	4
MTH 065 Elementary Algebra ^{8,G} or higher	4
WR 121 English Composition ^{8,G}	4
Total Recommended Prerequisite Credits	15

Fall

LA 100 Legal Procedures ^{*,8,G}	4
LA 102 Legal Terminology ^{8,G}	3
BT 108 Business Proofreading and Editing ^{7,8,G}	4
Total Credits	11

Winter

BA 211 Financial Accounting ^{*,8,G}	4
CS 120 Concepts of Computing: Information Processing ^{8,G}	4
LA 101 Introduction to Paralegal Studies ^{*,8,G}	3
LA 128 Legal Procedures 2 ^{*,8,G}	4
Total Credits	15

Spring

BA 214 Business Communications ^{*,8,G}	4
LA 105 Civil Litigation ^{*,8,G}	3
LA 132 Ethics for the Legal Professional ^{*,8,G}	3
Choice of: ^{8,G}	4
SP 105 Listening and Critical Thinking	
SP 218 Interpersonal Communication	
SP 219 Small Group Discussion	
BT 206 Co-op Ed: Business Seminar ^{*,8,G}	2
Total Credits	16

- 4 Must be passed with grade of "C" or better to satisfy program requirement.
- 7 For this certificate and for transfer to UCC, Lane's Language Skills and Proofreading test is not accepted to waive BT 108.
- 8 All courses must be taken for a letter grade and passed with a grade of "C" or better or courses must be retaken.
- 9 Students are expected to have the ability to accurately type 40 words per minute. The Business Department at Lane offers free placement tests to assist students in determining skill levels. Students who are unable to meet the minimum requirements should consider completing keyboarding and/or skill building courses to reach the required skill level. Additional testing information and schedule details are available at: lanecc.edu/business/testing

Office Software Specialist**Career Pathway Certificate of Completion**

Purpose This Career Pathway Certificate of Completion is designed for professional office personnel who are interested in career enhancement, or for current Business students with office experience who wish to expand their software proficiency. In today's competitive job market, Office Software Specialist certification can bring employment opportunities, greater earning potential and career advancement, and increased job satisfaction.

Learning Outcomes The graduate of the Office Software Specialist Certificate of Completion will be able to:

- navigate the Windows operating environment.
- create, format, save, edit, paginate, and print documents.
- create and apply character and paragraph styles, generate and update document indexes, tables of contents, and captions, and demonstrate mastery in working with document

sections, templates, and mail merge.

- create, run, and save macros.
- use cell, row and column, and worksheet formatting techniques to create professional-looking spreadsheets.
- use sophisticated Excel functions to perform sensitivity analysis to solve business problems.
- plan and develop a worksheet to solve complex business problems by using named cells and ranges, complex logical and nested logical functions, and relative, absolute, and mixed cell references in creating formulas and functions.
- work with arrays, iteration, multi-sheet data, form controls, look up functions, date and time functions, and math and statistical functions in a business problem-solving context.
- create presentations from a template, from existing slides, or by using the AutoContent Wizard and apply appropriate design principles to design, create, and present an original slide show using PowerPoint software.
- customize color schemes, apply slide transitions and animation effects, create a custom background, add animated clip art, link slides within the presentation, resize and scale objects, add action buttons, hide slides, and set automatic slide timings.
- enter, edit, move, and delete information in established databases with accuracy.
- sort, index, and search databases, create custom forms and reports, link tables, and import/export information.

BT 120 MS WORD for Business ^{*,4,G}	3
BT 122 MS POWERPOINT for Business ^{*,4,G}	3
BT 123 MS EXCEL for Business ^{*,4,G}	4
BT 124 MS ACCESS for Business ^{*,4,G}	3
BT 220 MS WORD for Business – Expert ^{*,4,G}	3
BT 223 MS EXCEL for Business – Expert ^{*,4,G}	3
BT 228 Integrated Office Applications ^{4,G}	4
Total Credits	23

- 4 Must be passed with grade of "C" or better to satisfy program requirement.

Small Business Ownership**Career Pathway Certificate of Completion**

Purpose This Career Pathway Certificate is designed for individuals who may want to own and operate a business in the near term or future. This includes, but is not limited to, trade and professional students, community members and former graduates with skills that are marketable in the business environment; individuals with skill sets that are commonly delivered in a "freelancer" or independent contractor capacity; and service providers, small retailers and food service providers that may potentially organize as a business.

Learning Outcomes The graduate of the Small Business Ownership Certificate of Completion will be able to:

- understand his or her motivations and the reality of owning a small business, and understand the legal implications of being a business owner.
- determine the appropriate type of business entity for various business endeavors, and understand, outline and evaluate the components of a business plan.
- use cell, row and column, and worksheet formatting techniques to create professional-looking spreadsheets for analyzing business decisions.
- use sophisticated Excel functions to perform sensitivity analysis to solve business problems.
- understand the role of accounting in planning, operating, and reporting an organization's activities and management's fiduciary responsibility to safeguard assets and be able to discuss

the adequacy of internal controls.

- recognize how the major elements of the marketing process apply to small business marketing situations.
- design and utilize QuickBooks as a tool to efficiently meet an organizations accounting and tax compliance responsibilities.
- understand the link between accounting data and the underlying business reality, and use the accounting equation for analyzing business transactions and creating financial statements.
- understand the historical role and evolving trends in small business including: transitions to paperless environments, globalization, role of e-commerce, and sustainability.

	Fall
BA 101 Introduction to Business ^{4,G}	4
BT 123 MS EXCEL for Business ^{*,4,G}	4
BT 165 Introduction to the Accounting Cycle ^{4,B,G}	4
	Winter
BA 223 Marketing ^{*,4,G}	4
BA 226 Business Law ^{4,G}	4
BT 221 Budgeting for Managers ^{*,4,G}	4
	Spring
BA 206 Management Fundamentals ^{*,4,G}	3
BA 250 Small Business Management ^{*,4,G}	4
BT 163 QuickBooks ^{*,4,G}	4
Total Credits	35

4 Must be passed with grade of "C" or better to satisfy program requirement.

Auto Body and Fender Technology

Offered by the Advanced Technology Division
541.463.5380

Two-Year Associate of Applied Science Degree

Auto Collision Option

Auto Paint Option

Two-Year Certificate of Completion

Purpose To train technicians in the latest paint and collision technology, and provide substantial practical experience essential to becoming proficient in this industry, for careers in car dealerships, independent body and paint shops, heavy-duty truck shops, or with jobbers selling paint and collision equipment and materials.

Auto Collision Option prepares students for specialization in the auto collision industry, for careers in auto dealerships, custom repair shops, independent body shops, motor home manufacturing, employment with collision jobbers, auto collision repair estimators, and auto collision manufacturers.

Auto Paint Option prepares students for specialization in the auto paint industry, for careers in auto dealerships, custom paint shops, independent paint shops, heavy-duty truck shops, the motor home industry, and with paint jobbers and paint equipment manufacturers.

Learning Outcomes The student who successfully completes all Auto Body and Fender AAS or 2-year certificate program requirements will:

- adhere to OSHA and industry safety standards.
- effectively use the latest collision repair equipment as well as refinishing procedures.
- repair and refinish automobile bodies to industry standards.
- access library, computing, and communications services and obtain information and data from regional and national networks.
- interpret the concepts of a problem-solving task and translate them into mathematical equations.

In addition to the outcomes for Auto Body and Fender, the student who successfully completes all Auto Collision Option program requirements will:

- effectively use state-of-the-art measuring and collision repair equipment.
- demonstrate a thorough knowledge of advances in technology in auto collision.
- enter the workforce with substantial practical experience in collision repair.
- repair and reconstruct automobile bodies to industry standards.

In addition to the outcomes for Auto Body and Fender, the student who successfully completes all Auto Paint Option program requirements will:

- demonstrate thorough knowledge of advances in technology in auto paint.
- effectively use state-of-the-art equipment and materials as well as refinishing procedures.
- enter the workforce with substantial practical experience.

Job Openings Projected through 2018

Lane County openings - 20 annually

Statewide openings - 100 annually

Wages

Lane County average hourly - \$ 18.90; average annual - \$ 39,340

Oregon average hourly - \$19. 99; average annual - \$41,564

Costs (Estimate based on 2011 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees.....	\$9,777
Differential Fees [†]	\$3,366
Other Course/Program Costs.....	\$1,734
Tools.....	\$1,000
Books and supplies.....	\$600

Total Estimate \$16,477

[†] This is the total of all the differential fees attached to Auto Body and Fender Technology courses. These fees and other course fees may change during the year - see the online credit class schedule for fees assigned to courses.

Licensing or Other Certification Exams Required Completion of this program may substitute for one year of the two years of work experience required for taking written exams for ASE certification.

Prerequisites Minimum placement score of 68 in Reading OR completion of RD 080 OR prior college. A high school diploma or equivalent is recommended for all applicants to this program.

Admission Information See advtech/AT/admissionAT.htm or contact the Advanced Technology Division, AdvTechPrograms@lanecc.edu

Standard footnotes:

* Prerequisite required

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

R Required for AAS degree—see page 48

Cooperative Education (Co-op) Co-op offers students college credit and a grade for on-the-job work experience related to their educational and career goals. Through Co-op, students connect theory and practice, develop skills, expand career knowledge, and make contacts for the future. Work schedules and work sites vary. Under the supervision of the Auto Body and Fender Co-op Coordinator and with instructor consent, a maximum of 18 Co-op credits in AB 280 may be earned in lieu of required Auto Body and Fender course credits. Contact Marv Clemons, Auto Body Co-op Coordinator, Bldg. 8, Rm. 111, 541.463.3158, clemonsm@lanecc.edu

Auto Collision Option

Two-Year Associate of Applied Science Degree

First Year	Fall
AB 133 Beginning Auto Collision ^{*,D,G}	6
AB 134 Paint and Collision ^{*,D,G}	6
MTH 060 Beginning Algebra ^{*,D,G} or higher mathematics	4
Total Credits	16

	Winter
AB 133 Beginning Auto Collision ^{*,D,G}	6
AB 134 Paint and Collision ^{*,D,G}	6
EL 115 Effective Learning.....	3
Art elective	2
Total Credits	17

	Spring
AB 134 Paint and Collision ^{*,D,G}	6
AB 261 Intermediate Auto Collision ^{*,D,G}	6
CS 120 Concepts of Computing: Information Processing or higher computer science	4
Total Credits	16

Second Year	Fall
AB 261 Intermediate Auto Collision ^{*,D,G}	9
AB 263 Advanced Auto Collision ^{*,D,G}	3
MTH 076 Applied Geometry for Technicians [*] or higher mathematics	4
WR 115W Introduction to College Writing: Workplace Emphasis ^D or higher writing	3
Total Credits	19

	Winter
AB 263 Advanced Auto Collision ^{*,D,G}	12
PE/Health requirement ^{D,R}	3
Arts/Letters requirement ^R	3
Total Credits	18

	Spring
AB 132 Beginning Auto Paint ^{*,D,G}	12
Business elective	3
Human Relations requirement ^R	3
Elective AB 280 Co-op Ed: Auto Body Repair (optional)	
Total Credits	18

Auto Paint Option

Two-Year Associate of Applied Science Degree

First Year	Fall
AB 132 Beginning Auto Paint ^{*,D,G}	6
AB 134 Paint and Collision ^{*,D,G}	6

MTH 060 Beginning Algebra ^{*,D,G} or higher mathematics	4
Total Credits	16

	Winter
AB 132 Beginning Auto Paint ^{*,D,G}	6
AB 134 Paint and Collision ^{*,D,G}	6
EL 115 Effective Learning.....	3
Art elective	2
Total Credits	17

	Spring
AB 134 Paint and Collision ^{*,D,G}	6
AB 260 Intermediate Auto Paint ^{*,D,G}	6
CS 120 Concepts of Computing: Information Processing or higher computer science	4
Total Credits	16

Second Year	Fall
AB 260 Intermediate Auto Paint ^{*,D,G}	9
AB 262 Advanced Auto Paint ^{*,D,G}	3
MTH 076 Applied Geometry for Technicians [*] or higher mathematics	4
WR 115W Introduction to College Writing: Workplace Emphasis ^D or higher writing	3
Total Credits	19

	Winter
AB 262 Advanced Auto Paint ^{*,D,G}	12
PE/Health requirement ^{D,R}	3
Arts/Letters requirement ^R	3
Total Credits	18

	Spring
AB 133 Beginning Auto Collision ^{*,D,G}	12
Business elective	3
Human Relations requirement ^R	3
Total Credits	18

Auto Body and Fender Technology

Two-Year Certificate of Completion

Gainful Employment Disclosure

Standard Occupational Classification: 49-3021.00

Go to websites below for information about related occupations:

Automotive Body and Related Repairers
onetonline.org/link/summary/49-3021.00

Related Occupation:

Automotive Glass Installers and Repairers
onetonline.org/link/summary/49-3022.00

How much will the program cost?

(Estimate based on 2011-12 data. Consult Lane's website for updated tuition.)

Resident tuition and fees	\$13,374
Books, supplies, program costs	\$2,426
On-Campus room and board	Not offered

Total Estimate \$15,800

What's included?

Program Costs: lanecc.edu/advtech/AT/costsheetAT.htm

What are financing options to pay for the program?

In addition to any grant and scholarship aid for which they are eligible, students may use loans to finance their education. No 2010-11 program graduates used federal loans, private educational loans or institutional financing.

How long will it take to complete this program?

The program is designed to take 6 terms, or about 24 months of study to complete.

How many 2010-11 Auto Body and Fender Technology graduates completed within the designed program length?

None completed within 24 months.

What are my chances of getting a job when I graduate?

Lane County openings - 20 annually

Statewide openings - 100 annually

Will I be able to pay back student loans?

Most Lane students graduating in 2009-10 who took out federal student loans are successfully repaying them. Lane's federal loan student default rate for that period was 11.3%.

Where are comparable programs offered?

School	City	2009 Graduates
Chemeketa Community College	Salem	--
Clackamas Community College	Oregon City	--
Linn-Benton Community College	Albany	6
Portland Community College	Portland	19

Two-Year Certificate of Completion

First Year	Fall
AB 132 Beginning Auto Paint ^{*,D,G}	6
AB 134 Paint and Collision ^{*,D,G}	6
EL 115 Effective Learning	3
Total Credits	15

	Winter
AB 132 Beginning Auto Paint ^{*,D,G}	6
AB 134 Paint and Collision ^{*,D,G}	6
Art elective	2
Total Credits	14

	Spring
AB 133 Beginning Auto Collision ^{*,D,G}	6
AB 134 Paint and Collision ^{*,D,G}	6
WR 115W Introduction to College Writing: Workplace Emphasis ^D or higher writing	3
Total Credits	15

Second Year	Fall
AB 133 Beginning Auto Collision ^{*,D,G}	6
AB 261 Intermediate Auto Collision ^{*,D,G}	6
Choice of:.....	4
MTH 060 Beginning Algebra ^{*,D,G}	
MTH 076 Applied Geometry for Technicians ^{*,D,G}	
or higher mathematics	
Total Credits	16

	Winter
AB 260 Intermediate Auto Paint ^{*,D,G}	3
AB 261 Intermediate Auto Collision ^{*,D,G}	9
PE/Health Elective ^D	3
Total Credits	15

	Spring
AB 260 Intermediate Auto Paint ^{*,D,G}	12
Human Relations requirement ^D	3
Total Credits	15

Automotive Technology

Offered by the Advanced Technology Division, 541.463.5380

Two-Year Associate of Applied Science Degree

Two-Year Certificate of Completion

Purpose To prepare the graduate for employment as an automotive service technician working at company-owned repair stations, fleets, independent garages, gas stations, or new car dealerships.

Learning Outcomes The graduate of the Associate of Applied Science degree or the Two-Year Certificate of Completion will:

- use automotive service resources to complete lab projects and become familiar with computer accessed information, internet accessed information and information available in print related to automotive repair.
- be able to perform computations for gear ratios, engine displacement, electrical circuits, power output, vehicle alignment angles, conversion between the metric system and standard system, and use of precision measuring tools.
- diagnose and repair current vehicles using advanced diagnostic tools and equipment.
- successfully complete ASE certification tests.
- demonstrate and use industry safety standards.
- access library, computing, and communications services and obtain information and data from regional and national networks.
- interpret the concepts of a problem-solving task and translate them into mathematical equations.

Job Openings Projected through 2018

Lane County openings - 16 annually

Statewide openings - 174 annually

Wages

Lane County average hourly - \$18.39; average annual - \$38,243

Oregon average hourly - \$19.59; average annual - \$40,752

Costs (Estimate based on 2011 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees	\$9,893
Differential Fees [†]	\$2,337
Other Course/Program Costs	\$576
Tools	\$1,500
Books and supplies	\$1,100

Total Estimate \$15,406

[†] This is the total of all the differential fees attached to Automotive Technology courses. These fees and other course fees may change during the year - see the online credit class schedule for fees assigned to courses.

Program Certification National Automotive Technicians Education Foundation, a nonprofit foundation within the National Institute for Automotive Service Excellence.

Prerequisites Minimum placement score of 68 in Reading OR completion of RD 080 OR prior college. A high school diploma or equivalent is recommended for all applicants to this program.

Admission Information See lanecc.edu/advtech/AT/admissionAT.htm or contact the Advanced Technology Division, AdvTechPrograms@lanecc.edu

Cooperative Education (Co-op) Co-op offers students college credit

Standard footnotes:

* Prerequisite required

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

R Required for AAS degree—see page 48

and a grade for on-the-job work experience related to their educational and career goals. Through Co-op, students connect theory and practice, develop skills, expand career knowledge, and make contacts for the future. Work schedules and work sites vary. Under the supervision of the Automotive Technology Co-op Coordinator and with instructor consent, a maximum of 18 Co-op credits in AM 280 may be earned in lieu of required Automotive Technology course credits. Contact Marv Clemons, Automotive Co-op Coordinator, Bldg. 8, Rm. 111, 541.463.3158, clemonsm@lanecc.edu

Two-Year Associate of Applied Science Degree

First Year	Fall
AM 145 Engine Repair ^{*,D,G}	12
MTH 076 Applied Geometry for Technicians ^{*,D,G} or higher mathematics.....	4
Total Credits	16

	Winter
AM 149 Manual Drive Trains and Axles ^{*,D,G}	6
AM 147 Suspension and Steering ^{*,D,G}	6
WLD 121 Shielded Metal Arc Welding 1 [*]	4
PE/Health requirement ^{D,R}	3
Total Credits	19

	Spring
AM 242 Automatic Transmissions/Transaxles ^{*,D,G}	12
WR 115W Introduction to College Writing: Workplace Emphasis ^D or higher writing.....	3
Total Credits	15

Second Year	Fall
AM 243 Electrical and Electronic Systems ^{*,D,G}	12
CS 120 Concepts of Computing: Information Processing or higher computer science	4
Choice of:.....	4
Science or Computer Science course [*] ET 129 Electrical Theory 1	
Total Credits	20

	Winter
AM 244 Engine Performance ^{*,D,G}	12
CG 203 Human Relations at Work.....	3
Choice of:.....	4
SP 100 Basic Communications	
SP 105 Listening and Critical Thinking	
SP 218 Interpersonal Communications	
Total Credits	19

	Spring
AM 143 Brakes ^{*,D,G}	8
AM 246 Heating and Air Conditioning ^{*,D,G}	4
AM 280 Co-op Ed: Automotive ^{D,G}	3
Optional:	4
AM 245 Introduction to Hybrid Electric Vehicles	
Total Credits	15-19

Automotive Technology

Two-Year Certificate of Completion

Gainful Employment Disclosure

Standard Occupational Classification: 49-3023.01

Go to websites below for information about related occupations:

Automotive Master Mechanics

onetonline.org/link/summary/49-3023.01

Related Occupation:

Automotive Specialty Technicians

onetonline.org/link/summary/49-3023.02

How much will the program cost?

(Estimate based on 2011-12 data. Consult Lane's website for updated tuition.)

Resident tuition and fees	\$13,101
Books, supplies, program costs	\$3,125
On-Campus room and board.....	Not offered
Total Estimate	\$16,226

What's included?

Program Costs: lanecc.edu/es/feesandexpenses.html

What are financing options to pay for the program?

In addition to any grant and scholarship aid for which they are eligible, 100% of program graduates used loans to finance their education. The median debt for 2010-11 program graduates:

Federal Loans.....	\$21,476
Institutional financing.....	\$622

No 2010-11 program graduates used private educational loans.

How long will it take to complete this program?

The program is designed to take 6 terms, or about 24 months of study to complete.

How many 2010-11 Automotive Technology graduates completed within the designed program length?

Approximately 50% completed within 24 months.

What are my chances of getting a job when I graduate?

Lane County openings - 30 annually; Statewide openings - 300 annually

Will I be able to pay back student loans?

Most Lane students graduating in 2009-10 who took out federal student loans are successfully repaying them. Lane's federal loan student default rate for that period was 11.3%.

Where are comparable programs offered?

School	City	2009 Graduates
Central Oregon Community College	Bend	3
Chemeketa Community College	Salem	--
Clatsop Community College	Astoria	--
Linn-Benton Community College	Albany	--
Mt Hood Community College	Gresham	1
Portland Community College	Portland	1
Rogue Community College	Grants Pass	1
Umpqua Community College	Roseburg	--

Two-Year Certificate of Completion

First Year	Fall
AM 145 Engine Repair ^{*,D,G}	12
MTH 076 Applied Geometry for Technicians ^{*,D,G} or higher mathematics.....	4
Total Credits	16

	Winter
AM 149 Manual Drive Trains and Axles ^{*,D,G}	6
AM 147 Suspension and Steering ^{*,D,G}	6
WLD 121 Shielded Metal Arc Welding 1 [*]	4
Total Credits	16

	Spring
AM 242 Automatic Transmissions/Transaxles ^{*,D,G}	12
PE/Health elective ^{D,R}	3
Total Credits	15
Second Year	Fall
AM 243 Electrical and Electronic Systems ^{*,D,G}	12
WR 115W Introduction to College Writing: Workplace Emphasis ^D or higher writing	3
Total Credits	15
	Winter
AM 244 Engine Performance ^{*,D,G}	12
CG 203 Human Relations at Work	3
Total Credits	15
	Spring
AM 143 Brakes ^{*,D,G}	8
AM 246 Heating and Air Conditioning ^{*,D,G}	4
AM 280 Co-op Ed: Automotive ^{D,G}	3
Optional:	4
AM 245 Introduction to Hybrid Electric Vehicles	
Total Credits	15-19

Aviation Maintenance Technician

Offered by the Lane Aviation Academy, 541.463.4195

Two-Year Associate of Applied Science Degree

Two-Year Certificate of Completion

Purpose To prepare technicians to repair and maintain the operating condition of aircraft, and qualify for Federal Aviation Administration (FAA) certification exams (written, oral and practical) for the airframe and powerplant airman's certificate.

Learning Outcomes The graduate will:

- repair and maintain the operating condition of aircraft.
- pass the FAA written, oral and practical exams for licensing.
- demonstrate and use industry safety standards.
- access library, computing, and communications services and obtain information and data from regional, national, and international networks.
- interpret the concepts of a problem-solving task and translate them into mathematics.

Job Openings Projected through 2018

Statewide openings - 25 annually

Wages

Lane County average hourly - \$27.35; average annual - \$56,883

Oregon average hourly - \$26.21; average annual - \$54,515

Costs (Estimate based on 2011 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees	\$10,130
Other Course/Program Costs	\$1,380
Tools	\$1,000
Books and supplies	\$500
Total Estimate	\$13,010

Aviation Maintenance Technician course fees and other course fees may change during the year - see the online credit class schedule for fees assigned to courses.

Admission Information Contact Advanced Technology Division, AdvTechPrograms@Lanecc.edu

Prerequisites Minimum placement score of 68 in Reading, completion of RD 080 or prior college. A high school diploma or equivalent is recommended for all applicants to this program. Procedures for crediting and guidelines for the determination of documented military or field experience are available through application with the FAA liaison.

Program Endorsement The program is approved under Part 147 of the Federal Aviation Regulations of the Federal Aviation Administration.

Licensing Part 147 FAA oral, practical, and written certification exams are required.

Cooperative Education Co-op offers students college credit and a grade for on-the-job work experience related to their educational and career goals. Through Co-op, students connect theory and practice, develop skills, expand career knowledge, and make contacts for the future. Work schedules and work sites vary. Under the supervision of the Aviation Maintenance Co-op Coordinator and as approved by the FAA Liaison and Return to Service instructor, a maximum of six Co-op credits in AV 280 may be authorized in lieu of the final Return to Service course. Co-op may be taken summer term. Contact Marv Clemons, Aviation Maintenance Co-op Coordinator, Bldg. 8, Rm. 111, 541.463.3158, clemonsm@lanecc.edu

Two-Year Associate of Applied Science Degree

Required Prior to Beginning of First Year

MTH 076 Applied Geometry for Technicians ^{*,D,G} or equivalent	4
WR 115W Introduction to College Writing: Workplace Emphasis ^{1,D} or higher writing	3

First Year

	Fall
AV 192 General 101 ^{*,D,G}	6
AV 193 General 102 ^{*,D,G}	6
Science/Computer Science requirement ^{1,R}	3
Total Credits	15

	Winter
AV 196 General 105 ^{*,D,G}	6
AV 194 General 103 ^{*,D,G}	6
MTH 086 Applied Algebra for Technicians ^{*,2,D,G} or higher mathematics	4
PE/Health requirement ^{1,3,D,R}	3
Total Credits	19

	Spring
AV 279 Airframe (Section 3, and 4) ^{*,D,G}	12
AV 195 General 104 ^{*,D,G}	6
Total Credits	18

Second Year

	Fall
AV 281 Powerplant (Section 1 and 2) ^{*,D,G}	12
AV 279 Airframe (Section 1) [*]	6
Total Credits	18

Standard footnotes:

* Prerequisite required

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

R Required for AAS degree—see page 48

	Winter	
AV 281 Powerplant (Section 3 and 4) *	12	
Arts/Letters requirement ^{1,R}	3	
Human Relations requirement ^{1,R}	3	
Total Credits	18	
	Spring	
AV 283 Powerplant Return to Service ^{*,D,G}	6	
AV282 Airframe Return to Service ^{*,D,G}	6	
AV 279 Airframe (Section 2) ^{*,D,G}	6	
Elective AV 280 Co-op Ed: Aviation Maintenance (optional)		
Total Credits	18	

Aviation Maintenance Technician

Two-Year Certificate of Completion

Gainful Employment Disclosure

Standard Occupational Classification: 49-3011.00

Go to websites below for information about related occupations:

Aircraft Mechanics and Service Technicians

onetonline.org/link/summary/49-3011.00

Related Occupation:

Aircraft Structure, Surfaces, Rigging, and Systems Assemblers

onetonline.org/link/summary/51-2011.00

How much will the program cost?

(Estimate based on 2011-12 data. Consult Lane's website for updated tuition.)

Resident tuition and fees	\$10,947
Books, supplies, program costs	\$2,643
On-Campus room and board	Not offered
Total Estimate	\$13,590

What's included?

Program Costs: lanec.edu/es/feesandexpenses.html

What are financing options to pay for the program?

In addition to any grant and scholarship aid for which they are eligible, 78% of program graduates used loans to finance their education. The median debt for 2010-11 program graduates: Federal Loans..... \$18,912
No 2010-11 program graduates used private educational loans or institutional financing.

How long will it take to complete this program?

The program is designed to take 7 terms, or about 24 months of study to complete.

How many 2010-11 Aviation Maintenance Technician graduates completed within the designed program length?

Approximately 56% completed within 24 months.

What are my chances of getting a job when I graduate?

Statewide openings - 25 annually

Will I be able to pay back student loans?

Most Lane students graduating in 2009-10 who took out federal student loans are successfully repaying them. Lane's federal loan student default rate for that period was 11.3%.

Where are comparable programs offered?

School	City	2009 Graduates
Portland Community College	Portland	4

Required Prior to Beginning of First Year

MTH 076 Applied Geometry for Technicians ^{*,D,G} or equivalent	4
First Year	Fall
AV 192 General 101 ^{*,D,G}	6
AV 193 General 102 ^{*,D,G}	6
WR 115W Introduction to College Writing: Workplace Emphasis ^{1,D} or higher writing	3

PE/Health elective ^{1,3,D}	3
Total Credits	18

	Winter	
AV 196 General 105 ^{*,D,G}	6	
AV 194 General 103 ^{*,D,G}	6	
MTH 086 Applied Algebra for Technicians ^{*,2,D,G} or higher mathematics	4	
Total Credits	16	

	Spring	
AV 279 Airframe (Section 3, and 4) ^{*,D,G}	12	
AV 195 General 104 ^{*,D,G}	6	
Total Credits	18	

	Second Year	Fall
AV 281 Powerplant (Section 1 and 2) ^{*,D,G}	12	
AV 279 Airframe (Section 1)	6	
Total Credits	18	

	Winter	
AV 281 Powerplant (Section 3 and 4) ^{*,D,G}	12	
Human Relations requirement 1	3	
Total Credits	15	

	Spring	
AV 283 Powerplant Return to Service ^{*,D,G}	6	
AV 282 Airframe Return to Service ^{*,D,G}	6	
AV 279 Airframe (Section 2) ^{*,D,G}	6	
Total Credits	18	

- 1 Not required for two-year FAA Airframe and Powerplant airman's certificate exams.
- 2 MTH 065 or MTH 070 or higher mathematics may substitute for MTH 086.
- 3 PE activity courses must be completed over at least 2 terms.

Students interested in completing the FAA Airway Science requirements for two-year institutions should:

Substitute:

WR 121 Introduction to Academic Writing for
WR 115W Introduction to College Writing: Workplace Emphasis.
SP 111 Fundamentals of Public Speaking for Arts/Letters requirement.
MTH 111 College Algebra for Science/Computer Science requirement.

Add:

WR 227 Technical Writing
SP 130 Business and Professional Speech
J 205 Public Relations
Arts/Letters Elective (3 credits)
Any 200 level Psychology course (3 credits)
PH 101 or PH 102 Fundamentals of Physics
AV 179 General Aviation

Business Assistant

Offered by the Business Department, 541.463.5221

One-Year Certificate of Completion

Purpose To train business and office assistants for a wide variety of duties. They may handle correspondence, maintain electronic and manual files, assist with financial record keeping, operate a variety of office equipment, assist customers, answer telephones, act as a receptionist, act as an accounts receivable or payable clerk, perform general office duties, and use personal computers for internet research, word processing, and financial

analysis. This Certificate of Completion may fulfill the first year requirements of the Accounting and Administrative Office Professional Two-Year Associate of Applied Science degrees.

Learning Outcomes The graduate will be able to:

- organize and manage the daily business functions of an organization.
- use software including word processing, spreadsheets, databases, and presentation tools to input, manage, and interpret information to meet organizational needs.
- perform on the job in ways that reflect professional ethics, legal standards, and organizational expectations.
- create professional, accurate documents.
- anticipate and actively explore innovative solutions to technological and organizational challenges.
- provide basic training and technical support for office equipment and software systems.
- understand accounting as the "language of business."
- engage customers and co-workers in a purposeful manner – listening to and accurately interpreting their responses within diverse cultural contexts.
- use research and analytical skills to support the activities of the organization.
- formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them.
- work independently within diverse business environments, apply individual strengths and critical thinking to collaborative efforts.
- make effective presentations to internal and external audiences.
- use appropriate library and information resources to research business topics.
- apply critical thinking and analytical skills in decision-making and problem solving.
- use good keyboarding skills to prepare documents quickly and accurately according to employer standards.

Gainful Employment Disclosure

Standard Occupational Classification: 43-6014.00

Go to websites below for information about related occupations: Secretaries and Administrative Assistants, Except Legal, Medical, and Executive

onetonline.org/link/summary/43-6014.00

Related Occupation:

Receptionists and Information Clerks

onetonline.org/link/summary/43-4171.00

Office Clerks, General

onetonline.org/link/summary/43-9061.00

How much will the program cost?

(Estimate based on 2011-12 data. Consult Lane's website for updated tuition.)

Resident tuition and fees	\$5,823
Books, supplies, program costs	\$1,350
Personal Computer	\$1,500
On-Campus room and board	Not offered
Total Estimate	\$8,673

What's included?

Program Costs: lanecc.edu/es/feesandexpenses.html

What are financing options to pay for the program?

In addition to any grant and scholarship aid for which they are eligible, 72% of program graduates used loans to finance their education. The median debt for 2010-11 program graduates:

Federal Loans	\$8,131
Institutional financing	\$60

No 2010-11 program graduates used private educational loans.

How long will it take to complete this program?

The program is designed to take 3 terms, or about 12 months of study to complete.

How many 2010-11 Business Assistant graduates completed within the designed program length?

Approximately 6% completed within 12 months.

What are my chances of getting a job when I graduate?

Lane County openings - 78 annually

Nationwide openings - 861 annually

Will I be able to pay back student loans?

Most Lane students graduating in 2009-10 who took out federal student loans are successfully repaying them. Lane's federal loan student default rate for that period was 11.3%.

Where are comparable programs offered?

School	City	2009 Graduates
Blue Mountain Community College	Pendleton	--
Central Oregon Community College	Bend	1
Chemeketa Community College	Salem	23
Clatsop Community College	Astoria	--
Linn-Benton Community College	Albany	3
Mt Hood Community College	Gresham	13
Southwestern Oregon Community College	Coos Bay	--
Tillamook Bay Community College	Tillamook	--
Umpqua Community College	Roseburg	7

Note All Business Department majors must have a computer that meets minimum system requirements; contact the department or advisor for details.

Recommended Prerequisites

BT 010 Computer Keyboarding ^{1,G}	3
BT 020 10-Key Calculator ^{1,G}	3
BT 108 Business Proofreading and Editing ^{2,G}	4
MTH 060 Beginning Algebra ³	4
WR 115 Introduction to College Writing ³	4
Total Recommended Prerequisite Credits	18

Fall

BT 112 Team Building Skills ^{4,G}	3
BT 120 MS WORD for Business ^{*,4,G}	3
CS 120 Concepts of Computing: Information Processing ^{4,G}	4
WR 121 Composition: Introduction to Academic Writing ^{*,4,G}	4
Total Credits	14

Winter

BA 101 Introduction to Business ^{4,G}	4
BT 123 MS EXCEL for Business ^{*,4,G}	4
BT 165 Introduction to the Accounting Cycle ^{4,G}	4
MTH 065 Elementary Algebra or higher ^{*,4,G}	4
Total Credits	16

Spring

BA 206 Management Fundamentals ^{*,4,G}	3
BA 214 Business Communications ^{*,4,G}	4
BT 163 QuickBooks ^{*,4,G}	4
BT 206 Co-op Ed: Business Seminar ^{*,4,G}	2
Choice of:	4
BT 144 Administrative Procedures ^{*,4,G}	
BA 281 Personal Finance ^{4,G}	
Total Credits	17

Standard footnotes:

* Prerequisite required

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

R Required for AAS degree—see page 48

- 1 Before enrolling in BT 120 MS WORD for Business or BT 123 MS EXCEL for Business, students are expected to have a basic knowledge of the Windows operating system and the ability to type 30 words per minute accurately and key 130-132 strokes per minute on an electronic calculator (or numeric keypad). The Business Department offers free placement tests to assist students in determining their skill levels. Additional testing information and schedule details are available at: lanecc.edu/business/testing
- 2 Before enrolling in BA 214 Business Communications, students must pass a Language Skills and Proofreading test in the Testing office or pass BT 108 Business Proofreading and Editing.
- 3 Students must place at least into WR 121 and MTH 065, or take classes to reach these levels before enrolling in program courses.
- 4 Must be passed with grade of "C" or better to satisfy program requirement.

Computer Information Systems - Health Informatics

Offered by the Computer Information Technology Department, 541.463.5826

Two-Year Associate of Applied Science Degree

Career Pathway Certificate of Completion, Database Specialist

Career Pathway Certificate of Completion, Health Information Technology Specialist

Purpose To educate individuals to be effective developers, users and managers of health information resources. Health Informatics is the study of how health data are collected, stored and communicated; how those data are processed into health information suitable for administrative and clinical decision making; and how computer technology, communications technology, and other information management skills can be applied to support these processes. Graduates may be employed as health information professionals by clinics and offices of health care providers, hospitals, health maintenance organizations, insurance companies, government agencies, law firms, mental health programs, community health programs, researchers, consulting firms, and information systems vendors.

Learning Outcomes The graduate will:

- develop and evaluate health care system requirements
- design, implement and deploy a health care system
- evaluate, test, debug and troubleshoot a healthcare system
- apply operational health care knowledge in addressing Health Informatics system needs
- create effective databases and user interfaces
- query a database using advanced SQL concepts
- develop small programs
- select appropriate technology tools by recognizing tool capabilities and limitations
- communicate effectively in both oral and written form
- work effectively in teams
- manage time, tasks and projects
- take ownership of Health Informatics career by adapting and learning new skills
- explain concepts, components, and processes of a health care system
- plan and control total cost of ownership (TCO) for a health care system
- install, manage and troubleshoot issues in a network environment
- provide technical support to desktop clients
- identify and evaluate network requirements for a health care organization

- specify and purchase hardware and software for a local area network
- assemble hardware, install software, and configure a local area network
- operate a reliable and secure local area network
- establish and maintain connections between/among local area networks and wide area networks
- use network concepts and terminology to communicate with vendors and users
- work with users, managers and associates in helping to define systems requirements for new projects
- assist in management of small to medium-size projects using project management software and practices
- use accounting principles to increase profitability and decrease cost in a project
- use micro and macroeconomics knowledge to understand their effect on the economy
- use library resources for research and written tasks.
- perform advanced mathematical functions as necessary to prepare health data reports.

Job Openings Projected through 2018

Lane County openings - 13 annually

Statewide openings - 124 annually

Wages

Lane County average hourly - \$31.35; average annual - \$65,197

Oregon average hourly - \$27.33; average annual - \$56,848

Costs (Estimate based on 2011 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees.....	\$8,561
Books and Materials	\$2,526
Laptop Computer.....	\$1,500
CIT Lab Fees	\$168
Total Estimate \$12,755	

Computer Information Systems - Health Informatics course fees and other course fees may change during the year - see the online credit class schedule for fees assigned to courses.

Second Year Requirements A personal laptop is required for second-year students in the degree program. If you receive financial aid, some of those funds may be used for this purchase. Please contact the CIT Department for options and system requirements.

Cooperative Education (Co-op) Co-op offers students college credit and a grade for on-the-job work experience related to their educational and career goals. Through Co-op, students connect theory and practice, develop skills, expand career knowledge, and make contacts for the future. Work schedules and work sites vary. Contact the Cooperative Education Division, Bldg. 19, Rm. 231, 541.463.5203.

Program Lead Ron Little, Bldg. 19, Rm. 156, 541.463.5464, little@lanecc.edu

Two-Year Associate of Applied Science Degree

First Year	Fall
MTH 095 Intermediate Algebra ^{*,D,G}	5
WR 121 Introduction to Academic Writing ^{*,D,G}	4
Choice of:.....	4
CIS 140 Operating Environments: Managing Windows ^{D,G}	
CIS 140U Introduction to Unix/Linux ^{D,G}	
Directed Elective ^{D,G}	3-5
Total Credits 16-18	

	Winter	
HO 100 Medical Terminology ^{D,G}	3	
CS 179 Introduction to Computer Networks	4	
Choice of:.....	4	
CIS 122 Software Design ^{*,1,D,G}		
CS 133N Beginning Programming: C# ^{*,1,D,G}		
CS 133JS Beginning Programming: JavaScript ^{*,D,G}		
CS 161J Computer Science 1 ^{*,D,G}		
CS 161C+ Computer Science 1 ^{*,D,G}		
Choice of:.....	4	
BI 102I Human Biology (recommended) ^{D,G}		
or other Science/Computer Science requirement ^R		
Total Credits	15	

	Spring	
CIS 125D Software Tools 1: Databases ^{D,G}	4	
Choice of:.....	4	
CIS 135T XML, Data Transformation and Objects ^{*,1,D,G}		
CS 162J Computer Science 2 ^{*,D,G}		
CS 162C+ Computer Science 2 ^{*,D,G}		
Directed Elective ^{D,G}	3-5	
Human Relations requirement ^R	4	
Total Credits	15-17	

	Fall	
CIS 244 Systems Analysis ^{*,D,G}	4	
Choice of:.....	4	
HI 107 Working with Health IT Systems ^{D,G}		
HIM 110 Health Information Technology ^{*,1,D,G}		
Choice of:.....	3-4	
HIM 182 Health Care Delivery Systems ^{*,D,G}		
HI 101 Introduction to Health Care and Public Health in the US ^{D,G}		
Choice of recommended Speech classes:.....	4	
SP 111 Fundamentals of Public Speaking ^{D,G}		
SP 219 Small Group Discussion ^{D,G}		
SP 220 Communication, Gender, and Culture ^{D,G}		
or other Arts and Letters requirement ^R		
Total Credits	15-16	

	Winter	
CS 275 Database Systems and Modeling ^{*,D,G}	4	
Choice of:.....	3-4	
HIM 285 Healthcare Financing and Compliance ^{*,1,D,G}		
HI 208 Installation and Maintenance of Health IT Systems ^{D,G}		
Choice of:.....	4	
HI 111 Selecting, Implementing, and Customizing Electronic Health Record System ^{*,D,G}		
HIM 283 Health Information Systems ^{*,1,D,G}		
Choice of:.....	4	
BA 211 Financial Accounting ^{*,D,G}		
BA 205 Solving Communication Problems with Technology ^{*,1,D}		
Total Credits	15-16	

	Spring	
CS 276 Database SQL Programming ^{*,1,D,G}	4	
Choice of:.....	3-4	
CS 280H Coop Ed: Health Informatics ^{*,D,G}		
CIS 277H Introduction to Health Informatics ^{1,D,G}		
HI 209 Networking and Health Information Exchange ^{D,G}		
CIS 245 Managing Technical Projects ^{*,D,G}	4	
Directed Elective ^{2,D,G}	3-5	
Total Credits	14-17	

Directed Electives - consider prerequisites when choosing:

BA 224 Human Resource Management.....	3
BI 112 Cell Biology for Health Occupations.....	3
BI 121 Intro to Human Anatomy and Physiology 1 ¹	4
BI 122 Intro to Human Anatomy and Physiology 2 ¹	4
BI 231 Human Anatomy and Physiology 1.....	4
BI 232 Human Anatomy and Physiology 2.....	4
BI 233 Human Anatomy and Physiology 3.....	4
CIS 140 Operating Environments: Managing Windows (if not taken as an alternative to CIS 140U)	4
CIS 189 Wireless Security ¹	4
CIS 225 Computer End User Support	4
CIS 277D DB Security ¹	4
CIS 277O Advanced Database Concepts in Oracle ¹	4
CIS 277T Web Business Intelligence ¹	4
CIS 278 Data Communications Concepts 2 ¹	4
CIS 279L Linux Network Administration ¹	4
CIS 284 Network Security ¹	4
CIS 288M Microsoft Network Administration ¹	4
CIS 289M Microsoft Active Directory Administration ¹	4
CS 140U Introduction to Unix/Linux (if not taken an alternative to CIS 140)	4
CS 188 Wireless Networking	4
CS 240U Advanced Unix/Linux: Server Management.....	4
ET 287 Microcomputer Hardware	4
HI 208 Installation and Maintenance of Health IT Systems.....	4
HI 214 Comparative Electronic Health Record Systems.....	3
HIM 271 Quality Improvement in Healthcare (Co-requisite with HIM 274) ¹	3
HIM 274 Quality Improvement in Healthcare – lab ¹	1
HIM 281 Data Management and Analysis ¹ (Co-requisite with HIM 286)	3
HIM 286 Data Management and Analysis 1 – Lab ¹	2
MP 110 Medical Terminology ¹	2
MP 111 Medical Terminology ¹	4
OS 220 Business Editing Skills ¹	4
WR 122 Composition: Argument, Style and Research.....	4
WR 227 Technical Writing	4

- 1 This course available online through other Health Informatics Education Consortium Institutions
- 2 Students completing the Health Information Technology Specialist Career Pathway Certificate of Completion should take HI 214 Comparative Electronic Health Record Systems as their 2nd year Spring term directed elective.

Database Specialist**Career Pathway Certificate of Completion**

Purpose To prepare technicians for entry-level positions as database specialists.

Learning Outcomes The certificate recipient will:

- design, implement, test, debug and document relational database systems using a variety of current tools and technologies.
- understand the use of database to support organizational processes.
- interpret the mathematical concepts of relational algebra and translate a database related problem into SQL logic and expressions.
- use appropriate library and information resources to research database technologies and support lifelong technical learning.

Standard footnotes:

* Prerequisite required

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

R Required for AAS degree—see page 48

Prerequisites Students are expected to be comfortable working on a computer, including the ability to create files with a text editor and manage file folders. The courses in this Certificate of Completion are designed to be taken along with the Computer Programming, the Health Informatics, or the Computer Network Operations Associates of Applied Science degree programs offered by the CIT department. For details see the course description of each of the four required courses. Prerequisites can be waived for current IT technicians with the appropriate background.

Certificate Lead Ron Little, Bldg. 19, Room 156, 541.463.5464, little@lanecc.edu

Courses Required	Credits
CIS 125D Software Tools 1: Databases ^{D,G}	4
CIS 244 Systems Analysis ^{*,D,G}	4
CS 275 Database Systems and Modeling ^{*,D,G}	4
CS 276 Database SQL Programming ^{*,D,G}	4
Total Credits	16

Health Information Technology Specialist

Career Pathway Certificate of Completion

Purpose Designed for, but not limited to, workers who are currently employed in healthcare or information technology and hold a college degree or have equivalent experience, this program trains graduates qualified to implement and support Electronic Health Records (EHRs), information exchange across health care providers and public health authorities, and to redesign workflows within the health care settings to gain the quality and efficiency benefits of EHRs. The classes provide a basic knowledge of the skills required to implement and support electronic health records (EHRs) in the healthcare environment.

Learning Outcomes The certificate recipient will:

- design electronic health records workflows within health care settings
- implement and support electronic health records
- implement and support information exchange across health care providers and public health authorities
- use appropriate library and information resources to research database technologies and support lifelong technical learning.

Prerequisites Students are expected to be comfortable working on a computer, including the ability to create files with a text editor and manage file folders. The courses in this Certificate of Completion are designed to be taken along with the Health Informatics Associates of Applied Science degree offered by the CIT department. For details see the course description of each of the required courses. Prerequisites can be waived for current IT technicians with the appropriate background.

Certificate Lead Larry Scott, Bldg. 19, Rm. 140, 541.463.5458, scott@lanecc.edu

Courses Required

HI 101 Intro to Health Care in the US ^{D,G}	4
HI 107 Working with Health IT Systems ^{D,G}	4
HI 111 Selecting, Implementing, and Customizing	

Electronic Health Records Systems ^{D,G}	4
HI 214 Comparative Electronic Health Records ^{*,D,G}	3
HI 208 Installation and Maintenance of Health IT Systems ^{*,D,G}	4
HI 209 Networking and Health Information Exchange ^{*,D,G}	3
Total Credits	22

Computer Network Operations

Offered by the Computer Information Technology Department, 541.463.5826

Two-Year Associate of Applied Science Degree

Career Pathway Certificate of Completion, Computer Network Monitoring and Management

Career Pathway Certificate of Completion, Computer Network Security

Purpose to train entry-level network support technicians and more advanced network administrators in specific computer networking skills and general troubleshooting of hardware and software related problems.

Learning Outcomes

The graduate will:

- install and configure workstations, servers and networked printers.
- install and configure internetworking devices such as switches and routers.
- install and configure a variety of network operating systems and provide for interoperability between them.
- administer an organization's computer network infrastructure.
- understand network security issues and use appropriate tools to insure network integrity.
- understand the critical features of wireless networking.
- understand fundamental networking theory, terminology, and industry recognized standards.
- interpret the concepts of a computer network related problem-solving task.
- use appropriate library and information resources to research network management issues and tools and support lifelong technical learning.

Job Openings Projected through 2018

Lane County openings - 9 annually

Statewide openings - 98 annually

Wages

Lane County average hourly - \$31.50; average annual - \$65,518

Oregon average hourly - \$33.58; average annual - \$69,844

Costs (Estimate based on 2011 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees.....	\$9,416
Books and Materials.....	\$2,317
Laptop Computer.....	\$1,500
CIT Lab Fees.....	\$168
Total Estimate	\$13,401

Computer Network Operations course fees and other course fees may change during the year - see the online credit class schedule for fees assigned to courses.

Second Year Requirements A personal laptop is required for second-year students in the degree program. If you receive financial aid, some of those funds may be used for this purchase.

Please contact the CIT Department for options and system requirements.

Prerequisites Students must qualify for WR 121, either by placement testing or completing prerequisite courses, and by the third term, qualify to begin MTH 095. Each student should consult with a counselor or advisor to plan a program of study.

Computer Network Security Students who complete the Computer Network Operations degree are well positioned to continue their studies in computer network security by completing the curriculum for the Network Security Certificate of Completion offered by the CIT department. See the following Computer Network Security Certificate of Completion description or contact the certificate coordinator Joseph Colton, 541.463.5734, coltonj@lanecc.edu

Cooperative Education (Co-op) Co-op is a required and important part of the Computer Network Operations program. It provides relevant field experience that integrates theory and practice while providing opportunities to develop skills, explore career options, and network with professionals and employers in the computer network field. Contact the Cooperative Education Division, Bldg. 19, Rm. 231, 541.463.5203.

Program Lead Gary Bricher, Bldg. 19, Room 148, 541.463.5294, bricherg@lanecc.edu

Note Students completing the curriculum for the Computer Network Operations degree will also satisfy the requirements for the Computer Specialist certificate. In addition, students taking CS 296P Web Development 2: PHP as the fall term, second-year elective will satisfy the requirements for the Web Programming certificate. Students taking CS 188 Wireless Networking, and CS 285 Operating System Hardening as the winter and spring term, second-year electives would need to complete only one additional course, CS 286 Firewalls and VPNs, to qualify for the Computer Network Security certificate. Also, students completing the Computer Network Operations degree need to take only one additional course, CS288 Network Monitoring and Management, to qualify for the Computer Network Monitoring and Management certificate.

Two-Year Associate of Applied Science Degree

First Year		Fall
CIS 100 Computing Careers Exploration ^{D,G}		2
CIS 102 Problem Solving with Computers ^{D,G}		4
CIS 195 Web Authoring 1 ^{D,G}		3
CIS 140 Operating Systems: Managing Windows ^{D,G}		4
WR 121 Introduction to Academic Writing *		4
Total Credits		17
Winter		
ART 288 Introduction to Web Design ^{D,G}		2
CS 133JS Beginning Programming: JavaScript ^{*,4,D,G}		4
CIS 125D Software Tools 1: Databases ^{D,G}		4
CS 179 Introduction to Computer Networks ^{*,D,G}		4
ET 287 Microcomputer Hardware ^{D,G}		4
Total Credits		18

	Spring
CS 206A Coop Ed: Computer Networks Seminar 1 ^D	1
CS 295P Web Development 1: PHP ^{*,4,D,G}	4
CG 203 Human Relations at Work	3
CIS 227N Systems Support: Network and Operating Systems ^{*,D,G}	4
MTH 095 Intermediate Algebra or higher [*]	5
Total Credits	17

Second Year		Fall
CS 240W Advanced Windows: Server Management ^{*,D,G} ..		4
CIS 140U Introduction to Unix/Linux ^{*,D,G}		4
CS/CIS/GIS Elective ^{1,3,D,G}		4
WR 227 Technical Writing *		4
Total Credits		16

	Winter
CS 206B Coop Ed: Computer Networks Seminar 2 ^D	1
CS 284 Network Security Fundamentals ^{*,D,G}	4
CIS 225 Computer End-User Support ^{*,D,G}	4
CS 240U Advanced Unix/Linux: Server Management ^{*,D,G} ..	4
CS/CIS/GIS Elective ^{1,3,D,G}	4
Total Credits	17

	Spring
CS 289 Cisco Router and Switch Administration ^{*,D,G}	4
CS 280CN Coop Ed: Computer Network Operations ^{D,G}	3
PE/Health requirement ^R	3
CS/CIS/GIS Electives ^{1,3,G} or Speech Elective ²	4-8
Total Credits	14-18

- 1 The Computer Network Operations degree contains three second-year CS/CIS/GIS electives. Students may want to consider using CS/CIS/GIS electives to take a sequence of courses from the Network Security certificate curriculum, or from one of the other degree or certificate programs, such as, Computer Programming, Computer Simulation and Game Development, Geographic Information Systems, Computer Information Systems – Health Informatics or Computer Science transfer areFor more specific information about electives, students should contact the program academic advisor or program counselor to help determine what elective courses best fit their goals.
- 2 List of approved speech electives:
 - SP 100 Basic Communication
 - SP 111 Fundamentals of Public Speaking
 - SP 112 Persuasive Speech
 - SP 130 Business and Professional Speech
 - SP 219 Small Group Discussion
- 3 Students planning to pursue a bachelor's degree in Computer Science are advised to also complete the following courses in mathematics: MTH 111 College Algebra and MTH 231, 232, 233 Discrete Mathematics 1, 2, 3
- 4 Instead of CS 133JS and CS 295P the student may take any two required programming courses that are a sequence from one of the other CIT degree programs.

Computer Network Monitoring and Management

Career Pathway Certificate of Completion

Purpose Prepare graduates to manage and monitor modern network operating systems and the services provided by current, industry-standard platforms, including troubleshooting and proactive management for growth.

Learning Outcomes The certificate recipient will:

- Understand the performance fundamentals required to keep computer networks efficient

Standard footnotes:

* Prerequisite required

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

R Required for AAS degree—see page 48

- Install and configure Windows and Linux servers and Cisco routers and switches
- Identify sources of network performance problems and resolve them
- Implement the SNMP protocol on various networked devices
- Understand the importance of proactive management and planning for growth
- Install and configure an enterprise network monitoring package to track performance and availability of services
- Learn how to implement event handlers and notification/alert systems
- Learn to use protocol analysis software to monitor traffic and solve network problems

Prerequisites The courses in this Certificate of Completion are designed to be taken with the Computer Network Operations Associate of Applied Science degree program offered by the CIT department. There are specific prerequisites for each of the four courses required for this certificate. Each of the prerequisites is a requirement in the Network Operations degree. For details see the course description of each of the four required courses. Prerequisites can be waived for current IT network technicians with the appropriate background.

Certificate Lead Gary Bricher, Bldg. 19, Room 148, 541.463.5294, bricherg@lanecc.edu

Courses required	Credits
CS 240U Advanced Unix/Linux Server Management.....	4
CS 289 Cisco Router and Switch Administration.....	4
CS 240W Advanced Windows: Server Management	4
CS 288 Network Monitoring and Management	4
Total Credits	16

Computer Network Security

Career Pathway Certificate of Completion

Purpose To train those who already have networking skills to secure workstations, servers, and other networking devices.

Learning Outcomes The certificate recipient will:

- understand the security fundamentals required to help safeguard computer networks.
- implement wireless network security protections.
- identify and counteract attacks on workstations, servers, and other networking devices.
- identify vulnerabilities, discuss their resolutions, and generate vulnerability reports.
- install and utilize various security industry accepted tools.
- install and configure firewalls and VPNs.
- troubleshoot security issues and implement and test resolutions.

Prerequisites The courses in this Certificate of Completion are designed to be taken with the Computer Network Operations Associate of Applied Science degree program offered by the CIT department. There are specific prerequisites for each of the four courses required for this certificate. Each of the prerequisites is a requirement in the Network Operations degree. For details see the course description of each of the four required courses. Prerequisites can be waived for current IT network technicians with the appropriate background.

Certificate Lead Joseph Colton, Bldg. 19, Room 147, 541.463.5734, coltonj@lanecc.edu

Courses required	Credits
CS 188 Wireless Networking ^{*,D,G}	4
CS 284 Network Security Fundamentals ^{*,D,G}	4
CS 285 Operating System Hardening ^{*,D,G}	4
CS 286 Firewalls and VPNs ^{*,D,G}	4
Total Credits	16

Computer Programming

Offered by the Computer Information Technology Department, 541.463.5826

Two-Year Associate of Applied Science Degree, Computer Programming

Career Pathway Certificate of Completion, Web Programming

(See also Career Pathway Certificate of Completion, Database Specialist on page 81 and Geographic Information Systems on page 123 and One-year Certificate, Web Design on page 146)

Purpose To prepare technicians for entry-level positions as software developers.

Learning Outcomes The graduate will:

- design, implement, test, debug and document web based computer programs using a variety of current tools and technologies.
- design, implement, test, debug and document at least one other type of computer program such as: game program, database program, object-oriented program.
- understand the relationship between computer programs and organizational processes.
- interpret the mathematical concepts of a programming related problem-solving task and translate them into programming logic and expressions.
- use appropriate library and information resources to research programming tools and technologies and support lifelong technical learning.

Job Openings Projected through 2018

Lane County openings - 9 annually

Statewide openings - 98 annually

Wages

Lane County average hourly - \$31.50; average annual - \$65,518

Oregon average hourly - \$33.58; average annual - \$69,844

Costs (Estimate based on 2011 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees.....	\$8,888
Books and Materials	\$2,915
Laptop computer	\$1,500
CIT Lab Fees.....	\$168
Total Estimate	\$13,471

Computer Programming course fees and other course fees may change during the year - see the online credit class schedule for fees assigned to courses.

Second Year Requirements A personal laptop is required for second-year students in the degree program. If you receive financial aid, some of those funds may be used for this purchase. Please contact the CIT Department for options and system requirements.

Cooperative Education (Co-op) Co-op is a required and important part of the Computer Programming Degree program. It provides relevant field experience that integrates theory and practice while providing opportunities to develop skills, explore career options, and network with professionals and employers in the computer programming field. Contact the Cooperative Education Division, Bldg. 19, Rm. 231, 541.463.5203.

Program Lead Mari Good, Bldg. 19, Rm. 158, 541.463.5838, goodm@lanecc.edu

Computer Programming

Two-Year Associate of Applied Science Degree

Prerequisites Students must qualify for WR 121, either by placement testing or completing prerequisite courses, and by the third term, qualify to begin MTH 095. Each student should consult with a counselor or advisor to plan a program of study.

First Year	Fall
CIS 100 Computing Careers Exploration ^{D,G}	2
CIS 102 Problem Solving with Computers ^{D,G}	4
CIS 140 Operating Systems: Managing Windows ^{D,G}	4
WR 121 Introduction to Academic Writing *	4
PE/Health requirement ^R	3
Total Credits	17

	Winter
ART 288 Introduction to Web Design ^{D,G}	2
CIS 125D Software Tools 1: Databases ^{D,G}	4
CIS 195 Web Authoring 1 ^{D,G}	3
CS 133N Beginning Programming: C# ^{*,D,G}	4
CS 179 Introduction to Computer Networks ^{*,D,G}	4
Total Credits	17

	Spring
CG 203 Human Relations at Work.....	3
CS 133JS Beginning Programming JavaScript ^{*,D,G}	4
CS 233N Intermediate Programming C# ^{*,D,G}	4
MTH 095 Intermediate Algebra or higher *	5
Total Credits	16

Second Year	Fall
CIS 244 Systems Analysis * ^{D,G}	4
CS 295N Web Development 1: ASP.NET * ^{D,G}	4
WR 227 Technical Writing *	4
Open Elective	4
Total Credits	16

	Winter
CS 275 Database Systems and Modeling ^{*,D,G}	4
CS 296N Web Development 2: ASP.NET ^{*,1,G}	4
Speech Elective ²	4
CS/CIS/GIS Elective ^{1,D,G} (see below)	4
Total Credits	16

	Spring
CS 276 Database SQL Programming	4
CS297 Programming Capstone ^{*,D,G}	5
CS 280PR Co-op Ed: Programming (second-year standing required) ^{D,G}	3

CS/CIS/GIS Elective * ^{1,D,G} (see below)	4
Total Credits	16

- For more specific information about the Fall/Winter/Spring CS/CIS/GIS elective sequences please contact the Program Academic Advisor or the Program Counselor to help determine which elective sequence best fits your goals. Programming majors are strongly advised to take CS 295P Web Development 1: PHP and CS 296P Web Development 2: PHP as electives.
- List of approved speech electives:
 - SP 100 Basic Communication
 - SP 111 Fundamentals of Public Speaking
 - SP 112 Persuasive Speech
 - SP 130 Business and Professional Speech
 - SP 219 Small Group Discussion
- Students who complete the Computer Programming Degree will have completed all of the coursework to earn the Database Specialist Career Pathway Certificate. See Computer Information Systems - Health Informatics AAS listing for details.

Web Programming

Career Pathway Certificate of Completion

Purpose To prepare technicians for entry-level positions as web programmers.

Learning Outcomes The certificate recipient will:

- design, implement, test, debug and document web based computer programs using a variety of current tools and technologies.
- understand the use of web programming to support organizational processes.
- interpret the mathematical concepts of a programming related problem-solving task and translate them into programming logic and expressions.
- use appropriate library and information resources to research programming tools and technologies and support lifelong technical learning.

Prerequisites Students are expected to be comfortable working on a computer, including the ability to create files with a text editor and manage file folders.

Program Lead Mari Good, Bldg. 19, Rm. 158, 541.463.5838, goodm@lanecc.edu

Courses required	Credits
CIS 195 Web Authoring 1 ^{D,G}	3
CS 133JS Beginning Programming: JavaScript * ^{D,G}	4
CS 295P Web Development 1: PHP * ^{D,G}	4
CS 296P Web Development 2: PHP * ^{D,G}	4
Total Credits	15

Computer Simulation and Game Development

Offered by the Computer Information Technology Department, 541.463.5826

Two-Year Associate of Applied Science Degree, Computer Simulation and Game Development

Career Pathway Certificate of Completion, Computer Game Programming in C++

Purpose To prepare students for entry-level positions in the simulation and game development industries or to transfer to a four-year school for additional education.

Standard footnotes:

* Prerequisite required

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

R Required for AAS degree—see page 48

Learning Outcomes The graduate will:

- develop programming knowledge and skills with a current commercial programming language.
- design, program, test, debug and document computer simulation or game programs using a variety of current tools and technologies.
- create computer simulations or games using industry standard development tools.
- develop skills and knowledge in computer animation using industry standard tools.
- learn mathematical concepts related to simulation and game development and use those concepts in class projects.
- use appropriate library and information resources to research simulation and game development issues, programming tools and technologies and to support lifelong technical learning.

Job Openings Projected through 2018

Lane County openings - 12 annually

Statewide openings - 166 annually

Wages

Lane County average hourly - \$23.34; average annual - \$60,711

Oregon average hourly - \$33.96; average annual - \$70,644

Costs (Estimate based on 2011 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees.....	\$8,739
Books and Materials.....	\$1,840
Laptop Computer.....	\$1,500
CIT Lab Fees.....	\$168
Total Estimate \$12,247	

Computer Simulation and Game Development course fees and other course fees may change during the year - see the online credit class schedule for fees assigned to courses.

Second Year Requirements A personal laptop is required for second-year students in the degree program. If you receive financial aid, some of those funds may be used for this purchase. Please contact the CIT Department or go to lanecc.edu/cit for options and system requirements.

Cooperative Education (Co-op) Co-op is a required and important part of the Computer Simulation and Game Development Degree program. It provides relevant field experience that integrates theory and practice while providing opportunities to develop skills, explore career options, and network with professionals and employers in the computer programming field. Contact the Cooperative Education Division, Bldg. 19, Rm. 231, 541.463.5203.

Program Lead Jim Bailey, Bldg. 19, Rm. 146, 541.463.3148, baileyj@lanecc.edu

Computer Simulation and Game Development

Two-Year Associate of Applied Science Degree

Prerequisites Students must qualify for MTH 231, CS 161C+ and WR 121 either by placement testing or completing prerequisite courses. Students should consult with a counselor or advisor to plan a program of study.

First Year	Fall
CIS 100 Computing Careers Exploration ^{D,G}	2
CIS 125G Software Tools 1: Game Development ^{D,G}	4
CS 161C+ Computer Science 1 ^{D,G}	4

Elective ¹	4
Total Credits	14
Winter	
FA 221 Computer Animation ^{*,D,G}	3
CS 162C+ Computer Science 2 ^{*,D,G}	4
ART 245 Drawing for Media ^{D,G}	4
Elective ¹	4
Total Credits	15

Spring	
CIS 135G Software Tools 2: Game Development ^{*,D,G}	4
CS 260 Data Structures 1 ^{*,D,G}	4
FA 222 Computer Animation 2 ^{*,D,G}	3
PE/Health requirement ^R	3
Elective ¹	3
Total Credits	17

Second Year	
Fall	
CS 234G Advanced C++ Programming for Games ^{*,D,G}	4
CS 253 Computation for Computer Graphics ^{*,D,G}	4
MTH 231 Discrete Math 1 ^{*,D,G}	4
WR 121 Introduction to Academic Writing [*]	4
Total Credits	16

Winter	
CS 235G Software Tools 3: Game Development ^{*,D,G}	4
Speech course ²	4
WR 227 Technical Writing	4
MTH 232 Discrete Math 2 ^{*,D,G}	4
Total Credits	15

Spring	
CS 297G Simulation and Game Development	
Capstone ^{*,D,G}	4
CS 280SGD Co-op Ed: Simulation and Game Development (second-year standing required) ^{D,G}	3
Human Relations requirement ^R	3-4
CG 203 Human Relations at Work (Recommended)	
MTH 233 Discrete Math 3 ^{*,D,G}	4
Total Credits	14-15

1 Elective courses: See program counselor or advisor for course suggestions.

2 Speech course: See program counselor or advisor for course suggestions.

Computer Game Programming in C++

Career Pathway Certificate of Completion

Purpose To provide students with the knowledge and skills required to program in C++, specifically focused on simulation and game programming.

Learning Outcomes The certificate recipient will:

- understand the syntax and semantics of C++ programming.
- demonstrate the ability to solve programming projects using an object-oriented methodology.
- understand and use common data structures to solve programming problems.
- design, develop, test, debug, and document solutions to simulation and computer game problems using a variety of current tools.
- demonstrate the knowledge of common software engineering methodologies.
- develop a portfolio of programs working in a team-oriented environment.

Prerequisites Students are expected to be comfortable working on a computer, including the ability to create files with a text editor and manage file folders. CS 260 has a prerequisite of MTH 111.

Certificate Lead Jim Bailey, Bldg. 19, Rm. 146, 541.463.3148, baileyj@lanecc.edu

Courses Required

CS 161C+ Computer Science 1 ^{D,G}	4
CS 162C+ Computer Science 2 ^{*,D,G}	4
CS 260 Data Structures ^{*,D,G}	4
CS 234G Advanced C++ Programming for Games ^{*,D,G}	4
Total Credits	16

Computer Specialist

Offered by the Computer Information Technology Department, 541.463.5826

One-Year Certificate of Completion

Purpose To prepare specialists in the use of computer information systems. Specialists use a computer's capabilities as a problem-solving tool for positions that require end-user knowledge of computer hardware, software, and operating procedures.

Learning Outcomes The graduate will:

- have a broad range of skills necessary to be an effective user of information systems.
- have core skills in the use of computers, as well as the related skill areas of mathematics and writing.
- use appropriate library and information resources to research user support issues, concepts, and tools and support lifelong technical learning.
- install and configure operating system software.
- interpret the concepts of a problem-solving task.
- manipulate variables using computer software applications.
- collect and display data as lists, tables, and charts using computer software.
- design web pages and post them to the internet.

Wages

Lane County average hourly - \$20.14; average annual - \$45,671

Oregon average hourly - \$22.20; average annual - \$48,694

Gainful Employment Disclosure

Standard Occupational Classification: 11-3021.00

Go to websites below for information about related occupations:

Computer User Support Specialists
onetonline.org/link/summary/15-1151.00

Related Occupation:

Computer Programmers
onetonline.org/link/summary/15-1131.00

How much will the program cost?

(Estimate based on 2011-12 data. Consult Lane's website for updated tuition.)

Resident tuition and fees	\$4,356
Books and materials	\$1,624
CIT Lab Fees	\$78
On-Campus room and board	Not offered
Total Estimate	\$6,058

What's included?

Program Costs: lanecc.edu/es/feesandexpenses.html

What are financing options to pay for the program?

In addition to any grant and scholarship aid for which they are eligible, 84% of program graduates used loans to finance their education. The median debt for 2010-11 program graduates:

Federal Loans	\$10,832
Institutional financing	\$179

No 2010-11 program graduates used private educational loans.

How long will it take to complete this program?

The program is designed to take 3 terms, or about 12 months of study to complete.

How many 2010-11 Computer Specialist graduates completed within the designed program length?

Approximately 8% completed within 12 months.

What are my chances of getting a job when I graduate?

Lane County openings - 12 annually

Statewide openings - 166 annually

Will I be able to pay back student loans?

Most Lane students graduating in 2009-10 who took out federal student loans are successfully repaying them. Lane's federal loan student default rate for that period was 11.3%.

Where are comparable programs offered?

School	City	2009 Graduates
Pioneer Pacific College	Wilsonville	41

Prerequisites Students must qualify for WR 121, either by placement testing or completing prerequisite courses, and by the third term, qualify to begin MTH 095. Each student should consult with a counselor or advisor to plan a program of study.

Program Lead Ron Little, Bldg. 19, Room 156, 541.463.5464, little@lanecc.edu

Note The curriculum for the Computer Specialist certificate is known as the "CIT Core." These courses provide a solid foundation in information technology. The first-year curriculum for the Computer Programming and Computer Network Operations degrees share these core courses. This means that students pursuing either of these degrees may change their degree goals during the first year with very little extra course work required.

	Fall
CIS 100 Computing Careers Exploration ^{D,G}	2
CIS 102 Problem Solving with Computers ^{D,G}	4
CIS 195 Web Authoring 1 ^{D,G}	3
CIS 140 Operating Systems: Managing Windows ^{D,G}	4
WR 121 Introduction to Academic Writing [*]	4
Total Credits	17

	Winter
ART 288 Introduction to Web Design ^{D,G}	2
CIS 125D Software Tools 1: Databases ^{D,G}	4
CS 179 Introduction to Computer Networks ^{*,D,G}	4
Choice of:	4
CS 133N Beginning Programming: C# ^{*,D,G}	
ET 287 Microcomputer Hardware ^{D,G}	
Total Credits	14

	Spring
CS 133JS Beginning Programming JavaScript ^{*,D,G}	4
CG 203 Human Relations at Work	3
Choice of:	4
CIS 227N Systems Support: Network and Operating Systems ^{*,D,G}	

Standard footnotes:

* Prerequisite required

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

R Required for AAS degree—see page 48

CS 233N Intermediate Programming: C# ^{D,G}	
MTH 095 Intermediate Algebra or higher *	5
Total Credits	16

Computer Systems Support

Offered by the Computer Information Technology Department, 541.463.5826

Two-Year Associate of Applied Science Degree

(Also see the following Career Pathway Certificates of Completion: Database Specialist on page 81, Geographic Information Systems on page 123, Health Informatics Technology Specialist on page 80, Network Security on page 84, and Web Programming on page 85.)

Purpose Systems support workers provide technical assistance and support services to computer system users. They answer questions and resolve technology problems for work colleagues or clients in face-to-face contacts, via telephone or remote contacts, via e-mail or on support Web sites. They assist users with computer hardware, software, network connections, and operating procedures. Some systems support workers evaluate computer products, perform user needs assessments, install systems, prepare documentation, and provide training for users.

Learning Outcomes Graduates will be able to:

- use primary features of computer hardware and operating systems
- make productive use of application and operating system software
- read and understand operating manuals
- assist co-workers or clients with hardware and peripheral problems
- assist co-workers or clients with software problems
- perform common network administrative tasks
- monitor and troubleshoot network operation
- monitor computer and peripheral device operation
- advise users on computer security problems and strategies
- provide technical support services to computer users
- use appropriate user interaction methods
- test and troubleshoot computer applications and systems
- follow computer diagnostic procedures
- assess computer users' requirements and requests
- evaluate and recommend computer equipment and software
- perform hardware installation, maintenance and common repair tasks
- update and upgrade computer systems
- advise users on ergonomic uses of technology
- apply standard project management techniques
- work as a member of a team
- prepare documents and written communications for end users
- design and maintain support information on web sites
- use information resources for problem solving and troubleshooting
- explain concepts, components and processes to users
- prepare and deliver training materials for users
- maintain knowledge, skills and abilities through professional development

Job Openings Projected through 2018

Lane County openings - 9 annually
Statewide openings - 74 annually

Wages

Lane County average hourly - \$31.35; average annual - \$65,197
Oregon average hourly - \$27.33; average annual - \$56,848

Costs (Estimate based on 2011 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees.....	\$9,006
Books and Materials.....	\$2,317
Laptop Computer.....	\$1,500
CIT Lab Fees.....	\$168
Total Estimate	\$12,991

Computer Systems Support course fees and other course fees may change during the year - see the online credit class schedule for fees assigned to courses.

Second Year Requirements A personal laptop is required for second-year students in the degree program. If you receive financial aid, some of those funds may be used for this purchase. Please contact the CIT Department for options and system requirements.

Program lead Contact the Business and Computer Information Technology Division (BCIT), Bldg. 19, Rm. 137, 541.463.5221, BCITAdmin@lanecc.edu

Cooperative Education (Co-op) Co-op offers students college credit and a grade for on-the-job work experience related to their educational and career goals. Through Co-op, students connect theory and practice, develop skills, expand career knowledge, and make contacts for the future. Work schedules and work sites vary. Contact the Cooperative Education Division, Bldg. 19, Rm. 231, 541.463.5203.

Note Students who need to take additional coursework to meet the entry prerequisites for the program should expect to spend additional terms beyond the six terms described below.

Elective Clusters Elective clusters are intended to provide an opportunity for Systems Support majors to take additional coursework in their areas of special interest. Systems Support majors take a minimum of two elective clusters of at least three courses from among these choices. Substitutions must be pre-approved by a counselor or advisor. Note that some elective courses may require additional prerequisites: consult the course catalog for prerequisites and terms courses are offered. Pathways certificates are available in some elective clusters.

Recommended Program Prerequisites

- Take foundational writing courses to be prepared for WR 121 Academic Writing
- Take mathematics courses to be prepared for MTH 095 Intermediate Algebra
- Take study skills courses such as EL 115 Effective Learning to prepare for college-level coursework
- Take computer classes or self-study equivalent to CIS 101 Computer Fundamentals

First Year	Fall
CIS 100 Computing Careers Exploration ^{D,G}	2
CIS 140 Operating Systems: Managing Windows ^{D,G}	4
WR 121 Composition: Intro to Academic Writing *.....	4
MTH 095 Intermediate Algebra or higher *	5
Total Credits	15

	Winter	
CIS 102 Problem Solving with Computers ^{D,G}	4	
CS 179 Introduction to Computer Networks ^{*,D,G}	4	
ET 287 Microcomputer Hardware ^{D,G}	4	
ART 288 Introduction to Web Design ^{D,G}	2	
CIS 195 Web Authoring 1 ^{D,G}	3	
Total Credits	17	

	Spring	
CG 203 Human Relations at Work	3	
CIS 125D Software Tools 1: Databases ^{D,G}	4	
CIS 227N Systems Support: Network and Operating Systems ^{*,D,G}	4	
Choice of (see note 1):	4	
CS 133JS Beginning Programming: JavaScript ^{*,D,G}		
CS 133N Beginning Programming: C# ^{*,D,G}		
Total Credits	15	

	Second Year	
CIS 225 Computer End-User Support ^{*,D,G}	4	
WR 227 Technical Writing [*]	4	
Choice of one course from Elective Cluster 1 ^{D,G}	4	
Choice of one course from Elective Cluster 2 ^{D,G}	4	
Total Credits	14-16	

	Winter	
CS 280SS Coop Ed: Systems Support	3	
Speech Requirement (see note 2)	3	
Choice of one course from Elective Cluster 1 ^{D,G}	4	
Choice of one course from Elective Cluster 2 ^{D,G}	4	
PE/Health requirement	3	
Total Credits	15-17	

	Spring	
CIS 245 Managing Technology Projects ^{D,G}	4	
CS 280SS Coop Ed: Systems Support ^{D,G}	3	
Choice of one course from Elective Cluster 1 ^{D,G}	4	
Choice of one course from Elective Cluster 2 ^{D,G}	4	
Total Credits	13-15	

- 1 Other introductory programming courses may substitute for CS 133JS or CS133N:
 CIS 122 Software Design
 CS 161C+ Computer Science 1
 CS 161J Computer Science 1
- 2 Choice of recommended speech courses:
- | | |
|--|---|
| SP 111 Fundamentals of Public Speaking | 4 |
| SP 130 Business and Professional Speech | 4 |
| SP 218 Interpersonal Communication | 4 |
| SP 219 Small Group Discussion | 4 |
| SP 220 Communications, Gender, and Culture | 4 |

Elective Clusters

Network: Windows Cluster

CS 240W Advanced Windows: Server Management ^{D,G}	4
CS 284 Network Security Fundamentals ^{D,G}	4
CS 188 Wireless Networking ^{D,G}	4
Total Credits	12

Network: Unix/Linux cluster

CIS 140U Introduction to Unix/Linux ^{D,G}	4
CS 240U Advanced Unix/Linux: Server Management ^{D,G}	4
Choice of:	4
CS 188 Wireless Networking ^{D,G}	
CS 289 Cisco Router and Switch Admin ^{D,G}	
Total Credits	12

Health Informatics cluster

HI 101 Intro of Health Care and Public Health ^{D,G}	3
--	---

HI 107 Working with Health IT Systems ^{D,G}	4
Choice of:	
HI 111 Selecting, Implementing and Customizing Electronic Health Record Systems	4
HI 208 Installation and Maintenance of Health IT Systems ^{*,D,G}	4
Total Credits	11

Geographic Information Systems cluster

GIS 245 Maps and Spatial Information [*]	4
GIS 246 Introduction to GIS	4
Choice of:	
CIS 247 Information Analysis and Visualization	4
GIS 248 Applications in GIS	4
Total Credits	12

Database cluster

CIS 244 Systems Analysis ^{*,D,G}	4
CS 275 Database Program Development ^{*,D,G}	4
CS 276 Advanced SQL ^{*,D,G}	4
Total Credits	12

Web Programming: PHP cluster

CIS 244 Systems Analysis	4
CS 295P Web Development 1: PHP	4
CS 296P Web Development 2: PHP	4
Total Credits	12

Web Programming: C#/.NET cluster

CS 233N Intermediate Programming: C# ^{*,D,G}	4
CS 295N Web Development 1: ASP.NET ^{*,D,G}	4
CS 296N Web Development 2: ASP.NET ^{*,D,G}	4
Total Credits	12

Communication skills cluster

BA 101 Introduction to Business	4
BT 112 Team Building Skills	4
Choice of:	3-4
BA 206 Management Fundamentals [*]	
BA 278 Leadership and Team Dynamics	
Total Credits	11-12

Construction Technology

**Offered by the Advanced Technology Division,
541.463.5380**

Two-Year Associate of Applied Science Degree

One-Year Certificate of Completion

Career Pathway Certificate of Completion, Landscape Construction

Purpose To train students in the technical skills and knowledge of the construction industry. The graduate of this program can expect to work in the residential and commercial building construction field.

Learning Outcomes

The graduate will:

- demonstrate basic carpentry skills for the construction industry.
- cut, fit, and assemble wood and other materials for building construction.
- demonstrate and use industry safety standards.
- use blueprint reading skills necessary to the profession.
- demonstrate knowledge of laser level and field elevations.
- be adequately prepared to enter the workforce in the field of construction.

Standard footnotes:

* Prerequisite required

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

R Required for AAS degree—see page 48

- use appropriate library and information resources to research professional issues.
- interpret the concepts of a problem-solving task and translate them into mathematics.

Job Openings Projected through 2018

Lane County openings - 15 annually

Statewide openings - 194 annually

Wages

Lane County average hourly - \$21.24; average annual - \$44,180

Oregon average hourly - \$21.11; average annual - \$43,920

Costs (Estimate based on 2011 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees.....	\$9,006
Other Course/Program Costs.....	\$210
Tools.....	\$200
Books and supplies.....	\$700

Total Estimate \$10,116

Construction Technology course fees and other course fees may change during the year - see the online credit class schedule for fees assigned to courses.

Prerequisites Minimum placement score – of 68 in Reading OR completion of RD 080 OR prior college. A high school diploma or equivalent is recommended for all applicants to this program.

Admission Information See lanec.edu/advtech/AT/admissionAT.htm or contact the Advanced Technology Division, AdvTechPrograms@lanec.edu

Cooperative Education (Co-op) Co-op offers students college credit and a grade for on-the-job work experience related to their educational and career goals. Through Co-op, students connect theory and practice, develop skills, expand career knowledge, and make contacts for the future. Work schedules and work sites vary. Under the supervision of the Construction Technology Co-op Coordinator and with instructor consent, a maximum of 18 Co-op credits may be earned in lieu of required Construction Technology course credits. Contact Marv Clemons, Construction Technology Co-op Coordinator, Bldg. 8, Rm. 111, 541.463.3158, clemonsm@lanec.edu

Two-Year Associate of Applied Science Degree

First Year		Fall
CIS 101 Computer Fundamentals.....		3
CST 110 Blueprint Reading 1 ^{*,D,G}		3
CST 111 Construction Orientation and Environment ^{*,1,D,G}		2
CST 118 Building Construction ^{*,D,G}		5
MTH 076 Applied Geometry for Technicians or higher mathematics ^{*,D,G}		4
Total Credits		17
		Winter
CST 118 Building Construction ^{*,D,G}		5
CST 122 Construction Codes ^{D,G}		2
CST 211 Blueprint Reading 2 ^{*,D,G}		3
PE/Health requirement ^{D,R}		3
WR 121 Introduction to Academic Writing ^{*,D}		4
Total Credits		17
		Spring
CST 116 Construction Estimating ^{D,G}		4
CST 118 Building Construction ^{*,D,G}		5

CST 119 Building Construction Surveying ^{D,G}	3
Human Relations requirement ^R	3
Total Credits	15

Second Year

		Fall
Arts and Letters requirement ^R		3
CST 280 Co-op Ed: Construction ^{D,G}		3
DRF 142 Graphic Concepts.....		2
DRF 167 CAD 1 [*]		4
Directed electives (see list below).....		3
Total Credits		15

Winter

CST 280 Co-op Ed: Construction ^{D,G}	3
DRF 208 Residential Buildings *	4
Science or Computer Science course ^R	3
Directed electives (see list below)	6
Total Credits	16

Spring

CST 280 Co-op Ed: Construction ^{D,G}	3
Directed electives (see list below)	9
Choice of:.....	3
Arts/Letters, Science or Computer Science course, or Social Science/Human Relations requirement ^R	
Total Credits	15

Directed Electives (18 credits required for AAS degree)**Apprenticeship/Electronics Courses**

APPR 101 Trade Skills Fundamentals.....	4
ET129 Electrical Theory 1.....	4
ET130 Electrical Theory 2.....	4

Business Courses

BA 101 Introduction to Business.....	4
BT 165 Introduction to Accounting Cycle.....	3

Drafting Courses

DRF 137 Architectural Drafting – Plans [*]	4
DRF 168 CAD 2 [*]	4
DRF 205 Drafting: Structures [*]	4
DRF 207 Drafting: Strength of Materials [*]	4

Skill Development Courses

LAT 131 Landscape Construction.....	3
LAT 141 Principles of Nursery Operations.....	2
LAT 155 Landscape Plants 1.....	4
LAT 156 Landscape Plants 2.....	4
LAT 157 Landscape Plants 3.....	4
WLD 121 Shielded Metal Arc Welding 1 [*]	4
WLD 122 Shielded Metal Arc Welding 2 [*]	4

Mathematics Courses, Choice of:

MTH 070 Introductory Algebra [*]	5
MTH 086 Applied Algebra for Technicians [*]	4
MTH 095 Intermediate Algebra or higher [*]	5

Construction Technology**One Year Certificate of Completion**

Purpose To train students in the technical skills and knowledge of the construction industry. The graduate of this program can expect to work in the residential and commercial building construction field.

Learning Outcomes The graduate of the one year certificate will:

- demonstrate basic carpentry skills for the construction industry.
- cut, fit, and assemble wood and other materials for building construction.
- demonstrate and use industry safety standards.
- use blueprint reading skills necessary to the profession.
- demonstrate knowledge of laser level and field elevations.
- be adequately prepared to enter the workforce in the field of construction.

Gainful Employment Disclosure

Standard Occupational Classification: 47-2061.00

Go to websites below for information about related occupations:
Construction Laborers

onetonline.org/link/summary/47-2061.00

Related Occupation:

Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters

onetonline.org/link/summary/47-3011.00

How much will the program cost?

(Estimate based on 2011-12 data. Consult Lane's website for updated tuition.)

Resident tuition and fees	\$5,061
Books, supplies, program costs	\$1,110
On-Campus room and board.....	Not offered
Total Estimate	\$7,171

What's included?

Program Costs: lanecc.edu/advtech/AT/costsheetAT.htm

What are financing options to pay for the program?

In addition to any grant and scholarship aid for which they are eligible, 89% of program graduates used loans to finance their education. The median debt for 2010-11 program graduates:

Federal Loans.....	\$5,423
Institutional financing.....	\$1,284

No 2010-11 program graduates used private educational loans.

How long will it take to complete this program?

The program is designed to take 3 terms, or about 12 months of study to complete.

How many 2010-11 Construction Technology graduates completed within the designed program length?

Approximately 33% completed within 12 months.

What are my chances of getting a job when I graduate?

Lane County openings - 40 annually

Statewide openings - 476 annually

Will I be able to pay back student loans?

Most Lane students graduating in 2009-10 who took out federal student loans are successfully repaying them. Lane's federal loan student default rate for that period was 11.3%.

Where are comparable programs offered?

School	City	2009 Graduates
Clackamas Community College	Oregon City	--
Portland Community College	Portland	4
Rogue Community College	Grants Pass	3

	Fall
CIS 101 Computer Fundamentals.....	3
CST 110 Blueprint Reading 1 ^{*,D,G}	3
CST 111 Construction Orientation and Environment ^{*,1,D,G}	2
CST 118 Building Construction ^{*,D,G}	5
MTH 076 Applied Geometry for Technicians ^{*,D,G} or higher mathematics	4
Total Credits	17

	Winter
CST 118 Building Construction ^{*,D,G}	5
CST 122 Construction Codes ^{D,G}	2
CST 211 Blueprint Reading 2 ^{*,D,G}	3
PE/Health elective ^D	3
WR 121 Introduction to Academic Writing ^{*,D}	4
Total Credits	17

	Spring
CST 116 Construction Estimating ^{D,G}	4
CST 118 Building Construction ^{*,D,G}	5
CST 119 Building Construction Surveying ^{D,G}	3
Human Relations requirement	3
Total Credits	15

1 Corequisite requirement is CST 110 Blueprint Reading 1.

Construction, Landscape

Career Pathway Certificate of Completion

Note This curriculum is under review. Please see an advisor or counselor for updated information.

Construction Trades, General Apprenticeship

**Offered by the Advanced Technology Division,
541.463.5380**

**Associate of Applied Science Degree, Construction Trades,
General Apprenticeship**

**Certificate of Completion, Construction Trades, General
Apprenticeship**

Purpose To provide a structured system of training in construction trades or occupations, leading to certification and journey-level status, only for apprentices who are sponsored by individual employers, accepted by a Joint Apprenticeship Training Committee, and registered with the State of Oregon Bureau of Labor and Industries.

Learning Outcomes The graduate will:

- perform the duties and responsibilities of the individual construction trade/occupation.
- apply theory as it relates to trade competencies.
- demonstrate and use industry safety standards.
- utilize recognized standard building codes guidelines as applicable.
- prepare and utilize isometric sketching and detailed drawings per individual trade.
- develop attitudes conducive to improved customer relations skills in the construction trades.
- demonstrate communication and critical thinking skills necessary for job development advancement.
- use appropriate library and information resources to research professional issues and support lifelong learning.
- access library, computing, and communications services, and appropriately select information and data from regional, national, and international networks.
- represent, analyze and determine rules for finding patterns relating to linear functions, non-linear functions and arithmetic sequences with tables, graphs, and symbolic rules.

Standard footnotes:

* Prerequisite required

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

R Required for AAS degree—see page 48

- adapt to new job requirements to qualify for advancement in becoming lead supervisors.
- complete 8000 hours State of Oregon-approved on-the-job-training.

Costs (Estimate based on 2011 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees.....	\$10,325
Books and supplies.....	\$1,350
Total Estimate \$11,675	

Construction Trades, General Apprenticeship course fees and other course fees may change during the year - see the online credit class schedule for fees assigned to courses.

Carpenter

Job Openings Projected through 2018

Lane County openings - 15 annually

Statewide openings - 194 annually

Wages

Lane County average hourly - \$21.24; average annual - \$44,180

Oregon average hourly - \$21.11; average annual - \$43,920

HVAC

Job Openings Projected through 2018

Lane County openings - 5 annually

Statewide openings - 55 annually

Wages

Lane County average hourly - \$21.22; average annual - \$44,146

Oregon average hourly - \$22.35; average annual - \$46,496

Plumber

Job Openings Projected through 2018

Lane County openings - 6 annually

Statewide openings - 94 annually

Wages

Lane County average hourly - \$26.20; average annual - \$54,350

Oregon average hourly - \$28.46; average annual - \$59,182

Sheet Metal

Job Openings Projected through 2018

Lane County openings - 9 annually

Statewide openings - 75 annually

Wages

Lane County average hourly - \$22.40; average annual - \$46,500

Oregon average hourly - \$25.91; average annual - \$53,894

Apprentice Wages Although wages vary, the average starting wage of an apprentice is about 50 percent of a journey worker's rate of pay. Apprentices usually earn a five-percent raise every six months if training and school performance is satisfactory. Check the Bureau of Labor and Industries website: boli.state.or.us

Program Certification An apprenticeship "Award of Completion" issued by the Oregon Bureau of Labor and Industries Apprenticeship and Training Division certifies that an individual has been trained in all aspects of an occupation and has met the requirements for program completion. This certificate is recognized throughout Oregon and industry-wide as a valid indicator

of high quality, standardized training, and it provides on-the-job training documentation for community college credit.

In addition, the Oregon community college Construction Trades, General Apprenticeship pathway provides statewide transfer opportunities, ladder certificates of completion, and an optional transfer path into Oregon Institute of Technology Bachelor of Science degree in Operations Management. The Construction Trades, General Apprenticeship pathway includes an advising guide with a set of recommended courses that satisfy both the AAS and the Oregon Transfer Module (OTM). Students who complete the recommended set of OTM courses may apply for 45 credits of guaranteed block transfer to any other community college or Oregon University System institution.

Licensing or Other Certification Exams HVAC technician/installer and plumber trades require successful completion of trade-specific licensure examinations through the Oregon Building Codes Division.

Admission Information Students must be registered apprentices with the State of Oregon Bureau of Labor and Industries. Information is available at boli.state.or.us.

Pre-requisites Minimum placement scores – Reading 68, Writing 64, and Math parts A, B, C with 7/10 score. Note: See the counselor or advisor to obtain the suggested entry-level skills for successful completion of these programs.

Construction Trades, General Apprenticeship

Associate of Applied Science

To earn the degree, a student must

- complete 8000 hours State of Oregon-approved on-the-job training and provide a State of Oregon Apprenticeship Training Journeyman card or BOLI-ATD Certificate of Completion
- demonstrate an equivalency of 90 credit hours, with a minimum of 24 credits at Lane, including the last term at Lane
- complete all requirements for an AAS degree as listed below
- earn a cumulative grade point average above 2.0 at Lane or transfer credits earned at other regionally accredited colleges or universities

Requirements	Credits
1. General Education WR 115W Intro to College Writing:	
Workplace Emphasis ^D or higher-level writing	3
MTH 060 Beginning Algebra ^D	
or higher-level math	4
PE/Health Requirement ^R	3
Arts and Letters requirement ^R	3
Human Relations requirement ^R	3
Science/Math/Computer Science requirement ^R	3
Choice of:.....	3
Arts and Letters requirement ^R	
Human Relations/Social Science requirement ^R	
Science/Math/Computer Science requirement ^R	
2. Journeyman card from Oregon Bureau of	
Labor and Industries Apprenticeship and Training	
Division, prior certification credits	22
3. Construction Trades Core-Related Training	36-46
(Choice of one of the following trades)	

Carpenter (36 credits)

APR 115 Carpenter Skill Fundamentals
 APR 116 Carpentry Framing Fundamentals
 APR 117 Carpentry Framing and Introduction to Concrete
 APR 118 Carpentry Framing and Finishing
 APR 119 Carpentry Commercial Plans and Exterior Finish
 APR 120 Carpentry Interior Finish
 APR 201 Carpentry Basic Rigging and Practices
 APR 202 Carpentry Concrete Practices
 APR 203 Carpentry Forms and Tilt-up Panels
 APR 204 Carpentry Advanced Layout and Building Systems
 APR 205 Carpentry Advanced Planning and Management
 APR 206 Carpentry Equipment and Site Layout

HVAC Technician/Installer (41-44 credits)

APR 101A Trade Skills Fundamentals
 APR 172 Sheet Metal/HVAC Blueprint Reading
 APR 210 HVAC Systems 1
 APR 211 HVAC Systems 2
 APR 212 HVAC Systems 3
 APR 220A Electrical Code and Exam Prep
 APR 220B Electrical Code and Exam Prep
 APR 220C Electrical Code and Exam Prep
 ET 129 Electrical Theory 1
 ET 130 Electrical Theory 2
 ET 229 Motors 1
 ET 230 Motors 2

Plumber (36-39 credits)

APR 160 Plumbing Skill Fundamentals
 APR 161 Plumbing Materials and Fixtures
 APR 162 Plumbing Basic Waste Water Systems
 APR 163 Plumbing Calculations and Print Reading
 APR 164 Plumbing Basic Installation 1
 APR 165 Plumbing Basic Installation 2
 APR 260 Plumbing Water Supply Systems
 APR 261 Pipe Sizing and Systems
 APR 262 Plumbing Advanced Waste Systems
 APR 263 Plumbing Code and Test Prep
 APR 263 Plumbing Code and Test Prep
 APR 263 Plumbing Code and Test Prep

Sheet Metal Worker (46 credits)

APR 101A Trade Skills Fundamentals
 APR 170 Introduction to Sheet Metal Apprenticeship
 APR 171 Sheet Metal Basic Layout
 APR 172 Sheet Metal/HVAC Blueprint Reading
 APR 270 Architectural Sheet Metal
 APR 271 Sheet Metal Building Codes and Installation
 APR 272 Sheet Metal Duct Design
 APR 273 General Sheet Metal Fabrication
 APR 274 Sheet Metal Shop Fabrication
 APR 275 Sheet Metal Project Supervision
 MTH 076 Applied Geometry for Technicians
 WLD 121 Shielded Metal Arc Welding 1
 WLD 143 Wire Drive Welding 1

4. Program Electives to complete 90 credits for degree:..... 1-11

APR 101 Trade Skills Fundamentals
 APR 106 Plumbing Trades Introduction
 BA 101 Introduction to Business
 CS 120 Concepts of Computing
 CST 110 Blueprint Reading
 CST 111 Construction Orientation and Environment
 CST 116 Construction Estimating
 CST 118 Building Construction
 CST 119 Building Construction Surveying
 DRF 167 CAD 1
 HE 152 Drugs, Society and Behavior
 HE 252 First Aid
 MTH 076 Applied Geometry for Technicians

MTH 095 Intermediate Algebra or higher
 NRG 103 Sustainability in the Built Environment
 NRG 121 Air Conditioning System Analysis
 NRG 124 Energy Efficient Methods
 NRG 158 Thermal Design and Installation 1
 NRG 159 Thermal Design and Installation 2
 WATR 101 Introduction to Water Resources
 WLD 121 Shielded Metal Arc Welding 1
 WLD 122 Shielded Metal Arc Welding 2
 WLD 139 Welding Lab
 WLD 142 Pipe Welding Lab: Carbon Steel
 WLD 143 Wire Drive Welding 1

Construction Trades, General Apprenticeship

Certificate of Completion

Purpose Students may earn a Certificate of Completion in Construction Trades, General Apprenticeship by successfully completing 36-46 core related training credits with a 'C' or better in all courses, and completing related instruction in communications, computation, and human relations.

Learning Outcomes The graduate will:

- Apply theory as it relates to trade competencies.
- Perform the duties and responsibilities of the individual construction trade/occupation.

To earn the certificate, students must:

- complete State of Oregon-approved on-the-job training and provide a State of Oregon Apprenticeship Training Journeyman card or BOLI-ATD Certificate of Completion
 8000-Hour BOLI-ATD Trade: Carpenter
 8000-Hour BOLI-ATD Trade: HVAC Technician/Installer
 8000-Hour BOLI-ATD Trade: Plumber
 8000-Hour BOLI-ATD Trade: Sheet Metal Worker
- complete related instruction (communication, computation, human relations) 9 cr
- complete core-related training 36-46 cr

Total Credits 45-55

Core Related Training requirements (Choice of one of the following trades)

Carpenter (36 Credits)

APR 115 Carpenter Skill Fundamentals
 APR 116 Carpentry Framing Fundamentals
 APR 117 Carpentry Framing and Introduction to Concrete
 APR 118 Carpentry Framing and Finishing
 APR 119 Carpentry Commercial Plans and Exterior Finish
 APR 120 Carpentry Interior Finish
 APR 201 Carpentry Basic Rigging and Practices
 APR 202 Carpentry Concrete Practices
 APR 203 Carpentry Forms and Tilt-up Panels
 APR 204 Carpentry Advanced Layout and Building Systems
 APR 205 Carpentry Advanced Planning and Management
 APR 206 Carpentry Equipment and Site Layout
 HVAC Technician/Installer (41-44 credits)
 APR 101A Trade Skills Fundamentals
 APR 172 Sheet Metal/HVAC Blueprint Reading
 APR 210 HVAC Systems 1
 APR 211 HVAC Systems 2
 APR 212 HVAC Systems 3
 APR 220A Electrical Code and Exam Prep
 APR 220B Electrical Code and Exam Prep

Standard footnotes:

* Prerequisite required

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

R Required for AAS degree—see page 48

APR 220C Electrical Code and Exam Prep
 ET 129 Electrical Theory 1
 ET 130 Electrical Theory 2
 ET 229 Motors 1
 ET 230 Motors 2

Plumber (36-39 credits)

APR 160 Plumbing Skill Fundamentals
 APR 161 Plumbing Materials and Fixtures
 APR 162 Plumbing Basic Waste Water Systems
 APR 163 Plumbing Calculations and Print Reading
 APR 164 Plumbing Basic Installation 1
 APR 165 Plumbing Basic Installation 2
 APR 260 Plumbing Water Supply Systems
 APR 261 Pipe Sizing and Systems
 APR 262 Plumbing Advanced Waste Systems
 APR 263 Plumbing Code and Test Prep
 APR 263 Plumbing Code and Test Prep
 APR 263 Plumbing Code and Test Prep

Sheet Metal Worker (46 credits)

APR 101A Trade Skills Fundamentals
 APR 170 Introduction to Sheet Metal Apprenticeship
 APR 171 Sheet Metal Basic Layout
 APR 172 Sheet Metal/HVAC Blueprint Reading
 APR 270 Architectural Sheet Metal
 APR 271 Sheet Metal Building Codes and Installation
 APR 272 Sheet Metal Duct Design
 APR 273 General Sheet Metal Fabrication
 APR 274 Sheet Metal Shop Fabrication
 APR 275 Sheet Metal Project Supervision
 MTH 076 Applied Geometry for Technicians
 WLD 121 Shielded Metal Arc Welding 1
 WLD 143 Wire Drive Welding

Culinary Arts and Food Service Management

**Offered by Culinary Arts and Hospitality Management,
 541.463.3503**

Two-Year Associate of Applied Science Degree

Career Pathway Certificate of Completion, Baking and Pastry

Career Pathway Certificate of Completion, Food Preparation and Production

Career Pathway Certificate of Completion, Dietary Manager

Purpose To enable the transformation of students' passion for food and cooking into careers as future professional culinarians, restaurant owners, food and beverage managers, pastry cooks, dietary managers and other careers in food services. Focusing on classical culinary principles and techniques, the program's coursework is sequenced in building blocks of knowledge and skills competencies with an emphasis on learning by doing.

Accreditation The Culinary Arts two-year program (AAS degree) is accredited by the American Culinary Federation Foundation Accrediting Commission, a specialized accrediting commission recognized by the Council for Higher Education Accreditation. A student graduating from the program will be eligible to receive national certification status as a Certified Culinarian (CC).

Learning Outcomes The graduate of the two-year AAS will:

- develop a broad range of culinary and dining room service skills.
- operate equipment including cook tops, food processors, ovens (baking, convection, and conventional), dough mixers,

- meat slicers, espresso machines, cash register, point of sales (POS) systems and a variety of kitchen tools.
- develop supervisory and human relations skills.
- understand the fundamentals of financial analysis, purchasing and receiving, menu planning and costing, and food and beverage controls.
- access library, computer and communications services and obtain information and data from regional, national and international networks.
- develop fundamental baking and pastry knowledge and skills.
- perform mathematical functions related to food service operations.
- successfully plan and prepare large culinary events in the Center for Meeting and Learning.

Job Openings Projected through 2018:

Food Service Managers

Statewide openings - 87 annually
 Lane County openings - 7 annually

Chefs and Head Cooks

Statewide openings - 25 annually
 Lane County openings - 2 annually

Supervisors and Managers of Food Preparation and Serving Workers

Statewide openings - 222 annually
 Lane County openings - 21 annually

Restaurant Cooks

Statewide openings - 556 annually,
 Lane County openings - 41 annually

Production Bakers

Statewide openings - 92 annually
 Lane County openings - 39 annually

Wages

Chefs and Head Cooks - Lane County average hourly - \$17.52
 Oregon average hourly \$21.91, average annual - \$45,561
 Food Service Managers - Lane County average hourly - \$22.50
 Oregon average hourly - \$25.35, average annual - \$52,717
 First-Line Supervisors and Managers of Food Preparation and Serving Workers - Lane County average hourly - \$14.51
 Oregon average hourly \$15.51, average annual - \$32,270
 Restaurant Cooks - Lane County average hourly - \$12.62
 Oregon average hourly \$11.92, average annual - \$24,797
 Production Bakers - Lane County average hourly - \$11.94
 Oregon average hourly \$12.87, average annual - \$26,770

Costs (Estimate based on 2011 tuition and fees for 2-yr program)

Resident Tuition and Student Fees.....	\$9,893
Differential Fees [†]	\$3,348
Other Course/Program Costs	\$325
Culinary Books and supplies	\$745
Culinary Fees.....	1860
Total	16,171

[†] This is the total of all the differential fees attached to Culinary Arts courses. These and other fees may change during the year - see the online credit class schedule for fees assigned to courses.

Licensing and Other Certification Exams During the course of the program, students may earn a National Restaurant Association Education Foundation (NRAEF) Serv-Safe Certification as well as other NRAEF Certificate examinations for various courses.

Prerequisites Students can enter the Culinary Arts sequence in fall term only. Complete college placement tests with the following minimum scores: writing-64, reading-68 and readiness for MTH 025 - taking Math Placement Test Parts A, B and C - 7 out of 10 in each part, and attach copies of test score sheets to application. Students with prior college credit must attach a copy of transcript(s), and are highly recommended to take the Placement tests and attaching those scores as well.

Math must be current within one year or a placement test will be required. A Lane County Food Handlers Card is required for entry into the program.

Admission Information A separate application to the program is required. Admission information is available from the Culinary Arts and Hospitality Management office, Building 19, Room 202 or online at lanecc.edu/culinary. Or email: CulinaryHospPrograms@lanecc.edu

Cooperative Education (Co-op) Students earn credit for on-the-job work experience related to educational and career goals. Through Co-op, students can develop and practice skills, expand career knowledge, and make contacts for future job openings. For more information contact Joe McCully, Cooperative Education Coordinator, Bldg.19, Rm. 210, 541.463.3516, mccullyj@lanecc.edu

Program Contacts Wendy Milbrat, Administrative Support Specialist, 541.463.3503, milbratw@lanecc.edu or email: CulinaryHospPrograms@lanecc.edu

Note ALL courses required for this program must be taken for a grade, not pass/no pass, and must be passed with a grade of C or better.

Two-Year Associate of Applied Science Degree

General Education Requirements

(recommended prior to beginning program core)

	Spring
Arts and Letters requirement ^{2,D,G,R}	3
Science/Math/Computer Science requirement ^{2,D,G,R}	3
Choice of:.....	3
Arts and Letters requirement ^{2,D,G,R}	
Science/Math/Computer Science requirement ^{2,D,G,R}	
Social Science requirement ^{2,D,G,R}	
WR 115W Introduction to College Writing:	
Workplace Emphasis or higher ^{2,D,G,R}	3
HE 252 First Aid ^{2,D,G}	3
Total Credits	15

First Year

	Fall
CA 160 Cooking Theories 1 ^{*,D,G}	5
CA 175 Foodservice Sanitation and Safety ^{D,G}	2
CG 203 Human Relations at Work ^{3,D,G}	3
HRTM 105 Restaurant Operations ^{D,G}	3
MTH 025 Basic Mathematics	
Applications or higher ^{*,3,D,G,R}	3
Total Credits	16

	Winter
CA 162 Cooking Theories 2 ^{*,D,G}	5
CA 184 Dining Room and Kitchen Lab 1 ^{*,D,G}	3
FN 105 Nutrition for Foodservice Professionals ^{D,G}	3
Directed Electives ^{1,5,D,G}	2-5
Total Credits	13-16

	Spring
CA 163 Cooking Theories 3 ^{*,D,G}	5
CA 185 Dining Room and Kitchen Lab 2 ^{*,D,G}	4
CA 200 Restaurant and Menu Management ^{*,D,G}	3
Total Credits	12

	Summer
CA 280 Co-op Ed: Culinary Arts, Second Year ^{4,D,G}	9
Total Credits	9

	Fall
CA 186 Dining Room and Kitchen Lab 3 ^{*,D,G}	4
CA 279 Buffet and Banquet Planning ^{*,D,G}	2
CA 292 Advanced Cooking Theories 1	
(Garde Manger) ^{*,D,G}	3
HRTM 265 Hospitality Financials 1 ^{D,G}	3
Total Credits	12

	Winter
CA 176 Concepts of Taste and Flavor ^{*,D,G}	2
CA 187 Dining Room and Kitchen Supervision ^{*,D,G}	4
CA 279 Buffet and Banquet Planning ^{*,D,G}	2
CA 293 Advanced Cooking Theories	
(International Cuisine) ^{*,D,G}	3
HRTM 275 Hospitality Financials 2 ^{*,D,G}	3
Total Credits	14

	Spring
CA 279 Buffet and Banquet Planning ^{*,D,G}	2
CA 294 Advanced Cooking Theories 3	
(American Regional) ^{*,D,G}	3
CA 297 Culinary Leadership: Principles and Practices ^{*,D,G}	2
Directed Electives ^{1,5,D,G}	2-9
Total Credits	9-16

- 1 Directed electives may be met in any term of the program.
- 2 Pre-core general education requirements may be met any term of the program.
- 3 Enroll in Fall term to benefit from special sections scheduled for Culinary students.
- 4 Students may take Cooperative Education any term approved by the coordinator.
- 5 Check class schedules for terms Program Electives are offered.

Students interested in transferring to a four-year institution should:

1. Substitute WR 121 classes for WR 115W.
2. Add MTH 111 and MTH 112.
3. Add a speech course.
4. Add WR 122 and WR 123.

Directed Electives

BA 278 Leadership and Team Dynamics	4
BI 103H General Biology	4
BT 163 QuickBooks	3
BT 123 MS Excel for Business	3
BT 122 MS PowerPoint for Business.....	3
BT 120 MS Word for Business.....	3
CA 110 Culinary Adventuring: Local Guest Chef Series.....	2
CA 120 Culinary Adventuring: Seasonal Baking and Pastry	2
CA 121 Culinary Adventuring: The Composition of Cake ..	2
CA 123 Culinary Adventuring: International Baking and Pastry	2
CA 130 Culinary Adventuring: Oregon Wine Country	2
CA 163A Beginning Baking and Pastry	3
CA 163B Intermediate Baking and Pastry	3
CA 163C Advanced Baking and Pastry.....	3
CA 225 Catering Lab	2
CA 277 Culinary Competition Lab	2
CS 120 Concepts of Computing: Information Processing ^{D,G}	4
ES 102 Contemporary Racial and Ethnic Issues.....	4
FN 110 Personal Nutrition.....	3
FN 206 Co-op Ed: Dietary Manager Seminar	2
FN 255 Introduction to Medical Nutrition Therapy.....	3
FN 280 Co-op Ed: Dietary Manager.....	4
GEOG 201 World Regional Geography.....	3
HRTM 100 Introduction to Culinary Arts and Hospitality Management.....	3
HRTM 104 Introduction to Travel and Tourism	3

Standard footnotes:

* Prerequisite required

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

R Required for AAS degree—see page 48

HRTM 106 Introduction to Hospitality Management	3
HRTM 109 Principles of Meeting and Convention Management	3
HRTM 110 Hospitality Sales and Marketing	3
HRTM 130 Hospitality Information Systems	3
HRTM 140 Security in the Hospitality Industry	3
HRTM 281 Restaurant Ownership	3
HRTM 286 Fundamentals of Wine, Beer and Spirits.....	3
HST 104, 105, or 106 World History	4
PHL 201 Ethics.....	4
SP 115 Introduction to Intercultural Communications	4
SP 130 Business and Professional Speech.....	4
SUST 101 Introduction to Sustainability	3
WR 121 Introduction to Academic Writing	4

Baking and Pastry

Career Pathway Certificate of Completion

Purpose The Career Pathways Certificate (CPC) program in Baking and Pastry is for students who want to gain entry into the food service industry as beginning bakers and pastry cooks. All of the classes offered in this CPC program apply directly to an Associate of Applied Science degree in Culinary Arts and Foodservice Management.

Learning Outcomes The graduate will:

- develop essential and advanced baking and pastry knowledge and skills.
- operate equipment including cook tops, food processors, ovens (baking, convection, and conventional), dough mixers and a variety of kitchen tools.
- perform mathematical functions related to food service operations.

Admission Information A separate application to the program is required. Admission information is available from the Culinary Arts and Hospitality Management office, Building 19, Room 202 or online at lanecc.edu/culinary. Or email: CulinaryHospPrograms@lanecc.edu

Costs in Addition to Tuition (estimate)

Differential Fees* \$717

* This is the total of all the differential fees attached to Baking and Pastry Career Pathway Certificate courses. These and other fees may change during the year - see the online credit class schedule for fees assigned to courses.

	Fall
CA 120 Culinary Adventuring: Seasonal Baking and Pastry ^{4,D,G}	2
CA 163A Beginning Baking and Pastry ^{D,G}	3
CA 175 Foodservice Safety and Sanitation ^{D,G}	2
Total Credits	7
	Winter
CA 123 Culinary Adventuring: International Baking and Pastry ^{D,G}	2
CA 163B Intermediate Baking and Pastry ^{*,D,G}	3
MTH 025 Basic Mathematics Applications or higher ^{*,D,G} ..	3
Total Credits	10
	Spring
CA 120 Culinary Adventuring: Seasonal Baking and Pastry ^{4,D,G}	2
CA 121 Culinary Adventuring: Composition of Cake ^{D,G}	2
CA 163C Advanced Baking and Pastry ^{*,D,G}	3
Total Credits	7

Summer

CA 120 Culinary Adventuring: Seasonal Baking and Pastry ^{4,D,G} (2)

4 CA 120 Seasonal Baking and Pastry requirement is 4 total credits; 2 credits may be completed in any term

Dietary Manager

Career Pathway Certificate of Completion

Offered in partnership with the Health Professions Division by Culinary Arts and Hospitality Management, 541.463.3503; 541.463.5525

Purpose To offer Culinary Arts and Hospitality Management students the opportunity to earn an additional industry credential in dietary services management to broaden their employability as part of a health professionals team.

According to the Association of Nutrition and Foodservice Professionals, a Certified Dietary Manager (CDM®) has the education, training, and experience to competently perform the responsibilities of a dietary manager and has proven this by passing a nationally-recognized credentialing exam and fulfilling the requirements needed to maintain certified status. CDMs are experts at managing dietary operations. They are trained and qualified to administrate menus, food purchasing, and food preparation; and to apply nutrition principles, document nutrition information, ensure food safety, manage work teams, and more.

Learning Outcomes Graduates will be able to direct and control or assist with the dietary departments of hospitals, long-term care facilities, schools, correctional facilities, and many other settings, having skills for:

- menu planning
- food purchasing
- food service sanitation and safety
- financial management
- employee recruitment, training and supervision
- supervising the serving of special meals prescribed for medical purposes
- nutritional screening
- documentation of nutritional assessment data in the medical record

Job Openings projected through 2018

Lane County - 7 annually
Statewide - 87 annually

Wages The Association of Nutrition and Foodservice Professionals conducted a national online survey in 2010 of wages. For our region (California, Oregon, Washington and Alaska), in areas of a population under 100,000 (98 responses), the average salary was \$53,507. In a major city or suburb in our region (102 responses), the average salary was \$66,317.

Costs in Addition to Tuition and Registration Fees (Estimate based on 2011 data) - Subject to change without notice.

Books\$100-300

Admission Information available from the Health Professions office or online at lanecc.edu/hp.

Program Endorsement The Dietary Manager Program has been

approved by the Association of Nutrition and Foodservice Professionals through June 2015. Graduates are eligible for the credentialing exam and active ANFP membership.

Cooperative Education (Co-op) The Dietary Manager Training Program requires 4 credits (150 hours) of practical experience. Students earn credit for on-the-job work experience related to educational and career goals. Through Co-op, students can develop and practice skills, expand career knowledge, and make contacts for future Job Openings. Contact Tamberly Powell, Dietary Manager Co-op Coordinator, Bldg. 4, Rm. 229, 541.463.5525, powellt@lanecc.edu

Program Coordinator Tamberly Powell, 541.463.5525, powellt@lanecc.edu

Program Counseling and Advising The Health Professions 1 Team, Building 1, Room 103

Required Courses	Winter
FN 105 Nutrition for Foodservice Professionals ^{*,D,G}	3
FN 255 Medical Nutrition Therapy ^{*,D,G}	3
FN 206 Co-op Ed: Dietary Manager Seminar ^{*,D,G}	2
FN 280 Co-op Ed: Dietary Manager ^{*,D,G}	4
Total Credits	12

(Culinary Arts students completing this Certificate may take these Co-op hours as Program Elective credits for the AAS Degree)

Food Preparation and Production

Career Pathway Certificate of Completion

Purpose The Career Pathways Certificate (CPC) program in Food Preparation and Production is for students who want to gain entry into the food service industry as entry-level food production cooks. Some of the classes offered in this Certificate Program apply directly to an Associate of Applied Science degree in Culinary Arts and Foodservice Management.

Learning Outcomes The graduate will:

- develop a broad range of culinary and dining room service skills.
- operate equipment including cook tops, food processors, ovens (baking, convection, and conventional), dough mixers, meat slicers, espresso machines, cash register, point of sales (POS) systems and a variety of kitchen tools.
- develop supervisory and human relations skills.
- understand the fundamentals of restaurant operations, menu planning and costing, and food and beverage controls.

Admission Information Available from the Culinary Arts and Hospitality Management office, Building 19, Room 202 or online at lanecc.edu/culinary. Or email: CulinaryHospPrograms@lanecc.edu

CA 160A Food Preparation and Production 1 ^{D,G}	Fall	3
CA 175 Foodservice Sanitation and Safety ^{D,G}		2

HRTM 105 Restaurant Operations ^{D,G}	3
Total Credits	8
Winter	
CA 160B Food Preparation and Production 2 ^{*,D,G}	2
Program Elective ^{1,D,G}	2
CG 203 Human Relations at Work ^{D,G}	3
Total Credits	7

1 Program electives may be met in any term of the program.

Hospitality Management

Advising Plan for Culinary Arts AAS students

(Completing a second Two-year Associate of Applied Science degree)

Culinary Arts students who obtain the 2-year AAS degree in Hospitality Management will enhance their industry skill set and education. This list shows how Culinary Arts graduates may also complete the AAS degree in Hospitality Management.

HRTM 106 Introduction to Hospitality Management	Fall	3
HRTM 225 Hospitality Management Lab		2
HRTM 230 Hotel Operations 1		3
HRTM 279 Buffet and Banquet Planning		3
BT 165 Introduction to Accounting Cycle		3
Total Credits		14

HRTM 110 Hospitality Sales and Marketing	Winter	3
HRTM 120 Communications and Guest Relations		3
HRTM 225 Hospitality Management Lab		2
HRTM 231 Hotel Operations 2		3
HRTM 279 Buffet and Banquet Planning		2
Total Credits		13

HRTM 130 Hospitality Information Systems	Spring	3
HRTM 140 Security in the Hospitality Industry		3
HRTM 279 Buffet and Banquet Planning		2
HRTM 225 Hospitality Management Lab		2
HRTM 290 Hospitality Leadership		4
Total Credits		14

TOTAL CREDITS: 41

CA 187 Dining Room and Supervision will substitute for the requirement of HRTM 260 Supervision in the Hospitality Industry

CA 163 will substitute for the requirement of CA 159

All 9 Co-op Culinary Arts credits will fulfill the 7 Co-op Hospitality Management credits

Dental Assisting

Offered by Health Professions Division, 541.463.5617

One-Year Certificate of Completion

(See also Two-Year Associate of General Studies in Transfer Plans)

Purpose Prepares graduates for employment in the dental field with emphasis on current concepts and hands-on skills for clinical chairside assisting. Included classes also offer some cross-training and pathways to receptionist-bookkeeper.

Standard footnotes:

* Prerequisite required

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

R Required for AAS degree—see page 48

Learning Outcomes The graduate will:

- demonstrate knowledge and skills required to collect diagnostic data systematically
- demonstrate knowledge and skills required to perform a variety of clinically supportive treatments
- demonstrate knowledge and skill required to accurately expose, develop and mount diagnostic radiographs
- demonstrate knowledge and skills required for business office procedures
- demonstrate knowledge and skills required to access information via dental journals and web sites
- demonstrate knowledge and skills needed to compute mixing amounts for impression materials, cements, and disinfecting/sterilizing solutions, as well as calculate plaque indexing and inverse square law formulas
- demonstrate knowledge and ability to write/edit multiple types of professional communications

Gainful Employment Disclosure**Standard Occupational Classification: 31-9091.00**

Go to websites below for information about related occupations:

Dental Assistants

onetonline.org/link/summary/31-9091.00

Related Occupation:

Surgical Technologists

onetonline.org/link/summary/29-2055.00

How much will the 1-year certificate program cost?

(Estimate based on 2011-12 data. Consult Lane's website for updated tuition.)

Resident tuition and fees	\$5,211
Differential Fees [†]	\$932
Books	\$600
Required Program Costs	
(uniforms, National & State Board exams, etc.)	\$4,402
On-Campus room and board.....	Not offered

Total Estimate \$11,145

[†] This is the total of all the differential fees attached to Dental Assisting courses. These fees and other costs may change during the year - see the online credit class schedule for fees assigned to courses.

What's included?

Program Costs: lanecc.edu/es/feesandexpenses.html

What are financing options to pay for the program?

In addition to any grant and scholarship aid for which they are eligible, 100% of program graduates used loans to finance their education. The median debt for 2010-11 program graduates:

Federal Loans..... \$12,734

No 2010-11 program graduates used private educational loans or institutional financing.

How long will it take to complete this program?

The program is designed to take 3 terms, or about 12 months of study to complete.

How many 2010-11 Dental Assisting graduates completed within the designed program length?

84% completed within 12 months.

What are my chances of getting a job when I graduate?

Lane County openings - 19 annually

Statewide openings - 210 annually

100% of 2011 Lane graduates found employment in Lane County within six months of graduation.

Will I be able to pay back student loans?

Most Lane students graduating in 2009-10 who took out federal student loans are successfully repaying them. Lane's federal loan student default rate for that period was 11.3%.

Where are comparable programs offered?

School	City	2009 Graduates
Blue Mountain Community College	Pendleton	13
Carrington College	Portland	155
Central Oregon Community College	Bend	22
Chemeketa Community College	Salem	26
Clackamas Community College	Oregon City	16
Linn-Benton Community College	Albany	19
Portland Community College	Portland	37
Rogue Community College	Grants Pass	8
Umpqua Community College	Roseburg	12

Wages

Lane County average hourly - \$19.59; average annual - \$39,558

Oregon average hourly - \$18.37; average annual - \$38,254

Starting salary in the Eugene/Springfield area ranges from \$14-17 hourly or \$28,560-34,680 annually.

Program Accreditation American Dental Association's Commission on Dental Accreditation, a specialized accrediting board recognized by the U.S. Department of Education. The Commission may be contacted at (312) 440-4653 or 211 East Chicago Avenue, Chicago, Illinois 60611.

Licensing or Other Certification Students complete three National Board examinations each year administered by the Dental Assisting National Board, and are also eligible to receive all state required credentials, by submitting one clinical board and successfully completing the program.

Admission Information Contact the Health Professions Department or see lanecc.edu/hp/dental/da.htm

For assistance with meeting application or program requirements, contact Counseling and Advising in Building 1 room 103 or E-mail DAProgram@lanecc.edu with your specific questions. An online Academic Advising resource can be found by going to lanecc.edu/. Choose the "Moodle" link and in search courses type in the program name (e.g. Dental Assisting). Select "Academic Advising Resources for Dental Assisting".

Dental Assisting is a concentrated program that requires good reading and study skills. Students are encouraged to take DA 110 Health Sciences and DA 103 Dental Law and Ethics prior to entry into the program. Evidence of a physical examination (within the previous nine months) must be submitted prior to admission to the program.

Continuing Education The employed dental assistant may be eligible to register for any course offered if space permits and if the working assistant meets state credentialing qualifications by contacting the Program Coordinator, Leslie Greer 541.463.5638.

Cooperative Education (Co-op) Co-op is a required class for students enrolled in the Dental Assisting Program. Through Co-op, students spend a minimum of 24 hours a week during spring term working in at least two different professional dental offices. Co-op offers students the opportunity to gain skills, connect theory and practice, and make contacts for job openings. Contact Leslie Greer, Dental Assisting Co-op Coordinator, Bldg. 4, Rm. 135, 541.463.5638, greerl@lanecc.edu

Program Coordinator: Leslie Greer 541.463.5638

Prerequisites	Credits
MTH 052 Basic Math Applications (or higher) *	3
DA Human Relations requirement ^{5,6}	3

Choice of:.....	3-4
WR 115 Introduction to College Writing ^G	
WR 121 Introduction to Academic Writing ^G	
Choice of:.....	4
CIS 101 Computer Fundamentals or	
CS 120 Concepts of Computing: Information Processing	
Total Credits	13-14

One-Year Certificate of Completion

	Fall
DA 107 Dental Health Education 1 ^{*,1,2,3,G}	1
DA 110 Health Sciences ^{1,3,G}	3
DA 115 Dental Anatomy ^{*,1,2,3,G}	3
DA 192 Dental Materials 1 ^{*,2,3,G}	3
DA 195 Chairside Procedures 1 ^{*,1,2,3,G}	6
DA 210 Dental Radiology 1 ^{*,1,2,3,G}	4
Total Credits	20
	Winter
DA 108 Dental Health Education 2 ^{*,2,3,G}	3
DA 193 Dental Materials 2 ^{*,2,3,G}	3
DA 194 Dental Office Procedures ^{*,2,3,G}	3
DA 196 Chairside Procedures 2 ^{*,2,3,G}	7
DA 211 Dental Radiology 2 ^{*,2,3,G}	2
Total Credits	17
	Spring
DA 102 Advanced Clinical Experiences ^{*,3,G}	3
DA 103 Dentistry, Law and Ethics ^{*,3,4}	2
DA 206 Co-op Ed Seminar: Dental Assisting ^{*,2,3,G}	1
DA 280 Co-op Ed: Dental Assisting ^{*,2,3,G}	6
Total Credits	12

- 1 To be taken first year if program extended over two years.
- 2 Must be enrolled in Dental Assisting Program
- 3 Degree or certificate requirement. Must be passed with a grade of 75% or better to remain in the Dental Assisting program.
- 4 Online class only
- 5 Select from these approved Human Relations Courses:
 - CG 100 College Success
 - CG 140 Career and Life Planning
 - CG 144 Introduction to Assertive Behavior
 - CG 145 Coping Skills for Stress and Depression
 - CG 203 Human Relations at Work
 - CG 204 Eliminating Self-Defeating Behavior
 - CG 211,212 Dreikursian Principles of Child Guidance 1,2
 - CG 213 Improving Parent-Child Relations
 - PHL 201 Ethics
 - PHL 205 Contemporary Moral Issues
 - PS 204 Introduction to Comparative Politics
 - PS 213 Peace and Conflict Studies: Local
 - PSY 110 Exploring Psychology
 - PSY 205 Applied Psychology
 - SOC 108A Selected Topics in Womens Studies
 - SOC 204 Introduction to Sociology
 - SOC 205 Social Stratification and Social Systems
 - SOC 206 Institutions and Social Change
 - SOC 207 Women and Work
 - SOC 210 Marriage, Family and Intimate Relations
 - SOC 211 Social Deviance
 - SOC 225 Social Problems
 - WS 101 Introduction to Women's Studies

Dental Hygiene

Offered by Health Professions Division, 541.463.5617

Two-Year Associate of Applied Science Degree

Purpose To prepare graduates for careers as licensed clinical dental hygienists providing preventive, therapeutic, restorative and educational methods for the control of oral disease and promotion of optimal oral health.

Learning Outcomes The graduate will:

- demonstrate ethics, values, knowledge and skills in the provision of evidence based dental hygiene practice.
- use critical thinking skills and self-evaluation in the provision of patient care, disease prevention and exposure control.
- select and plan educational and clinical services for periodontal diseases using appropriate interpersonal communication, comprehensive data collection, knowledge of periodontal conditions and therapies, and educational strategies.
- demonstrate application of refined instrumentation skills for periodontal, restorative and therapeutic interventions.
- initiate and assume responsibility for health promotion and disease prevention activities.
- use assessment, planning, implementation and evaluation in the provision of dental hygiene services for the general dental patient, special needs populations and community groups.
- use mathematical and statistical concepts to calculate dosages and assess dental research/literature for application to clinical and preventive dental care strategies.
- use appropriate library and information resources to research professional issues, community program planning and to support lifelong learning.

Job Openings Projected through 2018

Mid-Willamette region openings - 28 annually

Statewide openings - 159 annually

Wages

Lane County average hourly - \$36.41; average annual - \$75,724

Oregon average hourly - \$37.57; average annual - \$78,146

Costs (Estimate based on 2011 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition	\$7,644
Differential Fees [†]	\$10,116
Student and Program Fees	\$2,381
Other Course/Program Costs	\$12,508
Total Estimate	\$32,649

[†] This is the total of all the differential fees attached to Dental Hygiene courses. These fees and other course fees may change during the year - see the online credit class schedule for fees assigned to courses.

Estimated Program Costs Program costs are provided to students at required application review sessions; see application packet. Examination fees estimated at \$2,100 are paid in January of the second year of the curriculum. Clinical sites may require an application for licensure in Oregon (oregondentistry.org) and a criminal background check.

Program Accreditation The American Dental Association's Commission on Dental Accreditation, a specialized accrediting board recognized by the U.S. Department of Education. The Commission may be contacted at (312) 440-4653 or 211 East Chicago Avenue, Chicago, Illinois 60611.

Standard footnotes:

* Prerequisite required

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

R Required for AAS degree—see page 48

Licensing or Other Certification Required National Dental Hygiene Board and the Western Regional Examining Board for Local Anesthesia, Restorative Dentistry and Clinical Dental Hygiene.

Admission Information See lanecc.edu/hp/dental/dh.htm for additional information and the admission packet.

Prerequisites In order to apply for entry, all applicants must complete the following minimum prerequisites with a grade of C or better. Other specialized program requirements will be described in acceptance materials.

The following courses or their equivalent are required in order to apply to the program.

BI 112 Cell Biology for Health Occupations ^{*,G}	3
CH 112 Chemistry for Health Occupations ^{*,G}	3
WR 121 Introduction to Academic Writing ^{*,G}	4
BI 231 Human Anatomy and Physiology 1 ^{*,D,G}	4
BI 232 Human Anatomy and Physiology 2 ^{*,D,G}	4
FN 225 Nutrition ^{D,G}	4
Choice of:.....	3
SOC 204 Introduction to Sociology ^G	
SOC 205 Social Stratification and Systems ^G	
SOC 206 Institutions and Social Change ^G	
MTH 052 Math for Introductory Physical Sciences ^{*,G} or higher mathematics	4
Choice of:.....	4
SP 100 Basic Communication ^{D,G}	
SP 111 Fundamentals of Public Speaking ^{D,G}	
Choice of:.....	3
PSY 201, 202, 203 General Psychology ^G	
Total Credits	36

Cooperative Education (Co-op) Co-op offers students college credit and a grade for on-the-job work experience related to their educational and career goals. Through Co-op, students connect theory and practice, develop skills, expand career knowledge, and make contacts for the future. Work schedules and work sites vary. Only students who have received their official program acceptance letter or who are currently enrolled in the dental hygiene program may take Dental Hygiene Co-op. Contact Leslie Greer, Dental Hygiene Co-op Coordinator, Bldg. 4, Rm. 135, 541.463.5638, greerl@lanecc.edu

Counseling and Advising For assistance in meeting program or application requirements, please go to Counseling and Advising in Building 1, Room 103, or e-mail DAProgram@lanecc.edu

First Year	Fall
DH 107 Dental Infection Control and Safety ^{1,2,G}	1
DH 113 Dental Anatomy and Histology ^{*,1,2,G}	2
DH 118A Clinical Dental Hygiene 1 ^{*,1,2,G}	4
DH 118B Clinical Dental Hygiene 1 Lab ^{*,1,2,G}	2
DH 228 Oral Biology 1 ^{*,1,2,G}	4
DH 243A Oral Roentgenology 1 ^{*,1,2,G}	2
DH 243B Oral Roentgenology 1 Lab ^{*,1,2,G}	1
Total Credits	16

	Winter
DH 119A Clinical Dental Hygiene 2 ^{*,1,2,G}	3
DH 119B Clinical Dental Hygiene 2 Lab ^{*,1,2,G}	4
DH 139 Special Needs Dental Patient ^{1,2,G}	2
DH 229 Oral Pathology for the Dental Hygienist ^{*,1,2,G}	3
DH 244A Oral Roentgenology 2 ^{*,1,2,G}	1

DH 244B Oral Roentgenology 2 Lab ^{*,1,2,G}	1
Total Credits	14

	Spring
BI 233 Human Anatomy and Physiology 3 ^{*,2,G}	4
BI 234 Introductory Microbiology ^{*,2,G}	4
DH 120A Clinical Dental Hygiene 3 ^{*,1,2,G}	3
DH 120B Clinical Dental Hygiene 3 Lab ^{*,1,2,G}	4
DH 132 Dental Materials for the Dental Hygienist ^{*,1,2,G}	2
DH 254 Pharmacology ^{*,1,2,G}	3
Total Credits	20

	Summer
DH 280 Co-op Ed: Dental Hygiene.....	0-3

Second Year	Fall
DH 220A Clinical Dental Hygiene 4 ^{*,1,2,G}	2
DH 220B Clinical Dental Hygiene 4 Lab ^{*,1,2,G}	5
DH 233 Anesthesia/Analgesic for Dental Hygiene Therapy ^{*,2,G}	3
DH 270 Periodontology 1 ^{*,1,2,G}	2
DH 275 Dental Hygiene Restorative Functions 1 ^{*,2,G}	2
Choice of:.....	4
WR 123 Composition: Research ^{*,2,G}	
WR 227 Technical Writing ^{*,2,G}	
Total Credits	18

	Winter
DH 221A Clinical Dental Hygiene 5 ^{*,1,2,G}	2
DH 221B Clinical Dental Hygiene 5: Lab ^{*,1,2,G}	6
DH 237 Community Dental Health ^{1,2,G}	3
DH 271 Periodontology 2 ^{*,1,2,G}	1
DH 276 Restorative Functions 2 ^{*,2,G}	1
Total Credits	13

	Spring
DH 222A Clinical Dental Hygiene 6 ^{*,1,2,G}	2
DH 222B Clinical Dental Hygiene 6 Lab ^{*,1,2,G}	5
DH 234 Trends and Issues in Dental Hygiene ^{*,1,2,G}	2
DH 238 Community Dental Health ^{*,1,2,G}	1
Total Credits	10

- 1 Must be accepted in Dental Hygiene Program
2 Must be passed with a grade of "C" or better

Diesel Technology

Offered by the Advanced Technology Division, 541.463.5380

Two-Year Associate of Applied Science Degree

Lift Truck/Material Handling Equipment Technician Option

Two-Year Certificate of Completion

Purpose To prepare the graduate for employment in occupations such as heavy equipment technician, highway truck technician, and lift truck and material handling technician. Possible job opportunities are available with truck fleets, logging fleets, heavy construction companies, OEM dealerships, road construction contractors, parts sales and service, and general heavy equipment repair shops.

Learning Outcomes The graduate will:

- access library, computing, and communications services and obtain information and data from regional and national networks.
- be able to explain and identify various technologies used in

the repair of on- and off-highway vehicles.

- demonstrate and use industry safety standards.
- demonstrate basic math skills using formulas to find force, pressure, area, and volume.
- demonstrate industry diesel engine overhaul, troubleshooting and repair procedures using industry standard tooling and equipment including disassembly, failure analysis, assembly, and operation of engine on a dynamometer.
- demonstrate industry troubleshooting and repair procedures of diesel engine fuel systems including disassembly, failure analysis, assembly and operation of major components.
- demonstrate industry troubleshooting and repair procedures of heavy equipment brake systems including disassembly, failure analysis, assembly and operation of major components.
- demonstrate industry troubleshooting and repair procedures of heavy equipment power train systems including disassembly, failure analysis, assembly and operation of major components.
- demonstrate industry troubleshooting procedures to diagnose and repair electrical systems including starting, charging, air conditioning, electronic control systems and lighting.
- demonstrate industry troubleshooting procedures to diagnose and repair hydraulic systems used on off- and on-highway vehicles including forklifts, crawlers, excavators, backhoes, skidsteers, and powershift transmissions.
- use lab station simulators to diagnose and troubleshoot system components.

Job Openings Projected through 2018

Lane County openings - 13 annually

Statewide openings - 136 annually

Wages

Lane County average hourly - \$20.44; average annual - \$42,512

Oregon average hourly - \$21.04; average annual - \$43,763

Costs (Estimate based on 2011 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees.....	\$10,160
Differential Fees [†]	\$2,352
Other Course/Program Costs.....	886
Tools.....	\$400
Books and supplies.....	\$1,300
Total Estimate \$15,098	

[†] This is the total of all the differential fees attached to Diesel Technology courses. These fees and other course fees may change during the year - see the online credit class schedule for fees assigned to courses.

Program Accreditation Association of Equipment Distributors Foundation (AEDF). Membership: Northwest Diesel Industry Council (NDIC) and Oregon Trucking Association (OTA)

Prerequisites Minimum placement score of 68 in Reading OR completion of RD 080 OR prior college. A high school diploma or equivalent is recommended for all applicants to this program.

Note: See counselor or advisor to learn what entry-level skills are suggested for successful completion of this program.

Admission Information See lanecc.edu/advtech/DS/index.htm or contact the Advanced Technology Division, AdvTechPrograms@lanecc.edu

Cooperative Education (Co-op) Co-op offers students college credit and a grade for on-the-job work experience related to their educational and career goals. Through Co-op, students connect theory and practice, develop skills, expand career

knowledge, and make contacts for the future. Work schedules and work sites vary. Under the supervision of the Diesel Technology Co-op Coordinator and with instructor consent, a maximum of 18 Co-op credits in DS 280 may be earned in lieu of required Diesel Technology course credits. Contact Marv Clemmons, Diesel Technology Co-op Coordinator, Bldg. 8, Rm. 111, 541.463.3158, clemonsm@lanecc.edu

Two-Year Associate of Applied Science Degree

First Year	Fall
DS 155 Heavy Equipment Hydraulics ^{*,D,G}	12
MTH 060 Beginning Algebra ^{*,D,G}	4
or higher mathematics	4
Total Credits	16

	Winter
DS 154 Heavy Duty Braking Systems ^{*,D,G}	12
WLD 121 Shielded Metal Arc Welding 1 [*]	4
PE/Health requirement ^{D,R}	3
Total Credits	19

	Spring
DS 158 Heavy Equipment Chassis and Power Trains ^{*,D,G}	12
Human Relations requirement ^R	3
WR 115W Introduction to College Writing: Workplace Emphasis ^D or higher writing	3
Total Credits	18

Second Year	Fall
DS 256 Diesel and Auxiliary Fuel Systems ^{*,D,G}	12
MTH 076 Applied Geometry for Technicians [*] or higher mathematics	4
Choice of:.....	3-4
MFG 197 Manufacturing Technology ^{*,D,G}	
WLD 122 Shielded Metal Arc Welding 2 [*]	
Total Credits	19-20

	Winter
DS 257 Diesel Electrical Systems ^{*,D,G}	12
CS 120 Concepts of Computing: Information Processing or higher computer science.....	4
WLD 143 Wire Drive Welding 1 [*]	4
Total Credits	20

	Spring
DS 259 Diesel Engines and Engine Overhaul ^{*,D,G}	12
Arts and Letters requirement ^R	3
DS 280 Co-op Ed: Diesel (optional elective)	
Total Credits	15

Two-Year Certificate of Completion

Gainful Employment Disclosure

Standard Occupational Classification: 49-3031.00

Go to websites below for information about related occupations:

Bus and Truck Mechanics and Diesel Engine Specialists
onetonline.org/link/summary/49-3031.00

Related Occupation:

Mobile Heavy Equipment Mechanics, Except Engines
onetonline.org/link/summary/49-3042.00

How much will the program cost?

(Estimate based on 2011-12 data. Consult Lane's website for updated tuition.)

Standard footnotes:

* Prerequisite required

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

R Required for AAS degree—see page 48

Resident tuition and fees	\$12,603
Books, supplies, program costs	\$2,456
On-Campus room and board	Not offered
Total Estimate \$15,059	

What's included?

Program Costs: lanecc.edu/advtech/AT/costsheetAT.htm

What are financing options to pay for the program?

In addition to any grant and scholarship aid for which they are eligible, 100% of program graduates used loans to finance their education. The median debt for 2010-11 program graduates:

Federal Loans	\$9,299
Institutional financing	\$571

No 2010-11 program graduates used private educational loans.

How long will it take to complete this program?

The program is designed to take 6 terms, or about 24 months of study to complete.

How many 2010-11 Diesel Technology graduates completed within the designed program length?

None completed within 24 months.

What are my chances of getting a job when I graduate?

Lane County openings - 13 annually

Statewide openings - 136 annually

Will I be able to pay back student loans?

Most Lane students graduating in 2009-10 who took out federal student loans are successfully repaying them. Lane's federal loan student default rate for that period was 11.3%.

Where are comparable programs offered?

Program	Contact	2009 Oregon Completers
Diesel Mechanics	Apprenticeship Division	19

First Year

DS 155 Heavy Equipment Hydraulics ^{*,D,G}	Fall 12
MTH 060 Beginning Algebra or MTH 076 Applied Geometry for Technicians ^{*,D,G} or higher mathematics	4
Total Credits	16

Winter

DS 154 Heavy Duty Braking Systems ^{*,D,G}	12
WLD 121 Shielded Metal Arc Welding 1 [*]	4
Total Credits	16

Spring

DS 158 Heavy Equipment Chassis and Power Trains ^{*,D,G}	12
Human Relations requirement	3
WR 115W Introduction to College Writing: Workplace Emphasis ^D or higher writing	3
Total Credits	18

Second Year

DS 256 Diesel and Auxiliary Fuel Systems ^{*,D,G}	Fall 12
Choice of:	3-4
MFG 197 Manufacturing Technology ^{*,D,G}	
WLD 122 Shielded Metal Arc Welding 2 [*]	
Total Credits	15-16

Winter

DS 257 Diesel Electrical Systems ^{*,D,G}	12
WLD 143 Wire Drive Welding 1 [*]	4
Total Credits	16

Spring

DS 259 Diesel Engines and Engine Overhaul ^{*,D,G}	12
PE/Health elective ^D	3
Total Credits	15

Diesel Technology: Lift Truck/Material Handling Equipment Technician Option

Two-Year Associate of Applied Science Degree

(This curriculum is under review during academic year 2012-13. See an advisor or counselor for current information.)

Drafting

Offered by the Advanced Technology Division,
541.463.5380

Two-Year Associate of Applied Science Degree

One-Year Certificate of Completion

Purpose To prepare students for careers in architectural and mechanical drafting. The profession requires attention to detail and the ability to learn mathematical, visual, and communication skills. Architectural Drafters may work for a residential designer, a structural engineer, an architect, a cabinet shop, or a construction firm. Mechanical Drafters may work in the manufacture of electronics, precision sheet metal, heavy equipment, steel fabrication, process piping, and plastics.

Learning Outcomes The graduate of the one-year program will:

- demonstrate basic competence in the use of at least one CAD software program. (Setup a drawing, create and modify text and geometry, use associative dimensioning correctly, create, store, and use blocks or symbols, manage object properties including linetype and layer, create objects in three dimensions, and print or plot drawings using a correct scale.)
- demonstrate basic graphical literacy.
- explain basic standard practices in architectural and mechanical drafting.
- interpret the concepts of a problem-solving task and translate them into mathematical language, and solve using mathematical operations.

In addition to the above outcomes, the graduate of the two-year program will:

- use graphic principles in the solution of problems relating to drafting and/or design.
- access information from public libraries, research libraries, online sources, appropriate codes and standards, professional organizations, and vendor catalogs.
- produce drawings in accordance with industry standards, e.g., ANSI/ASME, AIA, building codes.

Job Openings Projected through 2018

Lane County openings - 23 annually

Statewide openings - 267 annually

Wages

Lane County average hourly - \$19.53; average annual - \$40,621

Oregon average hourly - \$22.10; average annual - \$45,968

Costs (Estimate based on 2011 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees	\$8,828
Other Course/Program Costs	\$360
Tools	\$25
Books and supplies	\$1,250

Total Estimate \$10,463

Drafting course fees and other course fees may change during the year - see the online credit class schedule for fees assigned to courses.

Prerequisites Minimum placement score of 68 in Reading OR completion of RD 080 OR prior college. A high school diploma or equivalent is recommended for all applicants to this program. Basic computer literacy skills are a prerequisite to any CAD course.

Admission Information See lanecc.edu/advtech/DFT/index.htm or contact the Advanced Technology Division, AdvTechPrograms@lanecc.edu

Cooperative Education (Co-op) Co-op offers drafting students college credit and a grade for on-the-job work experience related to their educational and career goals. Through Co-op students connect theory and practice, develop skills, expand career knowledge, and make contacts for the future. Work schedules and work sites vary. Contact Tamara Pinkas, Drafting Co-op Coordinator, Bldg. 19, Rm. 231D, 541.463.5011, pinkast@lanecc.edu

Two-Year Associate of Applied Science Degree

First Year	Fall
DRF 142 Graphic Concepts ^{*,D,G}	2
DRF 167 CAD 1 ^{*,D,G}	4
CS 120 Concepts of Computing: Information Processing or higher computer science	4
MTH 076 Applied Geometry for Technicians ^{*,D,G} or higher mathematics	4
Total Credits	14

	Winter
CST 122 Construction Codes ^{D,G}	2
DRF 168 CAD 2 ^{*,D,G}	4
DRF 208 Residential Buildings ^{*,D,G}	4
Human Relations Requirement ^R	3
MTH 086 Applied Algebra for Technicians [*] or higher	4
Total Credits	17

	Spring
DRF 121 Mechanical Drafting ^{*,D,G}	4
DRF 137 Architectural Drafting - Plans ^{*,D,G}	4
DRF 206 Co-op Ed: Drafting Seminar ^{*,D}	2
DRF 245 Solid Modeling ^{*,D,G}	3
WR 121 Introduction to Academic Writing ^{*,D}	4
Total Credits	17

Second Year	Fall
DRF 205 Drafting: Structures ^{*,D,G}	4
DRF 210 Commercial Buildings ^{*,D,G}	4
DRF 232 Mechanical Design ^{*,D,G}	4
DS 155 Heavy Equipment Hydraulics ^{*,D,G}	1
PE/Health requirement ^{D,R}	3
Total Credits	16

	Winter
DRF 207 Drafting: Strength of Materials ^{*,D,G}	4
DRF 220 Building Information Modeling ^{*,D,G}	4
DRF 233 Geometric Tolerancing ^{*,D,G}	4
WR 227 Technical Writing [*]	4
Total Credits	16

	Spring
DRF 211 Mechanical Systems and Environmental Design ^{*,D,G}	4
DRF 234 Power Trains and Accessories Design ^{*,D,G}	4
DRF 203 Electrical Drafting ^{*,D,G}	2
ENGR 280D Co-op Ed: Drafting ^{D,G}	3
Total Credits	13

One-Year Certificate of Completion

Gainful Employment Disclosure

Standard Occupational Classification: 17-3011.01

Go to websites below for information about related occupations:

Architectural Drafters

onetonline.org/link/summary/17-3011.01

Related Occupation:

Civil Drafters

onetonline.org/link/summary/17-3011.02

Mechanical Drafters

onetonline.org/link/summary/17-3013.00

How much will the program cost?

(Estimate based on 2011-12 data. Consult Lane's website for updated tuition.)

Resident tuition and fees	\$5,013
Books, supplies, program costs	\$1,790
On-Campus room and board	Not offered

What's included?

Program Costs: lanecc.edu/advtech/AT/costsheetAT.htm

What are financing options to pay for the program?

In addition to any grant and scholarship aid for which they are eligible, 73% of program graduates used loans to finance their education. The median debt for 2010-11 program graduates:

Federal Loans	\$8,640
---------------------	---------

No 2010-11 program graduates used private educational loans or institutional financing.

How long will it take to complete this program?

The program is designed to take 3 terms, or about 12 months of study to complete.

How many 2010-11 Drafting graduates completed within the designed program length?

None completed within 12 months.

What are my chances of getting a job when I graduate?

Lane County openings - 8 annually

Statewide openings - 82 annually

Will I be able to pay back student loans?

Most Lane students graduating in 2009-10 who took out federal student loans are successfully repaying them. Lane's federal loan student default rate for that period was 11.3%.

Where are comparable programs offered?

School	City	2009 Graduates
Central Oregon Community College	Bend	4
Chemeketa Community College	Salem	2
Clackamas Community College	Oregon City	--
Oregon Coast Community College	Newport	1

	Fall
DRF 142 Graphic Concepts ^{*,D,G}	2
DRF 167 CAD 1 ^{*,D,G}	4
Choice of:.....	3-4
CIS 101 Computer Fundamentals	
CS 120 Concepts of Computing: Information Processing or higher computer science course	

Standard footnotes:

* Prerequisite required

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

R Required for AAS degree—see page 48

MTH 076 Applied Geometry for Technicians ^{*,D,G} or higher mathematics	4
Total Credits	13-14
Winter	
CST 122 Construction Codes ^{D,G}	2
DRF 168 CAD 2 ^{*,D,G}	4
DRF 208 Residential Buildings ^{*,D,G}	4
Human Relations Requirement ^D	3
MTH 086 Applied Algebra for Technicians [*] or higher mathematics [*]	4
Total Credits	17
Spring	
DRF 121 Mechanical Drafting ^{*,D,G}	4
DRF 137 Architectural Drafting-Plans ^{*,D,G}	4
DRF 206 Co-op Ed: Drafting Seminar ^D	2
DRF 245 Solid Modeling ^{*,D,G}	3
WR 121 Introduction to Academic Writing ^{*,D} or higher writing	4
Total Credits	17

Early Childhood Education

**Offered by the Child and Family Education Department,
541.463.3522**

Two-Year Associate of Applied Science Degree

One-Year Certificate of Completion

Career Pathway Certificate of Completion, Guidance and Curriculum

**Career Pathway Certificate of Completion,
Infant and Toddler**

Purpose To prepare students for successful careers as childcare professionals in a variety of settings such as childcare centers, on-site childcare centers in the business community, university and community college laboratory programs, government sponsored programs such as Head Start and Even Start, and in family childcare businesses.

Learning Outcomes The graduate will:

- plan and carry out developmentally appropriate curriculum activities for children ages infant through kindergarten.
- choose age appropriate guidance methods to enhance the child's development of self-worth, self-esteem, problem-solving skills and abilities for day-to-day life.
- design and effectively use environments that maximize children's abilities to make choices, explore personal power, develop empathy and caring behaviors, learn responsible roles for the classroom and appropriate relationships with others.
- assist parents with skill building in the areas of guidance, nutrition, and appropriate activity choices, and work effectively in a variety of roles with children and families.
- facilitate the operation of childcare programs ranging from working with children and families to administration and management.
- develop research skills and confidence to access information using print and computer resources, specifically the Internet, the library's on-line catalog and basic library reference sources.
- master application of basic mathematics to use in everyday life and business transactions, including measurement, introduction of probability and statistics, reading graphs and tables, and signed numbers.

Costs (Estimate based on 2011 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees.....	\$8,650
Other Course/Program Costs.....	\$150
Books and supplies.....	\$600
Total Estimate	\$9,400

Early Childhood Education course fees and other course fees may change during the year - see the online credit class schedule for fees assigned to courses.

Childcare Worker Job Openings Projected through 2018

Lane County openings - 20 annually

Statewide openings - 206 annually

Wages

Lane County average hourly - \$9.88; average annual - \$20,556

Oregon average hourly - \$10.36; average annual - \$21,549

Teacher Assistant Job Openings Projected through 2018

Lane County openings - 64 annually

Statewide openings - 558 annually

Wages

Lane County average hourly - \$12.99; average annual - \$27,025

Oregon average hourly - \$13.12; average annual - \$27,284

Preschool Teacher Job Openings Projected through 2018

Lane County openings - 19 annually

Statewide openings - 210 annually

Wages

Lane County average hourly - \$12.01; average annual - \$20,800

Oregon average hourly - \$11.97; average annual - \$24,898

Licensing or Other Certification Exams Required Individuals are not issued a license, but must meet requirements as defined by the State of Oregon Child Care Division.

Admission Information Application information is available from the Early Childhood Education program coordinator Jean Bishop, Bldg. 24, Rm. 121, 541.463.5287 and Enrollment and Student Financial Services, as well as online at lanecc.edu/cfe/ecel/index.html

Cooperative Education (Co-op) Co-op offers sixth term Early Childhood Education students college credit and a grade for on-the-job work experience related to their educational and career goals. Through Co-op, students connect theory and practice, develop skills, expand career knowledge, and make contacts for the future. Work schedules and work sites vary. Students are required to do one term of Co-op for five credits to earn the AAS degree and are eligible to enroll after they have reached sixth-term standing in the program. Contact Kathleen Lloyd, Early Childhood Ed Co-op Coordinator, Bldg. 27, Rm. 413, 541.463.5527, lloydk@lanecc.edu Visit the web lanecc.edu/cfe/ecel/index.html for detailed information about the program and lab school.

Two-Year Associate of Applied Science Degree

First Year	Fall
ECE 120 Intro to Early Childhood Education ^{D,G}	2
ECE 130 Child Care and Guidance ^{D,G}	3
ECE 140 Theory and Supervised Teaching 1 ^{D,G}	3

HDFS 226 Child Development ^{D,G}	3
WR 115 Introduction to College Writing or other AAS equivalent ^R	4
Total Credits	15

Winter

ECE 105 Health and Safety Issues	2
ECE 110 Observing Children's Behavior ^{D,G}	1
ECE 150 Creative Activities for Children ^{D,G}	3
ECE 170 Infants and Toddlers ^{D,G}	4
ECE 140 Theory and Supervised Teaching 1 ^{D,G}	3
MTH 025 Basic Math Applications ^G or higher level mathematics ^R	3
Program elective (refer to list below) ^{1,G}	3
Total Credits	19

Spring

ECE 160 Exploring Early Childhood Curriculum ^{D,G}	4
ECE 240 Theory and Supervised Teaching 2 ^{*,D,G}	4
FN 230 Family, Food and Nutrition ^{D,G}	3
Choice of:	3-4
ANTH 103 Cultural Anthropology ^{D,G}	
CG 203 Human Relations at Work ^{D,G}	
Total Credits	14-15

Second Year**Fall**

ECE 210 Applying Early Childhood Curriculum ^{*,D,G}	4
ECE 240 Theory and Supervised Teaching 2 ^{*,D,G}	4
Program elective (refer to list below) ^{1,G}	3
Science/ Math/ Computer Science requirement ^R	4
Total Credits	15

Winter

ECE 230 Family, School, Community Relations ^{D,G}	3
HDFS 227 Children Under Stress ^{*,D,G}	3
ECE 240 Theory and Supervised Teaching 2 ^{*,D,G}	4
General Education requirement, choice of:	4
Arts/Letters ^R	
Social Science ^R	
Science/Math/Computer Science ^R	
Total Credits	14

Spring

ECE 250 Infant and Toddler Environments ^{*,D,G}	3
ECE 260 Administration of Child Care Programs ^{*,G}	3
ED 280EC Co-op Ed: Early Childhood Ed ^{D,G}	5
Arts/Letters requirement ^R	3
Choice of:	3
Health requirement ^R	
Physical Education Activity requirement ^R	
Total Credits	17

1 Program electives may be selected from the following list or be approved by the ECE Program Coordinator in advance:

CG 144 Introduction to Assertive Behavior
CG 145 Coping Skills for Stress and Depression
CG 204 Eliminating Self-Defeating Behavior
CG 211 Dreikursian Principles of Child Guidance 1
CG 212 Dreikursian Principles of Child Guidance 2
ECE 240 Theory and Supervised Teaching 2 (extra term)
ED 225 Creative Dance for Children
ENG 100 Children's Literature
HDFS 228 Young Children with Special Needs
HDFS 229 Middle Childhood
HDFS 233 Parenting

HDFS 298 IS: Child Development
ECE 253 Diversity Issues In ECE

Early Childhood Education**One-Year Certificate of Completion**

Purpose To prepare students for successful careers as childcare professionals in a variety of settings such as for-profit and not-for-profit childcare centers, on-site childcare centers in the business community, university and community college laboratory programs, government sponsored programs such as Head Start and Even Start, and in a family childcare business operated from their own home.

Learning Outcomes The graduate will:

- choose age appropriate guidance methods to enhance the child's development of self-worth, self-esteem, problem-solving skills and abilities for day-to-day life.
- design and effectively use environments that maximize children's abilities to make choices, explore personal power, and develop empathy and caring
- master application of basic mathematics to use in everyday life and business transactions, including measurement, introduction of probability and statistics, reading graphs and tables, and signed numbers.

Gainful Employment Disclosure**Standard Occupational Classification: 25-2011.00**

Go to websites below for information about related occupations:

Preschool Teachers, Except Special Education

onetonline.org/link/summary/25-2011.00

Related Occupation:

Kindergarten Teachers, Except Special Education

onetonline.org/link/summary/25-2012.00

How much will the program cost?

(Estimate based on 2011-12 data. Consult Lane's website for updated tuition.)

Resident tuition and fees	\$4,445
Books, supplies, program costs	\$1,650
On-Campus room and board	Not offered
Total Estimate	\$6,095

What's included?

Program Costs: lanecc.edu/es/feesandexpenses.html

What are financing options to pay for the program?

In addition to any grant and scholarship aid for which they are eligible, 86% of program graduates used loans to finance their education. The median debt for 2010-11 program graduates:

Federal Loans	\$12,231
Institutional financing	\$756

No 2010-11 program graduates used private educational loans.

How long will it take to complete this program?

The program is designed to take 3 terms, or about 12 months of study to complete.

How many 2010-11 Early Childhood Education graduates completed within the designed program length?

None completed within 12 months.

What are my chances of getting a job when I graduate?

Lane County openings - 19 annually

Statewide openings - 210 annually

Will I be able to pay back student loans?

Most Lane students graduating in 2009-10 who took out federal

Standard footnotes:

* Prerequisite required

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

R Required for AAS degree—see page 48

student loans are successfully repaying them. Lane's federal loan student default rate for that period was 11.3%.

Where are comparable programs offered?

School	City	2009 Graduates
Blue Mountain Community College	Pendleton	--
Linn-Benton Community College	Albany	3
Tillamook Bay Community College	Tillamook	--

	Fall
ECE 120 Intro to Early Childhood Education ^{D,G}	2
ECE 130 Child Care and Guidance ^{D,G}	3
ECE 140 Theory and Supervised Teaching 1 ^{D,G}	3
HDFS 226 Child Development ^{D,G}	3
WR 115 Introduction to College Writing or other AAS equivalent ^R	4
Total Credits	15

	Winter
ECE 110 Observing Children's Behavior ^{D,G}	1
ECE 140 Theory and Supervised Teaching 1 ^{D,G}	3
ECE 150 Creative Activities for Children ^{D,G}	3
ECE 170 Infants and Toddlers ^{D,G}	4
MTH 025 Basic Math Applications ^G or higher level mathematics ^R	3
Program elective (refer to list below) ^{1,G}	3
Total Credits	17

	Spring
ECE 160 Exploring Early Childhood Curriculum ^{D,G}	4
ECE 240 Theory and Supervised Teaching 2 ^{*,D,G}	4
FN 230 Family, Food and Nutrition ^{D,G}	3
Choice of:.....	3-4
ANTH 103 Cultural Anthropology ^{D,G}	
CG 203 Human Relations at Work ^{D,G}	
Total Credits	14-15

1 Program electives may be selected from the following list or be approved by the ECE Program Coordinator in advance:

CG 144 Introduction to Assertive Behavior
CG 145 Coping with Stress and Depression
CG 204 Eliminating Self-Defeating Behavior
CG 211 Dreikursian Principles of Child Guidance 1
CG 212 Dreikursian Principles of Child Guidance 2
ECE 210 Applying Early Childhood Curriculum
ED 225 Creative Dance for Children
ENG 100 Children's Literature
HDFS 228 Young Children with Special Needs
HDFS 229 Middle Childhood
HDFS 233 Parenting
HDFS 298 IS: Child Development

Guidance and Curriculum

Career Pathway Certificate of Completion

Purpose Prepares graduates to work as early childhood education teaching assistants.

Learning Outcomes The graduate will:

- analyze teaching experiences and goals, then match planning to philosophy of teaching and educational practice.
- be able to explain theories of development relating to the early years.
- express and understand the use of developmentally appropriate guidance.
- identify developmental characteristics and developmental needs of young children in the areas of physical, intellectual, emotional, social and language development.

	Fall
ECE 130 Child Care and Guidance ^{D,G}	3
ECE 140 Theory and Supervised Teaching 1 ^{D,G}	3
ECE 160 Exploring Early Childhood Curriculum ^{D,G}	4
ECE 210 Applying Early Childhood Curriculum ^{*,D,G}	4
HDFS 226 Child Development ^{D,G}	3
Total Credits	17

Infant and Toddler

Career Pathway Certificate of Completion

Purpose Prepares graduates to plan quality and developmentally appropriate environments for infants and toddlers.

Learning Outcomes The graduate will:

- choose suitable equipment and materials for infants and toddlers.
- express and understand the use of developmentally appropriate guidance.
- identify developmental characteristics and developmental needs of infants and toddlers in the areas of physical, intellectual, emotional, social and language development.
- Graduates will identify state rules and regulations which govern certification of infant and toddler centers.

	Fall
ECE 130 Child Care and Guidance ^{D,G}	3
ECE 140 Theory and Supervised Teaching 1 ^{D,G}	3
ECE 170 Infants and Toddlers ^{D,G}	4
ECE 250 Infant and Toddler Environments ^{*,D,G}	3
HDFS 226 Child Development ^{D,G}	3
Total Credits	16

Electrician Apprenticeship Technologies

**Offered by the Advanced Technology Division,
541.463.5380**

**Associate of Applied Science Degree, Electrician
Apprenticeship Technologies**

**Certificate of Completion, Limited Electrician
Apprenticeship Technologies**

**Certificate of Completion, Electrician Apprenticeship
Technologies**

Purpose To provide a structured system of training in the electrician trade or occupation leading to certification and journey-level status, only for apprentices who are sponsored by individual employers, accepted by a Joint Apprenticeship Training Committee, and registered with the State of Oregon Bureau of Labor and Industries.

Learning Outcomes The graduate will:

- perform the duties and responsibilities of the electrician trade/occupation.
- apply theory to electrical wiring.
- demonstrate and use industry safety standards.
- develop attitudes conducive to improve customer relations skills in the electrician trade.
- develop communication and critical thinking skills necessary for job advancement.
- use appropriate library and information resources to research professional issues and support lifelong learning.

- access library, computing, and communications services, and appropriately select information and data from regional, national, and international networks.
- represent, analyze and determine rules for finding patterns relating to linear functions, non-linear functions and arithmetic sequences with tables, graphs, and symbolic rules.
- adapt to new job requirements to qualify for advancement in becoming lead supervisors.
- repair and install electrical wire devices according to licensure regulations to meet National Electrical Code and Oregon Building Codes Division for Inside Wire Electrician, Limited Energy Technician-License A and License B, Limited Maintenance Electrician, and Manufacturing Plant Electrician.
- complete 4000-8000 hours State of Oregon-approved on-the-job-training.

Job Openings Projected through 2018

Lane County openings - 16 annually

Statewide openings - 199 annually

Wages

Lane County average hourly - \$28.72; average annual - \$59,742

Oregon average hourly - \$31.22; average annual - \$64,938

Costs (Estimate based on 2011 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees.....	\$10,325
Books and supplies.....	\$1,350
Total Estimate \$11,675	

Electrician Apprenticeship Technologies course fees and other course fees may change during the year - see the online credit class schedule for fees assigned to courses. Costs of books and tools for the related training classes in the electrician programs vary with each individual trade/occupation.

Apprentice Wages Although wages vary, the average starting wage of an apprentice is about 50 percent of a journey worker's rate of pay. Apprentices usually earn a five-percent raise every six months if training and school performance is satisfactory. Check the Bureau of Labor and Industries website: *boli.state.or.us*

Program Certification An apprenticeship "Award of Completion" issued by the Oregon Bureau of Labor and Industries Apprenticeship and Training Division certifies that an individual has been trained in all aspects of an occupation and has met the requirements for program completion. This certificate is recognized throughout Oregon and industry-wide as a valid indicator of high quality, standardized training, and it provides on-the-job training documentation for community college credit.

In addition, The Oregon community college Electrician Apprenticeship Technologies pathway provides statewide transfer opportunities, ladder certificates of completion, and an optional transfer path into Oregon Institute of Technology Bachelor of Science degree in Operations Management. The Electrician Apprenticeship Technologies pathway includes an advising guide with a set of recommended courses that satisfy both the AAS degree and the Oregon Transfer Module (OTM). Students who complete the recommended set of OTM

courses may apply for 45 credits of guaranteed block transfer to any other community college or Oregon University System institution.

Licensing or Other Certification Electrician trades require successful completion of trade-specific licensure examinations through the Oregon Building Codes Division.

Pre-requisites Minimum placement scores – Reading 68, Writing 64, and Math parts A, B, C with 7/10 score. Note: See the counselor or advisor to obtain the suggested entry-level skills for successful completion of these programs.

Admission Information Students must be registered apprentices with the State of Oregon Bureau of Labor and Industries and accepted by a Joint Apprenticeship Training Committee. Selection to the program is by a point system from a pool of qualified applicants. Information on the point system is available at the Oregon Bureau of Labor and Industries website: *boli.state.or.us*. In most cases minimum qualifications to begin an apprenticeship include a minimum age of 18 years, a high school diploma with a GPA of 2.0 or higher or GED, and a minimum of a 'C' grade for one year of high school algebra (or equivalent).

Electrician Apprenticeship Technologies

Associate of Applied Science

To earn the degree, a student must:

- complete 4000-8000 hours State of Oregon-approved on-the-job training and provide a State of Oregon Apprenticeship Training Journey-level card or BOLI-ATD Certificate of Completion
- demonstrate an equivalency of 90 credit hours, with a minimum of 24 credits at Lane, including the last term at Lane
- complete all requirements for an AAS degree as listed below
- earn a cumulative grade point average above 2.0 at Lane or transfer credits earned at other regionally accredited colleges or universities

AAS requirements	Credits
General Education	
WR 115W Intro to College Writing: Workplace Emphasis ^D or higher-level writing	3
MTH 060 Beginning Algebra ^D or higher-level math	4
PE/Health Requirement ^R	3
Arts and Letters requirement ^R	3
Human Relations requirement ^R	3
Science/Math/Computer Science requirement ^R	3
Choice of:.....	3
Arts and Letters requirement ^R	
Human Relations/Social Science requirement ^R	
Science/Math/Computer Science requirement ^R	

Journey-level card from Oregon Bureau of Labor and Industries

Apprenticeship and Training Division	22
Electrician Core-Related Training ^D (Choice of one of the following trades)	21-48

Limited Maintenance Electrician (21 credits)

ET 129 Electrical Theory 1

Standard footnotes:

* Prerequisite required

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

R Required for AAS degree—see page 48

ET 130 Electrical Theory 2
 ET 229 Motors 1
 ET 230 Motors 2
 APR 220 Electrical Code and Exam Prep or
 APR 228 Apprenticeship Blueprint Reading

Limited Energy Technician License B (27 credits)

APR 101A Trade Skills Fundamentals
 APR 140 Electrical System Installation Methods
 APR 141 Limited Voltage Electrical Circuits
 APR 142 Testing Equipment and Specialized Applications
 APR 143 Limited Voltage Cabling
 APR 144 System Planning and Maintenance
 APR 220 Electrical Code and Exam Prep

Limited Energy Technician License A (39 credits)

APR 101A Trade Skills Fundamentals
 APR 140 Electrical System Installation Methods
 APR 141 Limited Voltage Electrical Circuits
 APR 142 Testing Equipment and Specialized Applications
 APR 143 Limited Voltage Cabling
 APR 144 System Planning and Maintenance
 APR 220 Electrical Code and Exam Prep
 APR 240 Alarm Systems
 APR 241 Audio and Signaling Systems
 APR 242 Limited Voltage System Integration

Manufacturing Plant Electrician (37 credits)

APR 220 Electrical Code and Exam Prep
 APR 228 Apprenticeship Blueprint Reading
 ET 129 Electrical Theory 1
 ET 130 Electrical Theory 2
 ET 229 Motors 1
 ET 235 Programmable Controllers 2
 ET 234 Programmable Controllers 1
 ET 230 Motors 2
 WLD 121 Shielded Metal Arc Welding

Inside Wire Electrician (48 credits)

APR 130 Electrical Principles
 APR 131 Electrical Principles/Residential Wiring
 APR 132 Electrical Residential Wiring Lab
 APR 133 Electrical Generators, Transformers, and Motors 1
 APR 134 Electrical Generators, Transformers, and Motors 2
 APR 135 Electrical Generators, Transformers, and Motors Lab
 APR 220 Electrical Code and Exam Prep
 APR 225 Electrical Motor Controls
 APR 226 Electrical Grounding/Bonding and Blueprint Reading
 APR 227 Electrical System Troubleshooting

Program Electives to complete 90 credits for degree: 0-25

APR 101 Trade Skills Fundamentals
 APR 105 Residential Wiring
 ET 129 Electrical Theory 1
 ET 130 Electrical Theory 2
 ET 234 Programmable Controllers 1
 CS 120 Concepts of Computing
 CST 110 Blueprint Reading
 CST 111 Construction Orientation and Environment
 CST 118 Building Construction
 DRF 167 CAD 1
 HE 152 Drugs, Society and Behavior
 HE 252 First Aid
 MTH 076 Applied Geometry for Technicians
 MTH 111 College Algebra
 MTH 112 Trigonometry
 WLD 121 Shielded Metal Arc Welding 1

Electrician Apprenticeship Technologies

Certificate of Completion

Students may earn a Certificate of Completion in Electrician Apprenticeship Technologies by successfully completing 36-45

core related training credits with a 'C' or better in all courses, and completing related instruction in communications, computation, and human relations.

Learning Outcomes Graduates will:

- Apply theory to electrical wiring
- Repair and install electrical wire devices according to licensure regulations to meet NEC and OSC for Inside Electrician, Limited Energy Technician-License A, and/or Manufacturing Plant Electrician

To earn the certificate, student must:

- complete State of Oregon-approved on-the-job training and provide a State of Oregon Apprenticeship Training Journeyman card or BOLI-ATD Certificate of Completion:
 6000-Hour BOLI-ATD Trade: Limited Energy Technician—License A
 8000-Hour BOLI-ATD Trade: Inside Wire Electrician
 8000-Hour BOLI-ATD Trade: Manufacturing Plant Electrician
- complete related instruction credits 9
 (communication, computation, human relations)
- complete core-related training credits..... 39-48

Total Credits 48-57

Core Related Training requirements (Choice of one of the following trades)

Limited Energy Technician License A (39 credits)

APR 101A Trade Skills Fundamentals
 APR 140 Electrical System Installation Methods
 APR 141 Limited Voltage Electrical Circuits
 APR 142 Testing Equipment and Specialized Applications
 APR 143 Limited Voltage Cabling
 APR 144 System Planning and Maintenance
 APR 220 Electrical Code and Exam Prep
 APR 240 Alarm Systems
 APR 241 Audio and Signaling Systems
 APR 242 Limited Voltage System Integration

Manufacturing Plant Electrician (37 credits)

APR 220 Electrical Code and Exam Prep
 APR 228 Apprenticeship Blueprint Reading
 ET 129 Electrical Theory 1
 ET 130 Electrical Theory 2
 ET 229 Motors 1
 ET 230 Motors 2
 ET 235 Programmable Controllers 2
 ET 234 Programmable Controllers 1
 WLD 121 Shielded Metal Arc Welding 1

Inside Wire Electrician (48 credits)

APR 130 Electrical Principles
 APR 131 Electrical Principles/Residential Wiring
 APR 132 Electrical Residential Wiring Lab
 APR 133 Electrical Generators, Transformers, and Motors 1
 APR 134 Electrical Generators, Transformers, and Motors 2
 APR 135 Electrical Generators, Transformers, and Motors Lab
 APR 220 Electrical Code and Exam Prep
 APR 225 Electrical Motor Controls
 APR 226 Electrical Grounding/Bonding and Blueprint Reading
 APR 227 Electrical System Troubleshooting

Limited Electrician Apprenticeship Technologies

Certificate of Completion

Learning Outcomes Graduates will be able to:

- Repair or install electrical wire devices according to limited licensure regulations to meet National Electrical Code and Oregon Building Codes Division for Limited Energy Technician—License B, and/or Limited Maintenance Electrician

To earn the certificate, student must:

- complete 4000 hours State of Oregon-approved on-the-job training and provide a State of Oregon Apprenticeship Training Journey-level card or BOLI-ATD Certificate of Completion
- complete core related training of 21-27 credits

Core Related Training requirements (Choice of one of the following trades)

Complete with a 'C' or better in all courses
(Choice of one of the following trades)

Limited Maintenance Electrician (21 credits)

ET 129 Electrical Theory 1
ET 130 Electrical Theory 2
ET 229 Motors 1
ET 230 Motors 2
APR 220 Electrical Code and Exam Prep or
APR 228 Apprenticeship Blueprint Reading

Limited Energy Technician License B (27 credits)

APR 101A Trade Skills Fundamentals
APR 140 Electrical System Installation Methods
APR 141 Limited Voltage Electrical Circuits
APR 142 Testing Equipment and Specialized Applications
APR 143 Limited Voltage Cabling
APR 144 System Planning and Maintenance
APR 220 Electrical Code and Exam Prep

Electronic Technology

Offered by the Advanced Technology Division,
541.463.5380

Two-Year Associate of Applied Science Degree

Purpose To provide graduates with the basic principles of electronic theory and the associated lab skills needed for successful work in the electronics industry. A graduate qualifies for entry-level employment as an electronic engineering technician, electronic production technician, electronic instrument technician, industrial electronic technician, or for employment in the military.

Learning Outcomes The graduate will:

- learn systematic methods of problem solving
- demonstrate the ability to operate electronic test equipment such as digital oscilloscopes, DMM, power supplies and function generators
- demonstrate the ability to generate and read schematic drawings and apply that knowledge to understand the operation of a physical circuit.
- construct, modify, and test operational multistage digital or analog circuits.
- examine defective circuits, investigate possible causes of the defect, and determine how to troubleshoot and repair the circuit.
- follow the flow of an automated manufacturing process, recognize the transducers used to monitor a process and, using programmable controllers (PLCs), ladder logic, and robotics, create, test and troubleshoot an automated process.
- demonstrate the ability to use a microcontroller and PBASIC software to control electronic circuits
- assemble and troubleshoot a personal computer.
- access library, computing, and communications services and obtain information and data from regional, national, and international networks.

Job Openings Projected through 2018

Lane County openings - 3 annually

Statewide openings - 82 annually

Workers must have postsecondary training to gain the necessary skills for this occupation. Those with an associate degree have a competitive advantage in this labor market.

Wages

Lane County average hourly - \$28.71; average annual - \$59,720

Oregon average hourly - \$27.18; average annual - \$56,534

Costs (Estimate based on 2011 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees.....	\$9,095
Other Course/Program Costs.....	\$350
Tools.....	\$200
Books and supplies.....	\$2,250
Total Estimate \$11,895	

Electronic Technology fees and other course fees may change during the year - see the online credit class schedule for fees assigned to courses.

Prerequisites Minimum placement score of 68 in Reading OR completion of RD 080 OR prior college AND MTH060 or higher with a grade of "C-" or better or pass a placement test through the Testing Office. A high school diploma or equivalent is recommended for all applicants to this program.

Admission Information See lanecc.edu/advtech/ET/index.htm or contact Advanced Technology Division, *AdvTechPrograms@lanecc.edu*

Cooperative Education (Co-op) Co-op offers students college credit and a grade for on-the-job work experience related to their educational and career goals. Through Co-op students connect theory and practice, develop skills, expand career knowledge, and make contacts for the future. Work schedules and work sites vary. Contact Marv Clemons, Electronics Co-op Coordinator, Bldg. 8, Rm. 111, 541.463.3158, clemonsm@lanecc.edu

First Year	Fall
ET 121 Shop Practices ^{*D,G}	2
ET 129 Electrical Theory 1 ^{*D,G}	4
MTH 065 Elementary Algebra ^{*D,G} or higher level mathematics.....	4
CS 120 Concepts of Computing: Information Processing or higher computer science course.....	4
PE/Health requirement ^{D,R}	3
Total Credits	17
Winter	Spring
ET 130 Electrical Theory 2 ^{*D,G}	4
ET 145 Semiconductor Devices 1 ^{*D,G}	4
ET 151 Digital Electronics 1 ^{*D,G}	4
MTH 095 Intermediate Algebra ^{*D} or higher level mathematics.....	5
Total Credits	17
ET 131 Electrical Theory 3 ^{*D,G}	4
ET 146 Semiconductor Devices 2 ^{*D,G}	4
ET 152 Digital Electronics 2 ^{*D,G}	4

Standard footnotes:

* Prerequisite required

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

R Required for AAS degree—see page 48

WR 121 Introduction to Academic Writing ^{*,D}	4
Total Credits	16
Second Year	Fall
ET 229 Motors 1 ^{*,D,G}	4
ET 234 Programmable Controllers 1 ^{*,D,G}	4
ET 239 Microprocessor Applications ^{*,D,G}	4
ET247 Linear Circuits.....	4
Total Credits	16
	Winter
ET 235 Programmable Controllers 2 ^{*,D,G}	4
ET 230 Motors 2 ^{*,D,G}	4
ENGR 280E Co-op Ed:	
Electronic Technology ^{D,G}	3
Human Relations requirement ^R	3
Total Credits	14
	Spring
ET 201 Industrial Instrumentation ^{*,D,G}	4
ET 281 Radiotelephone ^{*,D,G}	4
ET 287 Microcomputer Hardware ^{*,D,G}	4
WR 227 Technical Writing [*]	4
Total Credits	16

Emergency Medical Technology – Paramedic

Offered by the Health Professions Division, 541.463.5617

Two-Year Associate of Applied Science Degree

**One-Year Certificate of Completion,
Emergency Medical Technician**

Purpose To produce competent, entry level EMT-Basic and EMT-Paramedics to serve in career and volunteer EMS positions.

Learning Outcomes The graduate will:

- acquire the skills needed to be a safe and effective pre-hospital emergency medical provider
- work as a member of a 911 emergency medical response team
- transport sick and injured persons to medical facilities
- administer basic and advanced life support care
- document patient information, treatment plan, and patient progress
- understand and apply laws and rules relevant to emergency responders

Job Openings Projected through 2018

Lane County openings - 5 annually

Statewide openings - 79 annually

Wages

Lane County average hourly - \$18.88; average annual - \$39,273

Oregon average hourly - \$21.73; average annual - \$45,204

Costs (Estimate based on 2011 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees.....	\$8,652
Differential Fees [*]	\$1,632
Student and Program Fees	\$2,262

Other Course/Program Costs.....	\$3,167
Personal Health Insurance	varies
Total Estimate	\$15,713

^{*} This is the total of all the differential fees attached to Emergency Medical Technology-Paramedic courses. These fees and other course fees may change during the year - see the online credit class schedule for fees assigned to courses. Students are advised to inquire about additional charges. Parking fees may be required at clinical facilities.

Program Coursework Emergency Medical Technology-Paramedic, application for approval of EMT courses

(1) Lane's Health Professions Division is responsible for approving EMT courses.

(2) An EMT course must be offered by a teaching institution accredited by the Oregon Department of Education (ODE) or the Oregon State Board of Higher Education. The ODE uses the DHS/EMS administrative rules (OAR 333-265) and must meet the standards established by the ODE in OAR chapter 581, division 49: arcweb.sos.state.or.us/rules/OARS_500/OAR_581/581_049.html

Cooperative Education (Co-op) Students earning the two-year EMT-Paramedic AAS degree are required to take two Cooperative Education courses. Co-op courses provide opportunities to gain EMT skills in off-campus learning sites. Contact Tom Brokaw, EMT Co-op Coordinator, Bldg. 30, Rm. 229, 541.463.5633, brokawt@lanecc.edu.

Licensing or Other Certification Exams Required Oregon State and/or National Registry EMT-Basic and EMT-Paramedic exams. Two-Year Associate of Applied Science Degree graduates are qualified to apply for the Oregon EMT-Paramedic certification exam. Coursework includes lecture, lab, clinical time in the hospital and an internship on a 911 ambulance. All first year courses must be successfully completed with a minimum of a C- grade to qualify to apply into the second year of the AAS/ EMT-P program.

EMT-Basic students seeking EMT-Basic certification need only take EMT 151 and EMT 152. Students who successfully complete are eligible to apply for the Oregon EMT-Basic certification exam. Admission is by application only. Please see the EMT-Basic application for details, lanecc.edu/hp/emt.

Prerequisite requirements Students must be 18 years of age to take EMT courses. Students must also have High School Diploma, GED or college degree. Students enrolled in EMT programs are required to have a tuberculin test, measles and rubella vaccinations, and hepatitis B vaccinations. Tuberculin tests must be current through three terms (fall, winter, spring). Once admitted into the program, students are required to carry their own health insurance. Applicants for the second year must have current, valid Oregon EMT-Basic or Oregon EMT-Intermediate certification, and maintain good standing with the Department of Human Services, EMS and Trauma Systems Section. EMT students will be submitting to a criminal background check.

Admission Information Contact the Health Professions Division or see lanecc.edu/hp/emt/index.htm.

Emergency Medical Technology - Paramedic

Two-Year Associate of Applied Science Degree

First Year

	Fall
BI 231 Human Anatomy and Physiology 1 ^{*,2,D,G}	4
EMT 151 Emergency Medical Technician Basic Part 1 ^{D,G}	5
EMT 175 Introduction to Emergency Medical Services ^{D,G}	3
HO 100 Medical Terminology 1 ^{D,G}	3
WR 121 Introduction to Academic Writing ^{*,G}	4
Total Credits	19

Winter

BI 232 Human Anatomy and Physiology 2 ^{*,D,G}	4
EMT 152 Emergency Medical Technician Basic Part 2 ^{D,G} ..	5
EMT 196 Crisis Intervention ^{D,G}	3
MTH 095 Intermediate Algebra ^{1,G}	5
Total Credits	17

Spring

BI 233 Human Anatomy and Physiology 3 ^{*,D,G}	4
EMT 169 EMT Rescue ^{*,D,G}	3
EMT 170 Emergency Response Communication/Documentation ^{*,D,G}	2
EMT 171 Emergency Response Patient Transportation ^{*,D,G}	2
PSY 110 Exploring Psychology ^G	3
Total Credits	14

Second Year

	Fall
CIS 101 Computer Fundamentals ^G	3
EMT 270 EMT-Paramedic Part 1 ^{*,D,G}	10
EMT 271 EMT-Paramedic Part 1 Clinical ^{*,D}	1
SP 111 Fundamentals of Public Speaking or higher Speech course ^G	4
Total Credits	18

Winter

EMT 272 EMT-Paramedic 2 ^{*,D,G}	10
EMT 273 EMT-Paramedic Clinical 2 ^{*,D}	3
Social Science/Human Relations requirement ^G	3
Total Credits	16

Spring

EMT 274 EMT-Paramedic 3 ^{*,D,G}	4
EMT 275 EMT-Paramedic Clinical 3 ^{*,D,G}	4
EMT 280P1 Co-op Ed: EMT Internship Part1 ^{*,D,G}	3
HE 275 Lifetime Health and Fitness ^G	3
Total Credits	14

Summer

EMT 280P2 Co-op Ed: EMT Internship Part 2 ^{*,D,G}	5
Total Credits	5

Emergency Medical Technician

One-Year Certificate of Completion

Certificate of Completion was created as a statewide transfer tool. Some Oregon schools offer only the first year of the two

year degree. The certificate of completion qualifies a student to participate in the process for entry into the second year (the "paramedic year") of the AAS/EMT-P offered throughout the state. Not all Oregon EMT schools participate in the Certificate of Completion transferability. Those planning to take the first year at Lane, then transfer to another college, should check with the EMT program coordinator for guidance.

Gainful Employment Disclosure

Standard Occupational Classification: 29-2041.00

Go to websites below for information about related occupations: Emergency Medical Technicians and Paramedics

onetonline.org/link/summary/29-2041.00

Related Occupation:

Ambulance Drivers and Attendants, Except Emergency Medical Technicians

onetonline.org/link/summary/53-3011.00

How much will the program cost?

(Estimate based on 2011-12 data. Consult Lane's website for updated tuition.)

Resident tuition.....	\$4,200
Differential fees.....	\$438
Student and Program Fees.....	\$520
Other Program Costs.....	\$1,287
On-Campus room and board.....	Not offered
Total Estimate	\$6,445

What's included?

Program Costs: lanecc.edu/es/feesandexpenses.html

What are financing options to pay for the program?

In addition to any grant and scholarship aid for which they are eligible, 83% of program graduates used loans to finance their education. The median debt for 2010-11 program graduates:

Federal Loans.....	\$9,639
Institutional financing.....	\$60

No 2010-11 program graduates used private educational loans.

How long will it take to complete this program?

The program is designed to take 3 terms, or about 12 months of study to complete.

How many 2010-11 Emergency Medical Technician graduates completed within the designed program length?

Approximately 17% completed within 12 months.

What are my chances of getting a job when I graduate?

Lane County openings - 5 annually

Statewide openings - 79 annually

Will I be able to pay back student loans?

Most Lane students graduating in 2009-10 who took out federal student loans are successfully repaying them. Lane's federal loan student default rate for that period was 11.3%.

Where are comparable programs offered?

School	City	2009 Graduates
Blue Mountain Community College	Pendleton	--
Clackamas Community College	Oregon City	4
Clatsop Community College	Astoria	--
Columbia Gorge Community College	The Dalles	--
Klamath Community College	Klamath Falls	--
Lane Community College	Eugene	2
Linn-Benton Community College	Albany	1
Portland Community College	Portland	--
Rogue Community College	Grants Pass	--
Southwestern Oregon Community College	Coos Bay	4
Treasure Valley Community College	Ontario	--

Standard footnotes:

* Prerequisite required

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

R Required for AAS degree—see page 48

BI 231 Human Anatomy and Physiology 1 ^{*,2,D,G}	Fall	4
EMT 151 Emergency Medical Technician Basic Part 1 ^{D,G}		5
EMT 175 Introduction to Emergency Medical Services ^{D,G}		3
HO 100 Medical Terminology 1 ^{D,G}		3
WR 121 Introduction to Academic Writing ^{*,G}		4
Total Credits		19
BI 232 Human Anatomy and Physiology 2 ^{*,D,G}	Winter	4
EMT 152 Emergency Medical Technician Basic Part 2 ^{D,G}		5
EMT 196 Crisis Intervention ^{D,G}		3
MTH 095 Intermediate Algebra ^{1,G}		5
Total Credits		17
BI 233 Human Anatomy and Physiology 3 ^{*,D,G}	Spring	4
EMT 169 EMT Rescue ^{*,D,G}		3
EMT 170 Emergency Response Communication/Documentation ^{*,D,G}		2
EMT 171 Emergency Response Patient Transportation ^{*,D,G}		2
PSY 110 Exploring Psychology ^G		3
Total Credits		14

1. Students pursuing a bachelor's degree need to complete a college level, transferable math course
2. See BI 231 course description for required prerequisites.

Energy Management Technician

Offered by the Science Division, 541.463.3977

Two-Year Associate of Applied Science Degree, Energy Management

Two-Year Associate of Applied Science Option, Renewable Energy Technician

Two-Year Associate of Applied Science Option, Resource Conservation Management

Purpose To prepare students for careers in Energy Management, Resource Conservation Management, and Renewable Energy.

Learning Outcomes The graduate will:

- evaluate the energy use patterns for residential and commercial buildings and recommend energy efficiency and alternative energy solutions for high-energy consuming buildings.
- understand the interaction between energy consuming building systems and make recommendations based on that understanding.
- construct energy evaluation technical reports and make presentations for potential project implementation.
- use appropriate library and information resources to research professional issues and support lifelong learning.
- access library, computing and communications services, and obtain information and data from regional, national and international networks.
- collect and display data as lists, tables and plots using appropriate technology (e.g., graphing calculators, computer software).
- develop and evaluate inferences and predictions that are based on data.
- determine an appropriate scale for representing an object in a scale drawing.
- interpret the concepts of a problem-solving task, and translate them into mathematics.

The graduate of the Renewable Energy Technician Option also will:

- appropriately size and recommend renewable energy system types for particular situations.
- understand and put into practice the installation protocol for Photovoltaic and Solar Domestic Hot Water Systems.

The graduate of the Resource Conservation Management Option also will:

- conduct a full sustainability assessment.
- understand the LEED Framework and green buildings
- make recommendations for materials management and solid waste management
- assess carbon footprints for climate action in complex organizations

Employment Trends Employment opportunities in the Energy Management Industry are excellent. Students must consider the entire Western United States when seeking employment, as those willing to relocate will have greater employment opportunities.

Wages

Energy Management: \$38,000-45,000 annually.

Renewable Energy Technician: \$25,000-35,000 annually, depending on the area.

Resource Conservation Management: \$40,000-50,000 annually.

Costs (Estimate based on 2011 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees.....	\$9,230
Other Course/Program Costs.....	\$890
Total Estimate	\$10,120

Energy Management course fees and other course fees may change during the year - see the online credit class schedule for fees assigned to courses.

Admission Information Science Division, Bldg. 16, Rm. 252/253, youngg@lanecc.edu, ebbager@lanecc.edu

This is a limited enrollment program. Students must apply to the program by completing an Energy Program application form.

Accreditation Awarded Institute for Sustainable Power Quality accreditation credential from the Interstate Renewable Energy Council, International Standard #01021 for accreditation and certification of renewable energy training programs and instructors.

Cooperative Education (Co-op) Co-op is a required and important part of the Energy Management program. It provides relevant field experience that integrates theory and practice while providing opportunities to develop skills, explore career options, and network with professionals and employers in the field. Students must complete six Co-op credits for the AAS degree. Students may use up to eighteen Co-op credits toward the degree requirements. Contact the Cooperative Education Division, Bldg. 19, Rm. 231, 541.463.5203.

Program Director Roger Ebbage, Science Division, Bldg. 16, Rm. 253, 541.463.3977, ebbager@lanecc.edu

First Year	Fall
BT 123 MS Excel for Business ^{*,D,G}	4
NRG 102 Blueprint Reading: Residential and Commercial ^{1,D,G}	3

MTH 095 Intermediate Algebra ^{*,2}	5
NRG 101 Introduction to Energy Management ^{1,D,G}	3
NRG 103 Sustainability in the Built Environment ^{1,D,G}	3
PH 101 Fundamentals of Physics ^{*,1}	4
Total Credits	22

Winter

NRG 111 Residential/Light Commercial Energy Analysis ^{*,1,3,D,G}	3
NRG 154 Alternative Energy Technologies ^{1,D,G}	3
NRG 206A Co-op Ed: Energy Management Seminar 1	1
PH 102 Fundamentals of Physics ^{*,1}	4
WR 121 Introduction to Academic Writing ^{*,4,5}	4
Human Relations Requirement ^{5,R}	3
Total Credits	18

Spring

NRG 121 Air Conditioning Systems Analysis ^{*,1,D,G}	3
NRG 124 Energy Efficient Methods ^{*,1,D,G}	4
NRG 131 Lighting Fundamentals ^{*,1,D,G}	3
WR 227 Technical Writing ^{*,4,5}	4
Total Credits	14

Second Year**Fall**

NRG 122 Commercial Air Conditioning Systems Analysis ^{*,1,D,G}	3
NRG 132 Lighting Applications ^{*,1,D,G}	3
NRG 141 Energy Investment Analysis ^{*,1,3,D,G}	3
MTH 111 College Algebra [*]	5
Directed electives ⁴	3
Total Credits	17

Winter

NRG 112 Commercial Energy Use Analysis ^{*,1,D,G}	4
NRG 123 Energy Control Strategies ^{*,1,D,G}	4
NRG 206B Co-op Ed: Energy Management Seminar 2 ^D	1
Choice of: ^{4,5,R}	3
Physical Education Activity requirement Health requirement	
Directed electives ⁴	3
Total Credits	15

Spring

NRG 113 Building Energy Simulations ^{*,1,D,G}	4
NRG 142 Energy Accounting ^{*,1,3,D,G}	3
NRG 280 Co-op Ed: Energy Management ^{D,G}	6
Total Credits	13

Renewable Energy Technician Option**First Year****Fall**

BT 123 MS Excel for Business ^{*,D,G}	4
NRG 102 Blueprint Reading: Residential and Commercial ^{*,1,D,G}	3
MTH 095 Intermediate Algebra ^{*,2}	5
NRG 101 Introduction to Energy Management ^{1,D,G}	3
NRG 103 Sustainability in the Built Environment ^{1,D,G}	3
PH 101 Fundamentals of Physics ^{*,1}	4
Total Credits	22

Winter

NRG 111 Residential/Light Commercial Energy Analysis ^{1,3,D,G}	3
NRG 154 Alternative Energy Technologies ^{*,1,D,G}	3
NRG 206 A Co-op Ed: Energy Management Seminar 1 ^D	1
PH 102 Fundamentals of Physics ^{*,1}	4
WR 121 Introduction to Academic Writing ^{*,4,5}	4
Human Relations Requirement ^{4,R}	3
Total Credits	18

Spring

NRG 121 Air Conditioning Systems Analysis ^{*,1,D,G}	3
NRG 124 Energy Efficient Methods ^{*,1,D,G}	4
NRG 131 Lighting Fundamentals ^{*,1,D,G}	3
WR 227 Technical Writing ^{*,4,5}	4
Total Credits	14

Second Year**Fall**

ET 129 Electrical Theory 1 ^{*,D,G}	4
NRG 141 Energy Investment Analysis ^{*,1,3,D,G}	3
NRG 155 Photovoltaic Design and Installation 1 ^{*,1,D,G}	4
NRG 157 Renewable Energy Systems ^{*,1,D,G}	3
Total Credits	14

Winter

ET 130 Electrical Theory 2 ^{*,D,G}	4
NRG 156 Photovoltaic Design and Installation 2 ^{*,1,D,G}	4
NRG 158 Solar Thermal Design and Installation 1 ^{*,1,D,G}	4
NRG 206 B Co-op Ed: Energy Management Seminar 2 ^D	1
Choice of: ^{4,5,R}	3
Physical Education Activity requirement Health requirement	
Total Credits	16

Spring

NRG 159 Thermal Design and Installation 2 ^{*,1,D,G}	4
NRG 162 Solar Photovoltaics Systems Design and Installation ^{*,1,3,D,G}	4
NRG 280 Co-op Ed: Energy Management ^{D,G}	6
Total Credits	14

Resource Conservation Management Option**First Year****Fall**

BT 123 MS Excel for Business ^{*,D,G}	4
NRG 102 Blueprint Reading: Residential and Commercial ^{1,D,G}	3
MTH 095 Intermediate Algebra ^{*,2}	5
NRG 101 Introduction to Energy Management ^{1,D,G}	3
NRG 103 Sustainability in the Built Environment ^{1,D,G}	3
PH 101 Fundamentals of Physics ^{*,1}	4
Total Credits	22

Winter

NRG 111 Residential/Light Commercial Energy Analysis ^{*,1,3,D,G}	3
---	---

Standard footnotes:

* Prerequisite required

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

R Required for AAS degree—see page 48

NRG 154 Alternative Energy Technologies ^{1,D,G}	3
NRG 206A Co-op Ed: Energy Management Seminar 1	1
PH 102 Fundamentals of Physics ^{*,1}	4
WR 121 Introduction to Academic Writing ^{*,4,5}	4
Human Relations Requirement ^{5,R}	3
Total Credits	18

Spring

NRG 121 Air Conditioning Systems Analysis ^{*,1,D,G}	3
NRG 124 Energy Efficient Methods ^{*,1,D,G}	4
NRG 131 Lighting Fundamentals ^{*,1,D,G}	3
WR 227 Technical Writing ^{*,4,5}	4
Total Credits	14

Second Year**Fall**

NRG 122 Commercial Air Conditioning Systems Analysis ^{*,1,D,G}	3
NRG 141 Energy Investment Analysis ^{*,1,3,D,G}	3
NRG 157 Renewable Energy Systems ^{*,1,D,G}	3
NRG 171 Materials Management/Solid Waste Management for Institutions ^{1,D,G}	3
WATR 210 Water Conservation: Industrial/Commercial ^{1,D,G}	4
Total Credits	16

Winter

NRG 112 Commercial Energy Use Analysis ^{*,1,D,G}	4
NRG 172 Understanding the LEED Framework and Green Buildings ^{1,D,G}	3
NRG 206B Co-op Ed: Energy Management Seminar 2 ^D	1
WATR 202 Fostering Sustainable Practices ^{1,D,G}	3
Choice of: ^{4,5,R}	3
Physical Education Activity requirement Health requirement	
Total Credits	14

Spring

NRG 142 Energy Accounting ^{*,1,3,D,G}	3
NRG 173 Carbon Footprints for Climate Action in Complex Organizations ^{1,D,G}	4
NRG 174 Conducting a Full Sustainability Assessment ^{1,D,G}	4
NRG 280 Co-op Ed: Energy Management ^{D,G}	6
Total Credits	17

- 1 Instructor permission required
- 2 Must be completed by the end of the first year
- 3 Contains computation instruction to meet industry requirements
- 4 Can be taken any term
- 5 See catalog for AAS requirements

Directed Electives:

DRF 167 CAD 1
 DRF 168 CAD 2
 BT 223 MS EXCEL for Business - Expert
 SPAN 101 Spanish, First-Year
 SPAN 102 Spanish, First-Year
 MTH 111 College Algebra
 BA101 Introduction to Business
 ENVS 184 Global Climate Change
 PS 297 Environmental Politics
 PSY 201 General Psychology
 SP 100 Basic Communication
 SP 105 Listening and Critical Thinking
 SP 111 Fundamentals of Public Speaking
 SP 112 Persuasive Speech
 SP 218 Interpersonal Communication
 WATR 221 Water Mechanical Systems

WATR 105 Water Conservation: Residential
 WATR 202 Fostering Sustainable Practices
 WATR 215 Integrated Water Management
 NRG 280 Co-op Ed

Exercise and Movement Science

Offered by the Health, Physical Education and Athletics Division, 541.463.5545

Two-Year Associate of Applied Science Degree, Exercise and Movement Science

Two-Year Certificate of Completion, Fitness Specialist Level 2

One-Year Certificate of Completion, Fitness Specialist Level 1

Purpose Prepares students for various careers in the fitness industry, including personal training, group exercise instruction, coaching, athletic training, pre-physical therapy, wellness coaching, and recreation management.

Learning Outcomes The graduate will:

- demonstrate excellent interpersonal skills in the areas of leadership, motivation, management, and communication.
- understand and apply basic science information from the fields of biology, chemistry, and physics as they relate to the exercise science field.
- understand and apply advanced exercise principles related to applied kinesiology, physiology, injury prevention, conditioning, resistance training, and functional training.
- understand and apply nationally recognized standards for fitness and health and be able to communicate the benefits and precautions associated with exercise.
- understand and apply behavior modification strategies to enhance exercise and health behavior change with clients
- administer various fitness assessments including the measurement of cardiovascular endurance, body composition, flexibility, muscular strength and endurance, power, speed, and balance in both a laboratory setting and a gym or health club setting.
- design and demonstrate safe and effective exercise programs for groups or individuals who are apparently healthy or modify exercise programs to enhance participation and meet the needs of those with medically controlled diseases under the care and supervision of a physician.
- utilize appropriate library and information resources to apply current fitness industry research and support lifelong professional education.
- apply and interpret advanced algebraic formulas to fitness assessment data and exercise programming and critically analyze results and training implications.
- respond to the needs of a diverse clientele and demonstrate inclusive practices.
- understand current trends in the fitness industry and be able to provide responsive and timely programming and services to serve the health and fitness needs of individuals in their workplace, community, and the nation.
- demonstrate excellent leadership abilities, interpersonal communication skills, organizational and presentation skills and other necessary professional qualities demanded of health and fitness professionals in the workforce.
- understand professional scope of practice and role within the health and fitness field and the allied health care system and practice appropriate and ethical professional conduct

Job Openings Projected through 2018

Lane County openings - 19 annually

Statewide openings - 107 annually

Wages

Lane County average hourly - \$16.78; average annual - \$34,905

Oregon average hourly - \$17.62; average annual - \$36,650

Costs (Estimate based on 2011 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees.....	\$9,095
Other Course/Program Costs.....	\$180
Books and supplies.....	\$2,100
Total Estimate \$11,375	

Exercise and Movement Science course fees and other course fees may change during the year - see the online credit class schedule for fees assigned to courses. Costs related to obtaining National Certification post-graduation range from \$200-\$500 per certification.

Program Certification The American College of Sports Medicine has endorsed the curriculum for Lane Community College's Associate of Applied Science program. This curriculum covers the knowledge, skills, and abilities expected of an ACSM Health/Fitness Specialist®. This curriculum has been reviewed for the educational content and has been endorsed by ACSM.

Admission Contact the Health and PE department for Program information sheets and application packets, or see: lanecc.edu/healthpe/fitnesstraining.htm.

Program requirements In addition to completing all required coursework and meeting college graduation requirements, students must meet the following criteria for program completion:

- Attendance at a mandatory program orientation before fall term of the student's first year in the program.
- Earned letter grade of C or higher and earned accumulative G.P.of 3.0 or higher in all program core courses
- Complete all required Cooperative Education credits (10 credit requirement). Details will be provided on required sites.
- Abide by and uphold all program and college expectations and responsibilities.
- Receive acceptable evaluations from all program instructors.
- Receive acceptable evaluations from all Cooperative Education work experience supervisors and Cooperative Education coordinators.
- Attend an exit interview with program coordinator.

Cooperative Education (Co-op) Cooperative Education internships provide job-related experiences and are an integral component of the program. Students will begin by completing required on-campus internships in the Fitness Education Center (2 credits required) during their first two terms in the program. Upon successful completion (C letter grade or higher) of all core classes during Fall and Winter term of the first year and Co-op credits in the Fitness Education Center, students are then eligible to start completing required Co-op credits in the following areas: 1 credit of Co-op in a group exercise class (see Program Coordinator for approved list) and 1 credit in the Corrective Fitness class. Students may also begin to apply for a variety of on-campus and off-campus internships in various fitness disciplines to fulfill the 6 remaining elective Co-op credits. More details and direction will be given to students regarding required and optional internship sites. Students are encouraged

to choose a variety of sites. Maximum credit limits apply in each area. For more information contact: Sue Thompson, Bldg. 5, Rm. 227 541.463.5735, thompsons@lanecc.edu; or Shannon Gaul, Bldg. 30, Rm. 126, 541.463.5556, gauls@lanecc.edu

Program Coordinator Marisa Hastie, Bldg. 5, Rm. 221, 541.463.5552, hastiem@lanecc.edu

Exercise and Movement Science

Associate of Applied Science Degree

Fitness Specialist Level 2

Two-Year Certificate of Completion

Gainful Employment Disclosure

Standard Occupational Classification: 39-9031.00

Go to websites below for information about related occupations:

Fitness Trainers and Aerobics Instructors

onetonline.org/link/summary/39-9031.00

Related Occupation:

Recreation Workers

onetonline.org/link/summary/39-9032.00

How much will the program cost?

(Estimate based on 2011-12 data. Consult Lane's website for updated tuition.)

Resident tuition and fees	\$9,275
Books, supplies, program costs	\$1,980
On-Campus room and board.....	Not offered

Total Estimate \$11,255

What's included?

Program Costs: lanecc.edu/es/feesandexpenses.html

What are financing options to pay for the program?

In addition to any grant and scholarship aid for which they are eligible, 57% of program graduates used loans to finance their education. The median debt for 2010-11 program graduates:

Federal Loans..... \$8,934

No 2010-11 program graduates used private educational loans or institutional financing.

How long will it take to complete this program?

The program is designed to take 6 terms, or about 24 months of study to complete.

How many 2010-11 Fitness Specialist Level 2 graduates completed within the designed program length?

None completed within 24 months.

What are my chances of getting a job when I graduate?

Lane County openings - 17 annually

Statewide openings - 152 annually

Will I be able to pay back student loans?

Most Lane students graduating in 2009-10 who took out federal student loans are successfully repaying them. Lane's federal loan student default rate for that period was 11.3%.

Where are comparable programs offered?

No comparable certificate programs are offered in Oregon.

First Year

	Fall
EXMS 194F Professional Activity: Fitness Assessment and Exercise Prescription: Field Tech. ^{*1}	3
EXMS 194S Professional Activity: Strength Training and Conditioning ^{*1}	2
EXMS 196 Applied Anatomy and Kinesiology ^{*1}	3

Standard footnotes:

* Prerequisite required

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

R Required for AAS degree—see page 48

FN 225 Nutrition.....	4
Choice of:.....	1
PE 183A Conditioning	
PE 183F Fitness Education: Introduction	
PE 280F Co-op Ed: Fitness ^{D,G}	1
Choice of:.....	4
WR 115 Introduction to College Writing *	
WR 121 Introduction to Academic Writing *	
Total Credits	18

Winter

EXMS 194T Professional Activity: Techniques of Group Exercise Leadership ^{*,1}	2
EXMS 295 Injury Prevention and Management ^{*,1}	3
PE 280F Co-op Ed: Fitness ^{D,G}	1
Choice of:.....	1
PE 183S Strength Training	
PE 183U Strength Training for Women	
Choice of:.....	4-6
BI 102D General Biology – Survey of Biology	
BI 102I General Biology – Human Biology	
BI 112 and CH 112 Bio-Bonds Learning Community (co-requisites; CH 112 will count as Directed Elective)	
Choice of:.....	4-5
MTH 070 Introductory Algebra (or MTH 60 & 65 equivalent)	
MTH 095 Intermediate Algebra ^R	
MTH 105 Intro to Contemporary Mathematics	
MTH 111 College Algebra	
Total Credits	15-18

Spring

EXMS 135 Applied Exercise Physiology 1 ^{*,1}	3
Human Relations requirement ^R	3
Choice of:.....	3
HE 125 Workplace Health and Safety	
HE 152 Drugs, Society and Behavior	
HE 251 Wilderness First Aide	
HE 209 Human Sexuality	
HE 222 Consumer Health	
HE 240 Holistic Health	
HE 250 Personal Health	
HE 255 Global Health	
HE 275 Lifetime Health and Fitness ^D	
Choice of:.....	2
PE 280F Co-op Ed: Fitness ^{D,G}	
PE 280RT Co-op Ed: Corrective Fitness ^G	
PE 280 Co-op Ed: Physical Education ^G	
PE 280AR Co-op Ed: Aerobics ^G	
PE 280W Co-op Ed: Wellness ^G	
PE 280M Co-op Ed: Fitness Management ^G	
PE 280AT Co-op Ed: Athletic Training ^G	
Choice of:.....	4
SP 100 Basic Communication	
SP 105 Listening and Critical Thinking	
SP 111 Fundamentals of Public Speaking	
SP 115 Introduction to Intercultural Communications	
SP 218 Interpersonal Communication	
HE 252 First Aid ^D	3
Total Credits	18

Second Year**Fall**

EXMS 235 Applied Exercise Physiology 2 ^{*,1}	3
Directed Electives	3
Choice of:.....	2
PE 280F Co-op Ed: Fitness ^{D,G}	
PE 280RT Co-op Ed: Corrective Fitness ^G	
PE 280 Co-op Ed: Physical Education ^G	
PE 280AR Co-op Ed: Aerobics ^G	
PE 280W Co-op Ed: Wellness ^G	

PE 280M Co-op Ed: Fitness Management ^G	
PE 280AT Co-op Ed: Athletic Training ^G	
Physical Education Activity elective ²	1
Choice of:.....	4
WR 121 Introduction to Academic Writing *	
WR 122 Composition: Argument, Style and Research *	
WR 123 Composition: Research *	
Choice of:.....	3
HE 125 Workplace Health and Safety	
HE 152 Drugs, Society and Behavior	
HE 251 Wilderness First Aide	
HE 209 Human Sexuality	
HE 222 Consumer Health	
HE 240 Holistic Health	
HE 250 Personal Health	
HE 255 Global Health	
HE 275 Lifetime Health and Fitness	
Total Credits	16

Winter

EXMS 194L Professional Activity: Fitness Assessment and Exercise Prescription: Lab Techniques ^{*,1}	3
Physical Education Activity elective ²	1
Choice of:.....	2
PE 280F Co-op Ed: Fitness ^{D,G}	
PE 280RT Co-op Ed: Corrective Fitness ^G	
PE 280 Co-op Ed: Physical Education ^G	
PE 280AR Co-op Ed: Aerobics ^G	
PE 280W Co-op Ed: Wellness ^G	
PE 280M Co-op Ed: Fitness Management ^G	
PE 280AT Co-op Ed: Athletic Training ^G	
Directed Electives ³	6
Total Credits	12

Spring

EXMS 294 Foundations of Fitness Management ^{*,1}	3
Directed Electives ³	3
General electives	3
Physical Education Activity elective ²	1
Choice of:.....	2
PE 280F Co-op Ed: Fitness ^{D,G}	
PE 280RT Co-op Ed: Corrective Fitness ^G	
PE 280 Co-op Ed: Physical Education ^G	
PE 280AR Co-op Ed: Aerobics ^G	
PE 280W Co-op Ed: Wellness ^G	
PE 280M Co-op Ed: Fitness Management ^G	
PE 280AT Co-op Ed: Athletic Training ^G	
Cultural Literacy elective (from AA/OT requirement list in catalog)	3
Total Credits	15

1 Core curriculum requirement; must be passed with a grade of "C" or better

Fitness Specialist Level 1**One-Year Certificate of Completion****Gainful Employment Disclosure****Standard Occupational Classification: 39-9031.00**

Go to websites below for information about related occupations:

Fitness Trainers and Aerobics Instructors

onetonline.org/link/summary/39-9031.00

Related Occupation:

Recreation Workers

onetonline.org/link/summary/39-9032.00

How much will the program cost?

(Estimate based on 2011-12 data. Consult Lane's website for updated tuition.)

Resident tuition and fees	\$5,008
Books, supplies, program costs	\$990
On-Campus room and board.....	Not offered
Total Estimate	\$5,998

What's included?

Program Costs: lanecc.edu/es/feesandexpenses.html

What are financing options to pay for the program?

In addition to any grant and scholarship aid for which they are eligible, program participants may use federal or private loans to finance their education.

How long will it take to complete this program?

The program is designed to take 3 terms, or about 12 months of study to complete.

What are financing options to pay for the program?

In addition to any grant and scholarship aid for which they are eligible, 89% of program graduates used loans to finance their education. The median debt for 2010-11 program graduates:

Federal Loans..... \$8,934

No 2010-11 program graduates used private educational loans or institutional financing.

How long will it take to complete this program?

The program is designed to take 3 terms, or about 12 months of study to complete.

How many 2010-11 Fitness Specialist Level 1 graduates completed within the designed program length?

None completed within 12 months.

What are my chances of getting a job when I graduate?

Lane County openings - 19 annually

Statewide openings - 107 annually

Will I be able to pay back student loans?

Most Lane students graduating in 2009-10 who took out federal student loans are successfully repaying them. Lane's federal loan student default rate for that period was 11.3%.

Where are comparable programs offered?

No comparable certificate programs are offered in Oregon.

	Fall
EXMS 194F Professional Activity: Fitness Assessment and Exercise Prescription-Field Techniques ^{*,1}	3
EXMS 194S Professional Activity: Strength Training and Conditioning ^{*,1}	2
EXMS 196 Applied Anatomy and Kinesiology ^{*,1}	3
FN 225 Nutrition.....	4
Choice of:.....	1
PE 183A Conditioning	
PE 183F Fitness Education: Introduction	
PE 280F Co-op Ed: Fitness ^{D,G}	1
Choice of:.....	4
WR 115 Introduction to College Writing [*]	
WR 121 Introduction to Academic Writing [*]	
Total Credits	18
	Winter
EXMS 194T Techniques of Group Exercise Leadership ^{*,1}	2
EXMS 295 Injury Prevention and Management ^{*,1}	3
PE 280F Co-op Ed: Fitness ^{D,G}	2
Choice of:.....	1
PE 183S Strength Training	
PE 183U Strength Training for Women	
Choice of:.....	4-6
BI 102D General Biology – Survey of Biology	
BI 102I General Biology – Human Biology	
BI 112 and CH 112 Bio-Bonds Learning Community	

(co-requisites; CH 112 will count as Directed Elective)

Choice of:.....	4-5
MTH 070 Introductory Algebra (or MTH 60 & 65 equivalent)	
MTH 095 Intermediate Algebra	
MTH 105 Intro to Contemporary Mathematics	
MTH 111 College Algebra	

Total Credits 16-18

Spring

EXMS135 Applied Exercise Physiology 1 ^{*,1}	3
Human Relations requirement ^R	3
Choice of:.....	3
HE 125 Workplace Health and Safety	
HE 152 Drugs, Society and Behavior	
HE 251 Wilderness First Aide	
HE 209 Human Sexuality	
HE 222 Consumer Health	
HE 240 Holistic Health	
HE 250 Personal Health	
HE 255 Global Health	
HE 275 Lifetime Health and Fitness ^D	
Choice of:.....	2
PE 280F Co-op Ed: Fitness ^{D,G}	
PE 280 Co-op Ed: Physical Education ^G	
PE 280AR Co-op Ed: Aerobics ^G	
PE 280W Co-op Ed: Wellness ^G	
PE 280M Co-op Ed: Fitness Management ^G	
PE 280AT Co-op Ed: Athletic Training ^G	
Choice of:.....	4
SP 100 Basic Communication	
SP 105 Listening and Critical Thinking	
SP 111 Fundamentals of Public Speaking	
SP 115 Introduction to Intercultural Communications	
SP 218 Interpersonal Communication	
HE 252 First Aid ^D	3
Total Credits	18

- 1 Core curriculum requirement; must be passed with a grade of "C" or better
- 2 PE Activity Electives Fitness-related activity courses to be selected from the following list:
 - PE 181B Cardio Core Conditioning
 - PE 181C Combination Aerobics
 - PE 181D Dance Aerobics
 - PE 181K Kickboxing Aerobics
 - PE 181S Step Aerobics
 - PE 181SB Body Sculpt
 - PE 181SS Step and Sculpt
 - PE 181Y Yogilates
 - PE 183A Conditioning
 - PE 183B Exercise and Weight Control
 - PE 183C Exercise Walking
 - PE 183CG Group Cycling
 - PE 183E Fitness Circuits
 - PE 183G Fitness Education: Continuing/Returning
 - PE 183J Jogging
 - PE 183R Stability Ball Fitness
 - PE 183S Strength Training
 - PE 183U Strength Training for Women
 - PE 183W Fitness through Corrective Exercise
 - PE 184K Karate
 - PE 184P Personal Defense
 - PE 185T Tai Chi Chuan
 - PE 185Y or PE 185Z or PE 185YG Yoga

Students may repeat any of the above PE classes once for credit.
- 3 Directed Electives Courses to be selected from the following list:
 - BA 101 Introduction to Business
 - BA 226 Business Law
 - BA 278 Leadership and Team Dynamics
 - BI 101F General Biology - Survey of Biology
 - BI 102D General Biology – Survey of Biology

Standard footnotes:

* Prerequisite required

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

R Required for AAS degree—see page 48

BI 102I General Biology: Human Biology
 BI 112 Cell Biology for Health Occupations (co-requisite CH 112)
 BI 231 Human Anatomy and Physiology 1
 BI 232 Human Anatomy and Physiology 2
 BI 233 Human Anatomy and Physiology 3
 CG 140 Career and Life Planning
 CG 203 Human Relations at Work
 CG 206 Coping Skills for Stress and Depression
 CG 216 Understanding Eating Issues
 CH 104 Introductory Chemistry 1
 CH 105 Introductory Chemistry 2
 CH 112 Chemistry for Health Occupations (co requisite BI 112)
 CH 221 General Chemistry 1
 CH 222 General Chemistry 2
 CS 120 Concepts of Computing: Information Processing
 EL 115 Effective Learning
 EL 115H Effective Learning: Health Science Majors
 EXMS 214 Physiology of Exercise & Healthy Aging
 EXMS 227 Introduction to Exercise Science
 EXMS 275 Exercise and Sport Biomechanics
 FN 230 Family, Food, and Nutrition
 FN 190 Sports Nutrition
 FN 110 Personal Nutrition
 HE 125 Workplace Health and Safety
 HE 152 Drugs, Society and Behavior
 HE 209 Human Sexuality
 HE 222 Consumer Health
 HE 250 Personal Health
 HE 240 Holistic Health
 HE 250 Personal Health
 HE 251 Wilderness First Aid
 HE 255 Global Health
 HO 100 Medical Terminology
 HO 150 Human Body Systems 1
 HO 152 Human Body Systems 2
 HS 107 Gerontology and Aging
 HS 200 Understanding Addictive Behaviors
 MTH 111 College Algebra
 MTH 112 Trigonometry
 PH 101 Fundamentals of Physics
 PH 102 Fundamentals of Physics
 PH 103 Fundamentals of Physics
 PH 201 General Physics
 PSY 110 Exploring Psychology
 PSY 201 General Psychology
 PSY 202 General Psychology
 PSY 215 Lifespan Developmental Psychology
 PSY 218 Multicultural Psychology
 PSY 239 Introduction to Abnormal Psychology
 SOC 204 Introduction to Sociology
 SOC 207 Women and Work
 SOC 208 Sport and Society
 SP 105 Listening and Critical Thinking
 SP 111 Fundamentals of Public Speaking
 SP 112 Persuasive Speech
 SP 115 Introduction to Intercultural Communication
 SP 130 Business and Professional Speech
 SP 218 Interpersonal Communication
 SPAN 101 Spanish, First Year
 SPAN 102 Spanish, First Year
 SPAN 103 Spanish, First Year
 WR 122 Composition: Argument, Style and Research
 WR 123 Composition: Research
 WR 227 Technical Writing

Fabrication/Welding Technology

**Offered by the Advanced Technology Division,
541.463.5380**

**Two-Year Associate of Applied Science Degree
Fabrication/Welding Technology**

**One-Year Certificate of Completion
Fabrication/Welding Technology**

**Career Pathway Certificate of Completion
Shielded Metal Arc Welder**

**Career Pathway Certificate of Completion
Wire Drive Welder**

**One-Year Certificate of Completion
Welding Processes**

Purpose To prepare the graduate for employment for entry-level and higher positions in metal fabrication industries. Graduates will begin work in light or heavy metal fabrication as welders and/or fabricators. Training and experience can lead to careers in technical sales, supervision, estimating, quality control, inspection, specialty welding, and teaching, as well as self-employment. The fabrication/welding certificate program (the first year of the two-year degree) prepares graduates for employment as welders/fabricators. The welding processes certificate program prepares graduates for employment as welder-trainees or welders.

Learning Outcomes The graduate of the AAS degree will:

- use blueprint-reading skills, cost estimating, applied science of materials, and mathematics necessary to the profession.
- apply knowledge of forming, fitting, and welding processes.
- demonstrate entry-level fabrication techniques and welding processes and application including GTAW, structural and pipefitting, metallurgy, quality control procedures, and business operation.
- demonstrate and use industry safety standards.
- use appropriate library and information resources to research professional issues and support lifelong learning.
- use mathematical formulas to calculate area, volume, and weight of metal objects.

The graduate of the Fabrication/Welding Technology One-Year Certificate of Completion will:

- read and build metal products from simple blueprints.
- use blueprints and other reference materials to calculate cost of materials necessary to the building of metal products.
- apply mathematics necessary to fabricate metal products.
- perform at entry-level typical industrial welding processes.
- demonstrate at industry entry-level use of certain machine tools commonly found in industry.
- demonstrate and use industry safety standards.
- use appropriate library and information resources to research professional issues and support lifelong learning.

Job Openings Projected through 2018

Lane County openings - 28 annually

Statewide openings - 210 annually

Wages

Lane County average hourly - \$16.93; average annual - \$35,210

Oregon average hourly - \$17.71; average annual - \$36,837

Costs (Estimate based on 2011 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees.....	\$9,537
Other Course/Program Costs.....	\$1,692
Tools.....	\$575
Books and supplies.....	\$750
Total Estimate \$12,554	

Fabrication/Welding Technology course fees and other course fees may change during the year - see the online credit class schedule for fees assigned to courses.

Licensing or Other Certification Exams Exams for Welder Qualification Certification - electric welding processes.

Prerequisites Minimum placement score— of 68 in Reading OR completion of RD 080 OR prior college. A high school diploma or equivalent is recommended for all applicants to this program.

Admission Information Normal program entry is fall term. A program orientation is held for new students for fall term (dates available in Counseling or Enrollment and Student Financial Services). Contact advisor/counselor for assistance for winter and spring term entry, email AdvTechPrograms@lanecc.edu

Cooperative Education (Co-op) Co-op offers students college credit and a grade for on-the-job work experience related to their educational and career goals. Through Co-op students connect theory and practice, develop skills, expand career knowledge, and make contacts for the future. Work schedules and work sites vary. In certain circumstances, Co-op experience may be substituted for major course work. Contact Marv Clemmons, Fabrication/Welding Co-op Coordinator, Bldg. 8, Rm. 111, 541.463.3158, clemmonsm@lanecc.edu

Fabrication/Welding

Two-Year Associate of Applied Science Degree

First Year		Fall
WLD 112 Fabrication/Welding 1 ^{*,D,G}		12
MTH 076 Applied Geometry for Technicians ^{*,D,G} or higher mathematics.....		4
Total Credits		16
		Winter
WLD 113 Fabrication/Welding 2 ^{*,D,G}		12
CG 203 Human Relations at Work		3
Total Credits		15
		Spring
WLD 114 Fabrication/Welding 3 ^{*,D,G}		12
WR 115W Introduction to College Writing: Workplace Emphasis ^D or higher writing		3
Total Credits		15
Second Year		Fall
WLD 215 Fabrication/Welding 4 ^{*,D,G}		12
MFG 197 Manufacturing Technology ^{*,G}		3
Choice of:.....		3
Arts/Letters requirement ^R		
Social Science requirement ^R		
Total Credits		18

		Winter
WLD 216 Fabrication/Welding 5 ^{*,D,G}		12
PE/Health requirement ^{D,R}		3
Science or Computer Science course ^R		3
Total Credits		18
		Spring
WLD 217 Fabrication/Welding 6 ^{*,D,G}		12
Arts and Letters requirement ^R		3
Welding elective ^{D,G}		3
Total Credits		18

Fabrication Welding

One-Year Certificate of Completion

Gainful Employment Disclosure

Standard Occupational Classification: 51-4121.06

Go to websites below for information about related occupations:

Structural Metal Fabricators and Fitters

onetonline.org/link/summary/51-2041.00

Related Occupation:

Welders, Cutters, and Welder Fitters

onetonline.org/link/summary/51-4121.06

How much will the program cost?

(Estimate based on 2011-12 data. Consult Lane's website for updated tuition.)

Resident tuition and fees	\$5,634
Books, supplies, program costs	\$1,575
On-Campus room and board.....	Not offered

Total Estimate \$7,209

What's included?

Program Costs: lanecc.edu/advtech/AT/costsheetAT.htm

What are financing options to pay for the program?

In addition to any grant and scholarship aid for which they are eligible, 100% of program graduates used loans to finance their education. The median debt for 2010-11 program graduates:

Federal Loans.....	\$7,416
Institutional financing.....	\$359

No 2010-11 program graduates used private educational loans.

How long will it take to complete this program?

The program is designed to take 3 terms, or about 12 months of study to complete.

How many 2010-11 Fabrication/Welding Technology graduates completed within the designed program length?

Approximately 25% completed within 12 months.

What are my chances of getting a job when I graduate?

Lane County openings - 6 annually

Statewide openings - 42 annually

Will I be able to pay back student loans?

Most Lane students graduating in 2009-10 who took out federal student loans are successfully repaying them. Lane's federal loan student default rate for that period was 11.3%.

Where are comparable programs offered?

School	City	2009 Graduates
Chemeketa Community College	Salem	2
Mt Hood Community College	Gresham	13

		Fall
WLD 112 Fabrication/Welding 1 ^{*,D,G}		12
MTH 076 Applied Geometry for Technicians ^{*,D,G} or higher mathematics.....		4
Total Credits		16

Standard footnotes:

* Prerequisite required

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

R Required for AAS degree—see page 48

	Winter
WLD 113 Fabrication/Welding 2 ^{*,D,G}	12
WR 115W Introduction to College Writing: Workplace Emphasis ^W or higher writing	3
Total Credits	15
	Spring
WLD 114 Fabrication/Welding 3 ^{*,D,G}	12
CG 203 Human Relations at Work	3
Total Credits	15

Shielded Metal Arc Welder

Career Pathway Certificate of Completion

Learning Outcomes The graduate will:

- read simple blueprints, interpret and apply industrial welding symbols
- demonstrate proficiency at a industry entry-level with Shielded Metal Arc Welding
- weld and cut metal as is typical of circumstances found in industrial environments
- demonstrate and use industry safety standards

MTH 076 Applied Geometry for Technicians ^{*,D,G} or higher mathematics.....	4
Choice of:.....	4-12
WLD 121 Shielded Metal Arc Welding 1 ^{*,D,G}	
WLD 112 Fabrication/Welding 1 ^{*,D,G}	
Choice of:.....	4-12
WLD 122 Shielded Metal Arc Welding 2 ^{*,D,G}	
WLD 113 Fabrication/Welding 2 ^{*,D,G}	
Choice of:.....	3-12
WLD 141 Welder Qualification (Cert): SMAW	
WLD 216 Fabrication/Welding 5 ^{*,D,G}	
Total Credits	15-40

Wire Drive Welder

Career Pathway Certificate of Completion

Learning Outcomes The graduate will:

- read simple blueprints, interpret and apply industrial welding symbols
- demonstrate proficiency at a industry entry-level with various wire drive processes
- weld and cut metal as is typical of circumstances found in industrial environments
- demonstrate and use industry safety standards

MTH 076 Applied Geometry for Technicians ^{*,D,G} or higher mathematics.....	4
Choice of:.....	4-12
WLD 143 Wire Drive Welding 1 ^{*,D,G}	
WLD 112 Fabrication/Welding 1 ^{*,D,G}	
Choice of:.....	4-12
WLD 154 Wire Drive Welding 2 ^{*,D,G}	
WLD 113 Fabrication/Welding 2 ^{*,D,G}	
Choice of:.....	3-12
WLD 140 Welder Qualification (Certification): Wire Drive *	
WLD 216 Fabrication/Welding 5 ^{*,D,G}	
Total Credits	15-40

Welding Processes

One-Year Certificate of Completion

Welding Processes

Purpose To prepare the graduate for employment for entry-level and higher positions in metal fabrication industries. The graduate begins work in light or heavy metal fabrication as welders and/or fabricators. Training and experience can lead to careers in technical sales, supervision, estimating, quality control, inspection, specialty welding, and teaching. The fabrication/welding certificate program (the first year of the two-year degree) prepares graduates for employment as welders/ fabricators. The welding processes certificate program prepares graduates for employment as welder-trainees or welders.

The graduate of the Welding Processes One-Year Certificate of Completion will:

- read simple blueprints, interpret and apply industrial welding symbols.
- demonstrate proficiency at a industry entry-level with Shielded Metal Arc Welding, various wire drive processes and Gas Tungsten Arc Welding.
- weld and cut metal as is typical of circumstances found in industrial environments.
- demonstrate and use industry safety standards.

Gainful Employment Disclosure

Standard Occupational Classification: 51-4121.06

Go to websites below for information about related occupations:

Welders, Cutters, and Welder Fitters

onetonline.org/link/summary/51-4121.06

Related Occupation:

Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders

onetonline.org/link/summary/51-4122.00

How much will the program cost?

(Estimate based on 2011-12 data. Consult Lane's website for updated tuition.)

Resident tuition and fees	\$7,279
Books, supplies, program costs	\$2,500
On-Campus room and board.....	Not offered
Total Estimate	\$9,779

What's included?

Program Costs: lanecc.edu/advtech/AT/costsheetAT.htm

What are financing options to pay for the program?

In addition to any grant and scholarship aid for which they are eligible, students may use loans to finance their education.

No 2010-11 program graduates used federal loans, private educational loans or institutional financing.

How long will it take to complete this program?

The program is designed to take 6 terms, or about 12 months of study to complete.

How many 2010-11 Welding Processes graduates completed within the designed program length?

None completed within 12 months.

What are my chances of getting a job when I graduate?

Lane County openings - 19 annually

Statewide openings - 169 annually

Will I be able to pay back student loans?

Most Lane students graduating in 2009-10 who took out federal student loans are successfully repaying them. Lane's federal loan student default rate for that period was 11.3%.

Where are comparable programs offered?

School	City	2009 Graduates
Chemeketa Community College	Salem	5
Clackamas Community College	Oregon City	--
Clatsop Community College	Astoria	4
Klamath Community College	Klamath Falls	4
Lane Community College	Eugene	2
Linn-Benton Community College	Albany	2
Mt Hood Community College	Gresham	15
Portland Community College	Portland	1
Rogue Community College	Grants Pass	3
Southwestern Oregon Community College	Coos Bay	2
Treasure Valley Community College	Ontario	--
Umpqua Community College	Roseburg	--

Wages Lane County average, \$16.93 hourly, \$35,210 annually. Statewide average \$17.71 hourly, \$36,829 average annually (\$45,000 annually for fabricators).

Licensing or Other Certification Exams Exams for Welder Qualification Certification - wire drive and arc welding processes.

Prerequisites Minimum placement score— of 68 in Reading OR completion of RD 080 OR prior college. A high school diploma or equivalent is recommended for all applicants to this program.

Admission Information See lanecc.edu/advtech/AT/admissionAT.htm or contact the Advanced Technology Division, AdvTech-Programs@lanecc.edu

Cooperative Education (Co-op) Co-op offers students college credit and a grade for on-the-job work experience related to their educational and career goals. Through Co-op students connect theory and practice, develop skills, expand career knowledge, and make contacts for the future. Work schedules and work sites vary. In certain circumstances, Co-op experience may be substituted for major course work. Contact Marv Clemmons, Fabrication/Welding Co-op Coordinator, Bldg. 8, Rm. 111, 541.463.3158, clemonsm@lanecc.edu

Learning Outcomes The graduate of the Welding Processes One-Year Certificate of Completion will:

- read simple blueprints, interpret and apply industrial welding symbols.
- demonstrate industry entry-level proficiency with Shielded Metal Arc Welding, various wire drive processes and Gas Tungsten Arc Welding.
- weld and cut metal in circumstances typical of industrial environments.
- demonstrate and use industry safety standards.

		Fall
MTH 076 Applied Geometry for Technicians ^{*,D,G} or higher mathematics.....	4	
WLD 121 Shielded Metal Arc Welding 1 ^{*,D,G}	4	
WLD 143 Wire Drive Welding 1 ^{*,D,G}	4	
Total Credits	12	
		Winter
CG 203 Human Relations at Work.....	3	
WLD 122 Shielded Metal Arc Welding 2 ^{*,D,G}	4	
WLD 154 Wire Drive Welding 2 ^{*,D,G}	4	
Total Credits	11	

		Spring
WLD 159 Wire Drive Welding 3 ^{*,D,G}	4	
WLD 242 Gas Tungsten Arc Welding 1 ^{*,D,G}	3	
WR 115W Introduction to College Writing: Workplace Emphasis or higher writing.....	3	
Total Credits	10	
		Fall
WLD 111 Blueprint Reading for Welders ^{*,D,G}	3	
WLD 160 Wire Drive Welding 4 ^{*,D,G}	4	
WLD 256 Gas Tungsten Arc Welding 2 ^{*,D,G}	3	
Total Credits	10	
		Winter
WLD 257 Gas Tungsten Arc Welding 3 ^{*,D,G}	3	
Directed electives.....	0-4	
Total Credits	0-7	
Directed Electives:		
DRF 167 Cad 1.....	4	
ENGR 280W Co-op Ed: Welding	3	
WLD 121 Shielded Metal Arc Welding 1	4	
WLD 122 Shielded Metal Arc Welding 2	4	
WLD 139 Welding Lab * [Available only as pass/no pass].	1-3	
WLD 140 Welder Qualification (Certification):		
Wire Drive *	3	
WLD 141 Welder Qualification (Certification): SMAW *	3	
WLD 142 Pipe Welding Lab: Carbon Steel.....	3	
WLD 143 Wire Drive Welding 1	4	
WLD 154 Wire Drive Welding 2	4	

Flight Technology

Offered by the Lane Aviation Academy, 541.463.4195

Two-Year Associate of Applied Science Degree

Purpose To prepare students for successful careers as pilots in the air transportation industry.

Learning Outcomes The graduate will:

- be certificated by the FAA as commercial pilot with an option for being FAA certified as a Flight Instructor.
- have FAA pilot certification and be legally qualified for an entry-level position in the commercial aviation industry.
- have knowledge and skills to serve in responsible positions in a corporate aviation department.
- be skilled in the use of multiple industry libraries and data base systems and be skilled as a researcher in the aviation industry.
- be skilled in the use of various systems of measure and conversion; be skilled in the use of performance tables and graphs; plot data manually and electronically to determine performance and trends.
- skillfully access a multitude of library accessible resources for applications information and topical research projects; be skilled in the use of local and national libraries and databases.
- accurately use systems of measure, skillfully perform unit conversions, and be skilled in computational analysis defining airplane operational performance; accurately use performance tables, charts and graphs; use interpolation to derive implied values; and be skilled in the use of aviation specific manual and electronic calculators to determine time, rate and trends.

Graduates may also transfer to a four-year university preparing for a professional degree.

Standard footnotes:

* Prerequisite required

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

R Required for AAS degree—see page 48

Job Openings Projected through 2018

- Statewide openings - 27 annually
- National openings - 10,620 annually for commercial pilots, aircraft pilots and flight engineers, and airline pilots and copilots

Wages Flight instructors earn from \$15,000-45,000. Entry-level airline pilots earn \$28,000 through their probationary period. Air carrier line pilots earn \$45,000-250,000 annually.

Costs (Estimate based on 2011 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees	\$10,449
Certificates, flight lab and instruction fees, including ground charges	up to \$45,000
FAA Knowledge Exams (five required for degree)	\$750
FAA Physical.....	\$250
Books	\$1800
Supplies.....	\$300
Total up to \$58,549	

Flight Technology course fees and other course fees may change during the year - see the online credit class schedule for fees assigned to courses.

Admissions Information An information packet may be requested by calling 541.463.4195, visiting the Flight Technology Department at 28715 Old Airport Road, Eugene OR 97402, or visiting our website at lanecc.edu/flight.

Program Endorsement The Federal Aviation Administration approves this program. Flight Technology is a Certified Part 141 approved training course and is the only flight school in the State of Oregon with FAA approved self-examining authority for Private Pilot, Commercial Pilot and Instrument Rating.

Licenses under Part 141: Private Pilot Course - Airplane Single engine Land (ASEL), Professional Pilot Course - Commercial and Instrument ASEL, Commercial ASEL, Instrument Pilot Course and Airline Transport Proficiency Course AMEL.

Advanced Certification Courses under Part 61: Private Pilot Airplane Multiengine (AMEL), Commercial Pilot AMEL, Flight Instructor Airplane Single Engine, Flight Instructor Instrument Airplane and Flight Instructor Airplane Multiengine.

Cooperative Education (Co-op) Co-op offers students college credit and a grade for on-the-job experience related to their educational and career goals. Through Co-op, students connect theory and practice, develop skills, expand career knowledge, and make contacts for the future. Work schedules and work sites vary. Contact Marv Clemons, Flight Technology Co-op Coordinator, Bldg. 8, Rm. 111, 541.463.3158, clemonsm@lanecc.edu

Note For FT 239 Professional Pilot Flight Lab a student must have a total of 39 Flight Lab credits to fulfill the AAS Degree requirement.

Prerequisite Courses An applicant may complete the following courses prior to program entry.

Arts and Letters requirement ^R	3
Human Relations requirement ^R	3
WR 121 Composition: Introduction to Academic Writing or higher writing ^{*,D}	4
Total Credits	10

First Year

FT 102 General Aviation Careers ^D	1
FT 103 Aircraft Development ^{*,D,G}	4

FT 130 Primary Flight Briefing ^{*,D,G}	3
FT 239 Professional Pilot Flight Lab ^{*,D}	6
FT 250 Private Pilot Ground School ^{D,G}	5
Total Credits	19

Winter

FT 239 Professional Pilot Flight Lab ^{*,D}	6
GS 109 Meteorology ^{D,G}	5
MTH 095 Intermediate Algebra or higher mathematics ^{*,D}	5
Total Credits	16

Spring

FT 113 Aviation Science ^{D,G}	4
FT 115 Aircraft Structures and Systems ^{D,G}	3
FT 239 Professional Pilot Flight Lab ^{*,D}	6
FT 251 Commercial Pilot Ground School ^{D,G}	5
Total Credits	18

Second Year**Fall**

CS 120 Concepts of Computing or higher computer science	4
FT 239 Professional Pilot Flight Lab ^{*,D}	7
FT 252 Instrument Ground School ^{D,G}	5
Total Credits	16

Winter

FT 239 Professional Pilot Flight Lab ^{*,D}	7
FT 254 Aerodynamics ^{D,G}	3
FT 256 Flight Instructor-Airplane Ground School ^{D,G}	3
FT 280 Co-op Ed: Flight Technology (optional) ^{D,G}	(3)
Physical Education/Health requirement ^{D,R}	3
Total Credits	16-19

Spring

BA 254 General Aviation Management ^{D,G}	3
FT 228 Multiengine Ground School ^{D,G}	2
FT 239 Professional Pilot Flight Lab ^{*,D}	7
FT 255 Fundamentals and Flight Instructor— Instrument Ground School ^{D,G}	3
Total Credits	15

Additional Ratings:**Credits**

FT 239 ATP	1-6
FT 239 CFIA	1-6
FT 239 CFII	1-6
FT 239 MEI	1-4
FT 239 Multiengine	1-3

Geospatial Information Science and Technology

Offered by the Social Science Division, 541.463.5427

Two-Year Associate of Applied Science Degree

Career Pathway Certificate of Completion, Geographic Information Science

Purpose Prepares graduates for careers as GIS technicians who work in a variety of fields to collect, map, analyze, and manage spatial data. GIS technicians are employed by organizations involved in forestry and natural resource exploration, mapping companies, utility companies, research organizations, city government, public safety organizations, the military, health and human services organizations, and consulting firms (e.g. in environmental, engineering, forestry, surveying and marketing

fields). GIS technicians help develop and manage spatial data (information related to location), use data to make decisions and manage resources, and create and update maps for use in reports and presentations.

Learning Outcomes The graduate will:

- Collect and input data into a GIS system using: GPS, Digitizing, Geocoding,
- Design and generate various cartographic products for planning or presentations.
- Understand and convert spatial data formats.
- Create, manage, and update spatial data.
- Manage information in a GIS database.
- Satellite image processing.
- Perform routine data analysis – buffer, query, union, intersect.
- Plan, design and manage mapping and analysis projects.

Job Openings Projected through 2018

Lane County openings - 20 annually

Statewide openings - 40 annually

Wages

Lane County average hourly - \$22.78; average annual - \$47,369

Oregon average hourly - \$23.26; average annual - \$48,381

Costs (Estimate based on 2011 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees	\$9,626
Other Course/Program Costs.....	\$490
Books and supplies.....	\$3,000
Total Estimate \$13,116	

Geospatial Information Science and Technology course fees and other course fees may change during the year - see the online credit class schedule for fees assigned to courses.

Program Endorsement The National GeoTech Center – DelMar Community College

Cooperative Education (Co-op) Co-op is a required and important part of the Geospatial Information Science and Technology program. It provides relevant field experience that integrates theory and practice while providing opportunities to develop skills, explore career options, and network with professionals and employers in the GIST field. Three Co-op credits are required for the GIST degree program. Work schedules and work sites vary. Contact Lynn Songer, GIST Co-op Coordinator, CEN, Rm.420G, 541.463.5493, songerl@lanecc.edu

Program Lead Lynn Songer, CEN, Rm.420G, 541.463.5493, songerl@lanecc.edu

Prerequisites Students must qualify for MTH 060, either by placement testing or completing prerequisite courses, and by the fourth term, qualify to begin MTH 095. Each student should consult with a counselor or advisor to plan a program of study.

Directed Electives Students in the AAS degree program are required to complete 4 credits from the GIST Directed Electives list.

Geospatial Information Science and Technology

Two-Year Associate of Applied Science Degree

First Year		Fall
WR 121 Introduction to Academic Writing.....		4
BT 123 MS EXCEL for Business ^{D,G}		4
CIS 125D Software Tools 1: Databases ^{D,G}		4
GIS 151 Digital Earth ^{D,G}		4
Total Credits		16
		Winter
DRF 167 CAD 1 ^{D,G}		4
WR 227 Technical Writing		4
GEOG 142 Introduction to Human Geography ^{D,G}		4
GIS 245 Maps and Spatial Information ^{D,G}		4
Total Credits		16
		Spring
GEOG 141 Natural Environment ^{D,G}		4
SP 111 Fundamentals of Public Speaking		4
GIS 246 Introduction to GIS ^{D,G}		4
Choice of:.....		3-4
HE255 Global Health and Sustainability, or HE222 Consumer Health		
Total Credits		15-16
Second Year		Fall
GIS 249 Raster Analysis and Remote Sensing ^{D,G}		4
CS 133P Beginning Programming: Python ^{D,G}		4
Arts and Letters Elective		4
Elective - Suggested Social science.....		4
Total Credits		16
		Winter
GIST Directed Electives.....		4
MTH 111 College Algebra		5
DRF 168 CAD 2 ^{D,G}		4
Total Credits		13
		Spring
GIS 260 Applications in GIS ^{D,G}		4
Arts and Letters Elective		4
GIS280 Cooperative Education.....		3
Selected Social Science Elective		4
Total Credits		15
		Summer
GIS 280 Cooperative Education ^{D,G}		3
Total Credits		3
GIST Directed Electives		
CIS 247 Information Analysis and Visualization.....		4
GIS 250 Cartographic Design.....		4
GIS 251 GIS for Water Technicians.....		2
GIS 252 Water Resources		2
GIS 253 Emerging Trends in Geospatial Technology.....		4
GIS 254 Spatial Data and Scripting		4
GIS 298 Independent Study: GIST.....		1-12

Standard footnotes:

* Prerequisite required

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

R Required for AAS degree—see page 48

Geographic Information Systems

Career Pathway Certificate of Completion

Purpose This sequence of courses provides a foundation in geospatial concepts while developing workforce skills. The focus on collaborative projects using real-world data to solve problems makes the GIS course sequence relevant and dynamic.

Learning Outcomes The graduate will understand:

- basic cartographic principles of global reference and coordinate systems, maps and generalization.
- types of maps including reference, thematic, topographic, aerial photography.
- skills and techniques used to create, analyze, and display spatial data using geographic information system software.
- principles of information analysis including how information is designed, organized, analyzed, visualized, used and misused.
- use of software tools to communicate information effectively through descriptive statistics and narratives, graphical visualization and mapping applications.
- project management of basic GIS tasks such as data management, cartographic design, and document conversion and analysis.

Courses required	Credits
GIS 151 Digital Earth ^{D,G}	4
GIS 245 Maps and Spatial Information ^{D,G}	4
GIS 246 Introduction to GIS ^{D,G}	4
Approved Elective for GIS Pathway	4
Total Credits	16

GIS Pathways Electives

CIS 247 Information Analysis and Visualization ^{D,G}	4
GIS 249 Raster Analysis and Remote Sensing	4
GIS 298 Independent Study *	4

* GIST Instructor approval required

Graphic Design

Offered by the Arts Division, 541.463.5409

Two-Year Associate of Applied Science Degree

Two-Year Certificate of Completion

Purpose To prepare graduates for entry-level positions in the fields of graphic and digital design

Learning Outcomes The graduate will:

- Design a variety of graphic materials including advertising, corporate identity, publications, packaging, signage, marketing, and the internet.
- Solve graphic communication problems through the use of computer technology used in the field.
- Demonstrate understanding of fundamental art, communication, and marketing principles in the development of design solutions.
- Demonstrate understanding of professional business standards and practices.
- Demonstrate ability to design and produce materials that will meet professional standards for reproduction.
- Use appropriate library and information resources to research design problems, issues, and technology as well as to support lifelong technical learning.

Job Openings Projected through 2018

Lane County openings - 18 annually

Statewide openings - 107 annually

Wages

Lane County average hourly - \$17.01; average annual - \$37,468

Oregon average hourly - \$19.28; average annual - \$40,102

Costs (Estimate based on 2011 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees	\$9,006
Other Course/Program Costs	\$1,500
Total Credits	\$10,506

Graphic Design course fees and other course fees may change during the year - see the online credit class schedule for fees assigned to courses.

Admission Information Open admission for first year. Limited admission for second year. See lanecc.edu/mediaarts/graphicdesign/2ndyear/index.html.

Cooperative Education (Co-op) Co-op offers students college credit and a grade for on-the-job work experience related to their educational and career goals. Through Co-op, students connect theory and practice, develop skills, expand career knowledge, and make contacts for the future. Work schedules and work sites vary. A minimum of six credits of Co-op in graphic design is required for completion of the graphic design program. Contact Teresa Hughes, Graphic Design Cooperative Education Coordinator, Bldg. 17, Rm. 106, 541.463.3179, hughes@lanecc.edu

Program Contacts: Jefferson Goolsby, Bldg. 17, Rm. 105; Susan Lowdermilk, Bldg. 11, Rm. 112.

Note Students must earn a grade of "B-" or better in all prerequisites and "C" or better in major requirements.

Two-Year Associate of Applied Science Degree

First Year	Fall
ART 131 Introduction to Drawing ^{B,G}	3
ART 216 Digital Design Tools ^{B,G}	4
ART 261 Photography 1 ^{B,G}	3
Choice of:	4
ART 115GD Basic Design Fundamentals ^{B,G} (4 credits) or	
ART 115 Basic Design: Fundamentals ^{B,G} (3 credits) and	
GD 110 Introduction to Graphic Design ^{D,G} (1 credit)	
Total Credits	14

	Winter
ART 119 Typography 1 ^{*,B,G}	3
ART 200 Graphic Design History ^{D,G}	3
ART 225 Digital Illustration ^{*,B,G}	3
CG 203 Human Relations at Work ^{D,G}	3
Science/Math/Computer Science requirement ^{D,G}	4
Total Credits	16

	Spring
ART 116 Basic Design: Color ^{B,D,G}	3
ART 231 Drawing: Intermediate ^{*,B,D,G}	3
CIS 195 Web Authoring 1 ^G	3
MUL 212 Digital Imaging ^{B,G}	3
WR 121 Introduction to Academic Writing ^{D,G}	4
Total Credits	16

Second Year	Fall
ART 218 Printing Technology ^{*B,G}	2
ART 221 Graphic Design 1 ^{*B,G}	4
ART 227 Graphic Design Production 1 ^{*B,G}	3
MUL 218 Business Practices for Media Arts ^{D,G}	2
Directed elective ^{D,G}	3
Total Credits	14

	Winter
ART 222 Graphic Design 2 ^{*,B,G}	4
ART 228 Graphic Design Production 2 ^{*,B,G}	4
ART 280 GD Co-op Ed: Graphic Design ^{*,G}	3
ART 289 Web Production ^{*,B,G}	3
Choice of:.....	3
Physical Education Activity requirement	
Health requirement	
Total Credits	17

	Spring
ART 223 Graphic Design 3 ^{*,B,G}	4
ART 229 Graphic Design Production 3 ^{*,B,G}	4
ART 280GD Co-op Ed: Graphic Design ^{*,B,G}	3
ART 290 Design Concepts for the Web ^{*,B,G}	3
MTH 060 Beginning Algebra	
or higher mathematics ^{D,G}	4
Total Credits	18

Two-Year Certificate of Completion

Gainful Employment Disclosure

Standard Occupational Classification: 27-1024.00

Go to websites below for information about related occupations:

Graphic Designers

onetonline.org/link/summary/27-1024.00

Related Occupation:

Commercial and Industrial Designers

onetonline.org/link/summary/27-1021.00

How much will the program cost?

(Estimate based on 2011-12 data. Consult Lane's website for updated tuition.)

Resident tuition and fees	\$9,171
Books, supplies, program costs	\$1,500
On-Campus room and board.....	Not offered
Total Estimate	\$10,671

What's included?

Program Costs: lanecc.edu/es/feesandexpenses.html

What are financing options to pay for the program?

In addition to any grant and scholarship aid for which they are eligible, 80% of program graduates used loans to finance their education. The median debt for 2010-11 program graduates: Federal Loans..... \$19,904
No 2010-11 program graduates used private educational loans or institutional financing.

How long will it take to complete this program?

The program is designed to take 6 terms, or about 24 months of study to complete.

How many 2010-11 Graphic Design graduates completed within the designed program length?

None completed within 24 months.

What are my chances of getting a job when I graduate?

Lane County openings - 11 annually

Statewide openings - 107 annually

Will I be able to pay back student loans?

Most Lane students graduating in 2009-10 who took out federal student loans are successfully repaying them. Lane's federal loan student default rate for that period was 11.3%.

Where are comparable programs offered?

School	City	2009 Graduates
Mt Hood Community College	Gresham	--
Linn Benton Community College	Albany	--

	Fall
ART 131 Introduction to Drawing ^{B,G}	3
ART 216 Digital Design Tools ^{B,G}	4
ART 261 Photography 1 ^{B,G}	3
Choice of:.....	4
ART 115GD Basic Design Fundamentals ^{B,G} (4 credits) or	
ART 115 Basic Design: Fundamentals ^{B,G} (3 credits) and	
GD 110 Introduction to Graphic Design ^{B,G} (1 credit)	
Total Credits	14

	Winter
ART 119 Typography ^{*,B,G}	3
ART 225 Digital Illustration ^{*,B,G}	3
ART 231 Drawing: Intermediate ^{*,B,G}	3
CG 203 Human Relations at Work ^{D,G}	3
Total Credits	12

	Spring
ART 116 Basic Design: Color ^{B,G}	3
CIS 195 Web Authoring 1 ^{D,G}	3
MUL 212 Digital Imaging ^{B,G}	3
WR 121 Introduction	
to Academic Writing ^{D,G}	4
Total Credits	13

	Fall
ART 218 Printing Technology ^{*,B,G}	2
ART 221 Graphic Design 1 ^{*,B,G}	4
ART 227 Graphic Design Production 1 ^{*,B,G}	3
MTH 060 Beginning Algebra	
or higher mathematics ^{D,G}	4
Total Credits	13

	Winter
ART 222 Graphic Design 2 ^{*,B,G}	4
ART 228 Graphic Design Production 2 ^{*,B,G}	4
ART 280GD Co-op Ed: Graphic Design ^{*,D,G}	3
ART 289 Web Production ^{*,B,G}	3
Total Credits	14

	Spring
ART 223 Graphic Design 3 ^{*,B,G}	4
ART 229 Graphic Design Production 3 ^{*,B,G}	4
ART 280GD Co-op Ed: Graphic Design ^{*,B,G}	3
ART 290 Design Concepts for the Web ^{*,B,G}	3
Total Credits	14

Directed Electives

Any Art Class

Any Multimedia Class

Health Records Technology

Offered by Health Professions Division, 541.463.5617

Two-Year Associate of General Studies

One-Year Certificate of Completion

Career Pathway Certificate of Completion: Basic Health Care

Career Pathway Certificate of Completion: Medical Coding

Career Pathway Certificate of Completion: Medical Transcription

Purpose To prepare graduates to assemble and maintain patient's medical records including medical history, symptoms, examination results, diagnostic tests, treatment methods, and all

Standard footnotes:

* Prerequisite required

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

R Required for AAS degree—see page 48

other healthcare provider services. Health Record Technicians organize and manage demographic, coded, and billing data by ensuring its quality, accuracy, accessibility, and security. They regularly communicate with physicians and other healthcare professionals to clarify diagnoses or to obtain additional information as needed to meet billing, payment, and regulatory requirements. Technicians also may assist with improving electronic health records (EHR) software usability and may contribute to the development and maintenance of health information networks.

Learning Outcomes The graduate will:

- organize, input, process, analyze, secure, and distribute healthcare information.
- organize, analyze, and technically evaluate the health record content for completeness and accuracy.
- abstract health records and assign standardized codes to diagnoses and procedures for indexing health data, reporting needs, and processing claims for insurance reimbursement.
- answer legal, governmental, and insurance company inquiries, compiling statistical data.
- be involved in administration, reimbursement, quality assurance, utilization review, and risk management committees as a representative of the Health Information Management team.
- utilize library and valid internet resources for research, projects, and to maintain a level of expertise in his or her field of study.
- perform mathematical functions as necessary to prepare health data reports.

Employment Projections from 2008 – 2018 estimate an average of 124 openings annually statewide and 13 openings annually in Lane County.

Wages Statewide average wages in 2011 were \$17.53 hourly or \$36,481 annually, usually with excellent benefits. Lane County average wages were \$17.20 hourly or \$35,776 annually.

Admission Information is available from the Counseling and Advising Center and the HRT web site, lanecc.edu/hp/hrt/

Cooperative Education (Co-op) Co-op is a directed elective for the HRT Program. Co-op offers students college credit and a grade for on-the-job work experience related to their educational and career goals. Through Co-op, students connect theory and practice, develop skills, expand career knowledge, and make contacts for the future. Work schedules and work sites vary. Students are required to complete a minimum of two terms of their program prior to registering for HRT Co-op and to have their clinical requirements completed, including their immunizations and background check. Contact the Cooperative Education Department, Bldg. 19, 541.463.5203.

Faculty Lead Shelley K. Williams, RN, B541.463.5182, williamSSK@lanecc.edu

Associate of General Studies Degree

Courses required for admission to Health Records Technology:

Prerequisites	Credits
BT 120 MS Word for Business ^{D,G}	3
HO 100 Medical Terminology 1 ^{D,G}	3
HO 110 Administrative Medical Office Procedures ^{D,G}	3

First Year	Fall
HIT 104 Clinical Terminology ^{D,G}	3
HIT 120 Introduction to Health Records ^{D,G}	2
HO 150 Human Body Systems 1 ^{*,D,G}	3
HO 190 Medical Formatting ^{*,D,G}	3
HO 195 Medical Transcription 1 ^{*,D,G}	3
Total Credits	14

	Winter
HIT 196 Medical Transcription 2 ^{*,D,G}	3
HO 112 Medical Insurance Procedures ^{*,D,G}	3
HO 152 Human Body Systems 2 ^{*,D,G}	3
HO 220 Legal and Ethical Aspects of Health Care ^{D,G}	3
MTH 065 Elementary Algebra or higher ^{D,G}	4
Total Credits	16

	Spring
HO 114 Medical Coding Procedures ^{*,D,G}	3
HIT 154 Intro to Medical Science ^{*,D,G}	3
HIT 160 Practice Management ^{*,1,D,G}	3
WR 121 Introduction to Academic Writing ^{*,G,D}	4
Science/Math/Computer Science Requirement	4
Total Credits	17

Second Year	Fall
CS 120 Concepts of Computing	4
Social Science Requirement	3
Science/Math/Computer Science Requirement	4
WR 227 Technical Writing ^{*,G,D}	4
Total Credits	15

	Winter
Social Science Requirement.....	3
Choice of:.....	3
PSY 201 General Psychology	
PSY 202 General Psychology	
PSY 203 General Psychology	
SOC 204 Introduction to Sociology	
SOC 205 Social Stratification and Social Systems	
SOC 206 Institutions and Social Change	
SP 218 Interpersonal Communication ^{D,G}	4
Directed Elective ^{D,G}	3
Total Credits	13

	Spring
Social Science Requirement	3
Arts and Letters Requirement	4
Health/PE Requirement	3
Directed Elective ^{D,G}	3
Total Credits	17

Directed Electives	
HIM 270 ICD Coding ^{D,G}	4
HIM 273 CPT Coding 1 ^{*,D,G}	4
HIM 275 CPT Coding 2 ^{*,D,G}	4
HIT 197 Medical Transcription 3 ^{1,D,G}	3-6
HIT 222 Reimbursement Methodologies ^{D,G}	3
HIT 280 Cooperative Education ^{*,1,D,G}	3-6
Choice of:	
HO 153 Intro to Pharmacology ^{*,D,G}	3
HI 107 Working with IT Systems ^{D,G}	3
HI 101 Intro to Public Health ^{D,G}	3
HI 111 Networking and Health Info Exchange ^{D,G}	3
CIS 125D Software Tools 1: Databases ^{D,G}	4

Health Records Technology

One-Year Certificate of Completion

Admission Information Application and admission into the Health Records Technology Program is required. For assistance in meeting program or application requirements, please go to Counseling and Advising in building 1, room 103 or e-mail HRTProgram@lanecc.edu

Admission and Application information is found on the web: lanecc.edu/hp/hrt/

Enrollment is limited to 40 students including Health Records Technology and Medical Transcriptionist students. Applicants are accepted on point basis.

Cooperative Education (Co-op) Co-op is a directed elective for the HRT Program. Co-op offers students college credit and a grade for on-the-job work experience related to their educational and career goals. Through Co-op, students connect theory and practice, develop skills, expand career knowledge, and make contacts for the future. Work schedules and work sites vary. Contact the Cooperative Education Division, Bldg. 19, Rm. 231, 541.463.5203.

Program Coordinator Shelley K. Williams, RN, BA 541.463.5182, williamSSK@lanecc.edu

Gainful Employment Disclosure

Standard Occupational Classification: 29-2071.00

Go to websites below for information about related occupations: Medical Records and Health Information Technicians onetonline.org/link/summary/29-2071.00

Related Occupation:

Insurance Claims Clerks

onetonline.org/link/summary/43-9041.01

How much will the program cost?

(Estimate based on 2011-12 data. Consult Lane's website for updated tuition.)

Resident tuition and fees	\$7,239
Books, supplies, program costs	\$1,700
On-Campus room and board.....	Not offered
Total Estimate	\$8,939

What's included?

Program Costs: lanecc.edu/es/feesandexpenses.html

What are financing options to pay for the program?

In addition to any grant and scholarship aid for which they are eligible, 75% of program graduates used loans to finance their education. The median debt for 2010-11 program graduates:
Federal Loans..... \$9,975
No 2010-11 program graduates used private educational loans or institutional financing.

How long will it take to complete this program?

The program is designed to take 4 terms, or about 12 months of study to complete.

How many 2010-11 Health Records Technology graduates completed within the designed program length?

None completed within 12 months.

What are my chances of getting a job when I graduate?

Lane County openings - 13 annually

Statewide openings - 124 annually

Will I be able to pay back student loans?

Most Lane students graduating in 2009-10 who took out federal student loans are successfully repaying them. Lane's federal loan student default rate for that period was 11.3%.

Where are comparable programs offered?

School	City	2009 Graduates
Linn-Benton Community College	Albany	--

Courses required for admission to Health Records Technology:

Prerequisites	Credits
BT 120 MS Word for Business ^{D,G}	3
HO 100 Medical Terminology ^{D,G}	3
HO 110 Administrative Medical Office Procedures ^{D,G}	3
MTH 065 Elementary Algebra or higher ^{D,G}	4
Total Prerequisite Credits	13

One-Year Certificate of Completion

	Fall
HIT 120 Introduction to Health Records ^{D,G}	2
HO 114 Medical Coding Procedures ^{*,D,G}	3
HO 150 Human Body Systems 1 ^{*,D,G}	3
HO 190 Medical Formatting ^{*,D,G}	3
HO 195 Medical Transcription 1 ^{*,1,D,G}	3
Directed Elective ^{D,G}	3-6
Total Credits	17-20

	Winter
SP 218 Interpersonal Communication ^{D,G}	4
CS 120 Concepts of Computing ^{D,G}	4
HIT 196 Medical Transcription 2 ^{*,D,G}	3
HO 112 Medical Insurance Procedures ^{*,D,G}	3
HO 152 Human Body Systems 2 ^{*,D,G}	3
HO 220 Legal and Ethical Aspects of Health Care ^{D,G}	3
Total Credits	20

	Spring
HIT 104 Clinical Terminology ^{D,G}	3
HIT 154 Introduction to Medical Science ^{*,D,G}	3
HIT 160 Practice Management ^{*,D,G}	3
WR 121 Introduction to Academic Writing ^{*,D,G}	4
Choice of:.....	3
PSY 201 General Psychology	
PSY 202 General Psychology	
PSY 203 General Psychology	
SOC 204 Introduction to Sociology	
SOC 205 Social Stratification and Social Systems	
SOC 206 Institutions and Social Change	
Directed Elective ^{D,G}	3-6
Total Credits	19-22

Directed Electives

HIM 270 ICD Coding ^{D,G}	4
HIM 273 CPT Coding 1 ^{*,D,G}	4
HIM 275 CPT Coding 2 ^{*,D,G}	4
HIT 197 Medical Transcription 3 ^{1,D,G}	3-6
HIT 222 Reimbursement Methodologies ^{D,G}	3
HIT 280 Cooperative Education ^{*,D,G}	3-6
Choice of:	
HO 153 Intro to Pharmacology ^{*,D,G}	3
HI 107 Working with IT Systems ^{D,G}	3
HI 101 Intro to Public Health ^{D,G}	3
HI 111 Networking & Health Info Exchange ^{D,G}	3
CIS 125D Software Tools 1: Databases ^{D,G}	4

Standard footnotes:

* Prerequisite required

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

R Required for AAS degree—see page 48

Basic Health Care

Career Pathway Certificate of Completion

Purpose This career pathway certificate teaches the basic skills needed for employment in an entry level position in a health care setting. The outcomes include practice responsible and confidential communications and apply an understanding of health care laws and ethics are required in health care practice , work in a professional manner in the health care environment, understand and apply medical terminology appropriately, describe the anatomy and physiology of the various systems of the body, demonstrate basic computer skills and, recognize the scope of work the student is legally allowed to perform with their level of training. The certificate is fully embedded in the Health Records Technology certificate and multiple other Lane programs. It is designed for positions in health care such as patient transport, medical receptionist, environmental support, food services, and physical therapy aide. There is no application requirement for this certificate.

Learning Outcomes The graduate will:

- practice responsible and confidential communications.
- apply an understanding of health care laws and ethics that are required in health care practice.
- work in a professional manner in the health care environment.
- understand and apply medical terminology appropriately.
- describe the anatomy and physiology of the various systems of the body.
- demonstrate basic computer skills.
- recognize the scope of work the graduate is legally allowed to perform with his or her level of training.

Admissions There is no application requirement for this certificate. However, to receive this certificate, students must demonstrate algebra proficiency, either by completing MTH 065 Elementary Algebra (or higher math course), or by placing into MTH 095 Intermediate Algebra on Lane's Placement Test.

	Fall
HO 100 Medical Terminology 1	3
HO 110 Administrative Medical Office Procedures.....	3
HO 150 Human Body Systems 1	3
Total Credits	9
	Winter
BT 120 MS WORD for Business.....	3
HO 152 Human Body Systems 2	3
WR 121 Introduction to Academic Writing	4
Total Credits	10

Medical Coding

Career Pathway Certificate of Completion

Purpose A coding specialist is an individual who reviews and analyzes health records to identify relevant diagnoses and procedures for distinct patient encounters. The coding specialist is responsible for translating diagnostic and procedural phrases utilized by health care providers into coded form. The translation process requires interaction with the health care provider to ensure that the terms have been translated accurately. The coded information that is a product of the coding process is then utilized for reimbursement purposes, in the assessment of clinical care, to

support medical research activity, and to support the identification of health care concerns critical to the public at large.

A coding specialist must have a thorough understanding of the content of the medical record in order to be able to locate information to support or provide specificity for coding. The coding specialist must also be highly trained in anatomy and physiology of the human body and disease processes in order to understand the etiology, pathology, symptoms, signs, diagnostic studies, treatment modalities, and prognosis of diseases and procedures to be coded.

Learning Outcomes The graduate will:

- practice responsible and confidential communications.
- translate diagnostic and procedural phrases utilized by health care providers into coded form.
- interact with the health care provider to ensure that the terms have been translated accurately.
- utilize coded information for reimbursement purposes, in the assessment of clinical care, to support medical research activity, and to support the identification of health care concerns critical to the public at large.
- understanding the content of medical records.
- locate information to support or provide specificity for coding.
- demonstrate knowledge of anatomy and physiology of the human body and disease processes
- demonstrate understanding of the etiology, pathology, symptoms, signs, diagnostic studies, treatment modalities, and prognosis of diseases and procedures to be coded.

Wages Beginning pay for medical coding specialists will range from \$12 - \$18.50 per hour.

Admission Information Application and admission into the Health Records Technology Program is required. Admission and Application information is found on the web at: lanecc.edu/hp/hrt/.

Cooperative Education (Co-op) Co-op is a directed elective for the HRT Program. Co-op offers students college credit and a grade for on-the-job work experience related to their educational and career goals. Through Co-op, students connect theory and practice, develop skills, expand career knowledge, and make contacts for the future. Work schedules and work sites vary. Contact the Cooperative Education Department, Bldg. 19, (541) 463-5203.

Counseling and Advising For assistance in meeting program or application requirements, please go to Counseling and Advising in building 1, room 103 or e-mail HRTProgram@lanecc.edu

Faculty Lead: Shelley K. Williams, RN, BA. 541.463.5182, williamSSK@lanecc.edu

Prerequisite Courses required for admission	Credits
BT 120 MS Word for Business ^{D,G}	3
HO 100 Medical Terminology ^{D,G}	3
HO 110 Administrative Medical Office Procedures ^{D,G}	3
MTH 065 Elementary Algebra or higher ^{D,G}	4
	Fall
HIM 270 ICD Coding ^{D,G}	4
HIT 120 Introduction to Health Records ^{D,G}	2
HO 112 Medical Insurance Procedures ^{*,D,G}	3
HO 150 Human Body Systems ^{1*,D,G}	3
Total Credits	12

	Winter	
HIM 273 CPT Coding 1 ^{*,D,G}	4	
HO 152 Human Body Systems 2 ^{*,D,G}	3	
HO 153 Intro to Pharmacology ^{*,D,G}	3	
HO 220 Legal and Ethical Aspects of Health Care ^{D,G}	3	
Directed Elective	0-3	
Total Credits	13-16	
	Spring	
HIM 275 CPT Coding 2 ^{*,D,G}	4	
HIT 154 Intro to Medical Science ^{*,D,G}	3	
HIT 222 Reimbursement Methodologies ^{*,D,G}	3	
Choice of:	0-3	
HIT 280 Cooperative Education ^{*,1,D,G}		
HO 195 Medical Transcription 1 ^{*,D,G}		
HI 107 Working with IT Systems ^{D,G}		
Total Credits	10-13	

Medical Transcription

Career Pathway Certificate of Completion

Medical transcriptionists are language specialists who transcribe dictation by physicians and other healthcare providers in order to document patient care. Important personal and professional characteristics of the medical transcriptionist include:

- desiring a professional career in medicine
- enjoyment in learning something new everyday
- having above-average skills in spelling and grammar
- enjoyment of typing and transcribing
- working independently
- being concerned about quality and excellence
- using designated professional reference materials.

Medical transcriptionists work in a variety of settings, including medical clinics, doctors' offices, hospitals, private transcription businesses, and home offices. Some transcriptionists become supervisors, managers, and teachers, while others establish their own transcription companies.

Learning Outcomes The graduate will:

- demonstrate knowledge of medical terminology.
- demonstrate knowledge of anatomy and physiology, disease processes, signs and symptoms, medications, and laboratory values.
- demonstrate knowledge of clinical specialty (or specialties) as appropriate.
- demonstrate skill with standard medical transcription guidelines and practices.
- demonstrate skill in English usage, grammar, punctuation, style, and editing.
- provide a high level of quality and security of patient health information (PHI)
- demonstrate detailed knowledge of HIPAA,
- demonstrate a commitment to excellence.

Wages Average pay in Oregon in 2009 is approximately \$14.64 per hour.

Costs in Addition to Tuition (estimate) - Subject to change without notice.

Program Costs \$1,200

Admission Information Application and admission into the Health Records Technology Program is required. Admission and Application information is found on the web at: lanecc.edu/hp/hrt/

Cooperative Education (Co-op) Co-op is a directed elective for the HRT Program. Co-op offers students college credit and a grade for on-the-job work experience related to their educational and career goals. Through Co-op, students connect theory and practice, develop skills, expand career knowledge, and make contacts for the future. Work schedules and work sites vary. Contact the Cooperative Education department, Bldg. 19, 541.463.5203.

For Counseling and Advising assistance in meeting program or application requirements, please go to Counseling and Advising in building 1, room 103 or e-mail HRTProgram@lanecc.edu

Faculty Lead: Shelley K. Williams, RN, BA, 541.463.5182, williamSSK@lanecc.edu

Prerequisite Courses required for admission	Credits
BT 120 MS Word for Business ^{D,G}	3
HO 100 Medical Terminology 1 ^{D,G}	3
HO 110 Administrative Medical Office Procedures ^{D,G}	3
MTH 065 Elementary Algebra or higher ^{D,G}	4

	Fall
HIT 120 Introduction to Health Records ^{D,G}	2
HO 150 Human Body Systems 1 ^{*,D,G}	3
HO 190 Medical Formatting ^{*,D,G}	3
HO 195 Medical Transcription 1 ^{*,D,G}	3
HO 220 Legal and Ethical Aspects of Health Care ^{D,G}	3
Total Credits	14

	Winter
HIT 196 Medical Transcription 2 ^{*,D,G}	3
HO 110 Administrative Medical Office Procedures ^{D,G}	3
HO 114 Medical Coding ^{*,D,G}	3
HO 152 Human Body Systems 2 ^{*,D,G}	3
Total Credits	12

	Spring
Directed Elective ^{*,D,G}	3
HIT 154 Intro to Medical Science ^{*,D,G}	3
HIT 197 Medical Transcription 3 ^{*,1,D,G}	3
HO 112 Medical Insurance Procedures ^{*,D,G}	3
Total Credits	12

	Summer
HIT 197 Medical Transcription 3 ^{*,3,D,G}	3

1 The Advisory Committee for this Career Pathway Certificate strongly recommends at least 6 credit hours of transcription laboratory (advanced transcription practice). Contact the course advisor to discuss this in more detail.

Standard footnotes:

* Prerequisite required

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

R Required for AAS degree—see page 48

Hospitality Management

**Offered by Culinary Arts and Hospitality Management,
541.463.3503**

Two-Year Associate of Applied Science Degree

**One-Year of Certificate of Completion,
Food Service Management**

**Career Pathway Certificate of Completion,
Meeting, Convention, and Special Events Manager**

**Career Pathway Certificate of Completion,
Restaurant Ownership**

Purpose Trains graduates for exciting, varied careers in several areas, such as hotel management, meeting and special event management, restaurant management and ownership, and travel and tourism-related businesses. Upon completing this degree program in Hospitality Management students will have opportunities for challenging and rewarding careers that can take them around the world if they so choose!

Learning Outcomes The Hospitality Management Program graduate will:

- Explore careers in the Hospitality Industry.
- Demonstrate job search and interviewing skills.
- Develop employability skills required for the Hospitality Management Industry.
- Demonstrate technological literacy to support the Hospitality Management Industry.
- Apply problem solving and decision making processes to Hospitality Management situations.
- Practice effective communication skills for the Hospitality Management workplace.
- Practice customer service skills required in Hospitality Management.
- Review financial records and accounts applicable to Hospitality Management operations.
- Explore the legal and ethical environment of the Hospitality Management industry.
- Understand economic principles of the Hospitality Management industry.
- Understand safe working habits for the Hospitality Management industry.
- Participate in Hospitality Management work-based learning experiences.
- Demonstrate oral communication skills required in Hospitality Management.
- Understand and demonstrate business and financial management.
- Evaluate leadership styles appropriate for the Hospitality workplace.
- Explain basic hotel departments and functions.
- Determine appropriate guest service strategies within the Hospitality industry.
- Characterize supervisory and management functions.
- Summarize management practices for the food industry.
- Understand appropriate environmental function and sustainable standard operating procedures.
- Understand marketing skills needed in the Hospitality industry.

Costs (Estimate based on 2011 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees.....	\$8,917
Hospitality Management Books	\$929

Hospitality Management Fees.....	\$640
----------------------------------	-------

Total Estimate \$10,486

Hospitality Management course fees and other course fees may change during the year - see the online credit class schedule for fees assigned to courses.

Hotel, Motel and Resort Desk Clerk

Job Openings Projected through 2018

Lane County openings - 13 annually
Statewide openings - 186 annually

Wages

Lane County average hourly - \$10.01; average annual - \$20,81
Oregon average hourly - \$10.65; average annual - \$22,152

Tour Guides and Escorts

Job Openings Projected through 2018

Lane County openings - 3 annually
Statewide openings - 32 annually

Wages

Lane County average hourly - \$11.82; average annual - \$24,586
Oregon average hourly - \$11.56; average annual - \$24,045

Lodging Managers

Job Openings Projected through 2018

Lane County openings - 2 annually
Statewide openings - 28 annually

Wages

Lane County average hourly - \$19.56; average annual - \$40,685
Oregon average hourly - \$23.06; average annual - \$47,965

Meeting and Convention Planners

Job Openings Projected through 2018

Lane County openings - 2 annually
Statewide openings - 17 annually

Wages

Lane County average hourly - \$19.34; average annual - \$40,227
Oregon average hourly - \$20.72; average annual - \$43,098

Accreditation The two-year AAS degree program is accredited by the Accreditation Commission for Programs in Hospitality Administration (ACPHA). Students graduating from the program will receive national certification status as a Certified Hospitality Graduate (CHG).

Licensing or Other Certification Exams Students completing certain classes that comply with the American Hotel and Lodging Association (AHLA) or National Restaurant Association Education Foundation (NRAEF) may receive Certificates of Completion from these organizations. During the course of the program, students may earn a National Restaurant Association Education Foundation (NRAEF) Serv-Safe Certification as well as other NRAEF Certificate examinations for various courses.

Prerequisites Must be a credit-level student. Students are strongly advised to enter fall term. Complete college placement tests with the following minimum scores: writing-64, reading-68 and readiness for MTH 025 – taking Math Placement Test Parts A, B and C – 7 out of 10 in each part, and attach copies of test score sheets to application. Students with prior

college credit, must attach a copy of transcript(s), and are highly recommended to take the Placement tests and attaching those scores as well. Math must be current within one year or a placement test will need to be taken. A Lane County Food Handlers Card is recommended for entry into the program.

Admission Information A separate application to the program is required. Admission information is available from the Culinary Arts and Hospitality Management office, Building 19, Room 202 or online at lanecc.edu/culinary. Or email: CulinaryHospPrograms@lanecc.edu

Cooperative Education (Co-op) Students earn credit for on-the-job work experience related to educational and career goals. Through Co-op, students can develop and practice skills, expand career knowledge, and make contacts for future employment. For more information contact Joe McCully, Cooperative Education Coordinator, Bldg.19, Rm. 210, 541.463.3516, mccullyj@lanecc.edu

Program Contact Wendy Milbrat, Administrative Support Specialist, 541.463.3503, milbratw@lanecc.edu; or email: CulinaryHospPrograms@lanecc.edu

Note ALL numbered courses required for this program must be taken for a grade, not pass/no pass, and must be passed with a grade of "C" or better.

Two-Year Associate of Applied Science Degree

General Education Requirements

(These courses may be completed prior to beginning program core classes)

CG 203 Human Relations at Work ^{D,G}	3
MTH 025 Basic Math Applications ^{*,D,G}	3
CS 120 Concepts of Computing: Information Processing ^{D,G}	4
Choice of:.....	3
Science/Math/Computer Science requirement ^{D,G,R}	
Social Science requirement ^{D,G,R}	
Arts and Letters requirement ^R	3
BT 165 Introduction to Accounting Cycle ^{*,D,G}	4
WR 115W Introduction to College Writing: Workplace Emphasis ^{*,D,G}	3
HE 252 First Aid ^{D,G}	3
Total Credits	26

First Year

CG 203 Human Relations at Work ^{D,G}	3
HRTM 105 Restaurant Operations ^{D,G}	3
HRTM 106 Introduction to Hospitality Management ^{D,G}	3
HRTM 225 Hospitality Management Lab ^{D,G}	2
Directed Elective ^{D,G}	2-3
MTH 025 Basic Math Applications ^{*,D,G}	3
Total Credits	16-17

Winter

CS 120 Concepts of Computing: Information Processing ^{D,G}	4
HRTM 110 Hospitality Sales and Marketing ^{D,G}	3
HRTM 120 Communications and Guest Relations ^{D,G}	3
HRTM 225 Hospitality Management Lab ^{D,G}	2

Choice of:.....	3
Science/Math/Computer Science requirement ^{D,G,R}	
Social Science requirement ^{D,G,R}	
Total Credits	15

Spring

BT 165 Introduction to Accounting Cycle ^{*,D,G}	4
CA 159 Kitchen Operations ^{D,G}	2
HRTM 130 Hospitality Information Systems ^{D,G}	3
HRTM 140 Security in the Hospitality Industry ^{D,G}	3
HRTM 225 Hospitality Management Lab ^{D,G}	2
WR 115W Introduction to College Writing: Workplace Emphasis ^{*,D,G}	3
Total Credits	17

Summer

HRTM 280 Co-op Ed: Hospitality Management ^{D,G}	7
Total Credits	7

Second Year

Fall

HRTM 230 Hotel Operations 1 ^{D,G}	3
HRTM 260 Supervision in the Hospitality Industry ^{D,G}	3
HRTM 265 Hospitality Financials 1 ^{D,G}	3
HRTM 279 Buffet and Banquet Planning ^{D,G}	2
Directed Elective ^{1,D,G}	2-3
Total Credits	13-14

Winter

HRTM 231 Hotel Operations 2 ^{*,D,G}	3
HRTM 275 Hospitality Financials 2 ^{*,D,G}	3
HRTM 279 Buffet and Banquet Planning ^{D,G}	2
Directed Elective ^{1,D,G}	2-3
Arts and Letters requirement ^R	3
Total Credits	13-14

Spring

HE 252 First Aid ^{D,G}	3
HRTM 279 Buffet and Banquet Planning ^{D,G}	2
HRTM 290 Hospitality Leadership ^{*,D,G}	4
Directed Elective ^{1,D,G}	3-4
Total Credits	12-13

Directed Electives

BA 101 Introduction to Business	4
BA 223 Marketing	4
BA 224 Human Resource Management	4
BA 278 Leadership and Team Dynamics	4
BT 163 QuickBooks	3
BT 123 MS Excel for Business	3
BT 122 MS PowerPoint for Business	3
BT 120 MS Word for Business	3
BT 180 Business Proofreading and Editing	4
CA 110 Guest Chef Series ^{D,G}	2
CA 130 Oregon Wine Country ^{D,G}	2
CA 175 Food Safety and Sanitation ^{D,G}	2
(Strongly recommended: National ServSafe Certification)	
CA 176 Concepts of Taste and Flavor ^{*,D,G}	2
CA 200 Restaurant and Menu Management ^{D,G}	3
ES 102 Contemporary Racial and Ethnic Issues	4
FN 105 Nutrition for Foodservice Professionals ^{D,G}	3
FN 110 Personal Nutrition	3
GEOG 201 World Regional Geography	3

Standard footnotes:

* Prerequisite required

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

R Required for AAS degree—see page 48

HRTM 100 Introduction to Culinary Arts and Hospitality Management.....	3
HRTM 104 Introduction to Travel and Tourism ^{D,G}	3
HRTM 109 Principles of Meeting and Convention Management ^{D,G}	3
HRTM 209 Advanced Principles of Meeting and Convention Management ^{D,G}	3
HRTM 281 Restaurant Ownership ^{D,G}	3
HRTM 286 Fundamentals of Wine, Beer and Spirits ^{D,G}	3
PHL 201 Ethics.....	4
SP 115 Introduction to Intercultural Communications.....	4
SP 130 Business and Professional Speech.....	4
SUST 101 Introduction to Sustainability.....	3
WR 121 Introduction to Academic Writing.....	4
1 Directed electives may be met in term of the 2-year program. Check current class schedule for terms Program Electives are offered or go to: lanecc.edu/culinary/culinary	
• Students may take Cooperative Education in any term approved by the coordinator.	
• Cooperative Education can be substituted for one term of HRTM 225 Hospitality Management Lab.	
• Students interested in transferring to a four-year institution should: 1. Complete WR 122 and WR 123 to fulfill the Arts and Letters requirements for the AAS. 2. Add MTH 111 and MTH 112 courses.	

Food Service Management

One-Year Certificate of Completion

The Hospitality Management program offers a one-year Certificate of Completion intended for students who want to learn how to excel in restaurant management. In addition to the one year Certificate of Completion from Lane, graduates may also earn 12 certificates and a credential from the National Restaurant Association Education Foundation. All of the classes offered in this Certificate program apply directly to the Hospitality Management Associate of Applied Science degree.

Learning Outcomes

The graduate will:

- Access library, computer and communications services and obtain information and data from regional, national and international networks.
- Develop a range of culinary and dining room service skills.
- Develop supervisory and human relations skills.
- Operate equipment including cook tops, food processors, ovens (baking, convection, and conventional), dough mixers, meat slicers, espresso machines, cash register, point of sales (POS) systems and a variety of kitchen tools.
- Perform mathematical functions related to food service operations.
- Understand the fundamentals of financial analysis, purchasing and receiving, menu planning and costing, and food and beverage controls.

Admission Information A separate application to the program is required. Admission information is available from the Culinary Arts and Hospitality Management office, Building 19, Room 202 or online at lanecc.edu/culinary. Or email: CulinaryHospPrograms@lanecc.edu

Gainful Employment Disclosure

Standard Occupational Classification: 11-9051.00

Go to websites below for information about related occupations: Food Service Managers

onetonline.org/link/summary/11-9051.00

Related Occupation:

First-Line Supervisors of Food Preparation and Serving Workers

onetonline.org/link/summary/35-1012.00

How much will the program cost?

(Estimate based on 2011-12 data. Consult Lane's website for updated tuition.)

Resident tuition and fees	\$5,551
Books, supplies, program costs	\$900
On-Campus room and board.....	Not offered
Total Estimate	\$6,451

What's included?

Program Costs: lanecc.edu/es/feesandexpenses.html

What are financing options to pay for the program?

In addition to any grant and scholarship aid for which they are eligible, students may use loans to finance their education.

No 2010-11 program graduates used federal loans, private educational loans or institutional financing.

How long will it take to complete this program?

The program is designed to take 3 terms, or about 12 months of study to complete.

How many 2010-11 Food Service Management graduates completed within the designed program length?

None completed within 12 months.

What are my chances of getting a job when I graduate?

Lane County openings - 7 annually

Statewide openings - 87 annually

Will I be able to pay back student loans?

Most Lane students graduating in 2009-10 who took out federal student loans are successfully repaying them. Lane's federal loan student default rate for that period was 11.3%.

Where are comparable programs offered?

School	City	2009 Graduates
Mt Hood Community College	Gresham	--
Choice of:.....		Fall 3
HRTM 105 Restaurant Operations ^{D,G}		
HRTM 106 Introduction to Hospitality Management ^{D,G}		
CA 175 Foodservice Safety and Sanitation ^{D,G}		2
MTH 025 Basic Math Applications ^{*D,G}		3
HRTM 265 Hospitality Financials 1 ^{D,G}		3
HRTM 260 Supervision in the Hospitality Industry ^{D,G}		3
CG 203 Human Relations at Work		3
Total Credits		17
		Winter
FN 105 Nutrition for Foodservice Professionals ^{D,G}		3
HRTM 110 Hospitality Sales and Marketing ^{D,G}		3
HRTM 120 Communications and Guest Relations ^{D,G}		3
HRTM 225 Hospitality Management Lab ^{D,G}		2-3
HRTM 275 Hospitality Financials 2 ^{*D,G}		3
HRTM 280 Co-op Ed: Hospitality Management ^{D,G} or		
WR 115W Introduction to College Writing:		
Workplace Emphasis ^{*D}		3
Total Credits		17-18
		Spring
CA 159 Kitchen Operations ^{D,G}		2
CA 200 Restaurant and Menu Management ^{D,G}		3
HRTM 130 Hospitality Information Systems ^{D,G}		3
HRTM 286 Fundamentals of Wine, Spirits and Beer ^{D,G}		3
HRTM 290 Hospitality Leadership ^{*D,G}		4
Total Credits		15

Meeting, Convention, and Special Events Manager

Career Pathway Certificate of Completion

The Career Pathways Certificate program for a Meeting, Convention, and Special Events Manager is for students that want to learn how to manage meetings, conventions, and special events. All of the classes offered in this program apply directly to an Associate of Applied Science degree in Hospitality Management.

Learning Outcomes

The graduate will:

- Explore careers in the Hospitality industry.
- Demonstrate job search and interviewing skills.
- Demonstrate technological literacy to support the Hospitality Management Industry.
- Practice customer service skills required in Hospitality Management.
- Review financial records and accounts applicable to Hospitality Management operations.
- Explore the legal and ethical environment of the Hospitality Management industry.
- Understand economic principles of the Hospitality Management industry.
- Understand safe working habits for the Hospitality Management industry.
- Understand and demonstrate business and financial management.
- Evaluate leadership styles appropriate for the Hospitality workplace.
- Explain basic hotel departments and functions.
- Determine appropriate guest service strategies within the Hospitality industry.
- Characterize supervisory and management functions.
- Summarize management practices for the food industry.
- Understand marketing skills needed in the Hospitality industry.
- Provide effective student learning and expansion of knowledge in the field of event management.
- Provide study of Sustainability principles in the industry focused on meetings, conventions, and special events.

Admission Information A separate application to the program is required. Admission information is available from the Culinary Arts and Hospitality Management office, Building 19, Room 202 or online at lanec.edu/culinary. Or email: CulinaryHospPrograms@lanec.edu

	Fall
HRTM 106 Introduction to Hospitality Management ^{D,G}	3
HRTM 109 Principles of Meeting and Convention Management ^{D,G}	3
HRTM 225 Hospitality Management Lab ^{D,G}	2
HRTM 230 Hotel Operations 1 ^{D,G}	3
HRTM 260 Supervision in the Hospitality Industry ^{D,G}	3
Total Credits	14
	Winter
HRTM 110 Hospitality Sales and Marketing ^{D,G}	3
HRTM 120 Communications and Guest Relations ^{D,G}	3
HRTM 225 Hospitality Management Lab ^{D,G}	2

HRTM 231 Hotel Operations 2 ^{*,D,G}	3
HRTM 279 Buffet and Banquet Planning ^{D,G}	2
HRTM 280 Co-op Ed: Hospitality Management ^{D,G}	2
Total Credits	15

Spring

HRTM 209 Advanced Principles of Meeting, Convention, and Special Event Management ^{D,G}	3
HRTM 225 Hospitality Management Lab ^{D,G}	2
HRTM 279 Buffet and Banquet Planning ^{D,G}	2
HRTM 280 Co-op Ed: Hospitality Management ^{D,G}	2
Total Credits	9

Summer

HRTM 280 Co-op Ed: Hospitality Management ^{D,G}	4
Total Credits	4

Restaurant Ownership

Career Pathway Certificate of Completion

The Career Pathways Certificate in Restaurant Ownership is for students who want to learn how to successfully own a restaurant. All of the classes offered in this Certificate program apply directly to an Associate of Applied Science degree in Hospitality Management.

Learning Outcomes

The Restaurant Ownership graduate will:

- Demonstrate technological literacy to support the Hospitality Management Industry.
- Practice customer service skills required in Hospitality Management.
- Review financial records and accounts applicable to Hospitality Management operations.
- Explore the legal and ethical environment of the Hospitality Management industry.
- Understand economic principles of the Hospitality Management industry.
- Understand safe working habits for the Hospitality Management industry.
- Demonstrate oral communication skills required in Hospitality Management.
- Understand and demonstrate business and financial management.
- Determine appropriate guest service strategies within the Hospitality industry.
- Characterize supervisory and management functions.
- Summarize management practices for the food industry.
- Understand appropriate environmental function and sustainable standard operating procedures.
- Understand marketing skills needed in the Hospitality industry.
- Understand the elements involved with developing a restaurant concept.
- Understand the unique aspects of restaurant ownership.

Admission Information A separate application to the program is required. Admission information is available from the Culinary Arts and Hospitality Management office, Building 19, Room 202 or online at lanec.edu/culinary. Or email: CulinaryHospPrograms@lanec.edu.

Standard footnotes:

* Prerequisite required

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

R Required for AAS degree—see page 48

	Fall
CA 175 Foodservice Safety and Sanitation ^{D,G}	2
HRTM 260 Supervision in the Hospitality Industry ^{D,G}	3
HRTM 265 Hospitality Financials 1 ^{D,G}	3
MTH 025 Basic Math Applications ^{*,D}	3
Total Credits	11
	Winter
HRTM 120 Communications and Guest Relations ^{D,G}	3
HRTM 275 Hospitality Financials 2 ^{*,D,G}	3
Directed Elective ^{D,G}	2-3
Total Credits	8-9
	Spring
CA 159 Kitchen Operations ^{D,G}	2
CA 200 Restaurant and Menu Management ^{D,G}	3
HRTM 130 Hospitality Information Systems ^{D,G}	3
HRTM 281 Restaurant Ownership ^{D,G}	3
HRTM 286 Fundamentals of Wine, Spirits and Beer ^{D,G}	3
Total Credits	14

Human Services

Offered by the Social Science Department, 541.463.5427

Two-Year Associate of Applied Science Degree

Career Pathway Certificate of Completion,
Adult Development and Aging

Purpose Human service workers are trained to provide a wide range of emotional and practical support services aimed at addressing the needs of people facing a variety of challenges in their lives. Human service workers are employed in diverse settings, serving children, adolescents, families, and adults. For example, human service workers can be found staffing crisis lines; supervising young juvenile offenders; working with the elderly to help them maintain their independence; arranging for services for homeless families; coordinating recreational services for people with disabilities; providing parent education; counseling and case managing individuals experiencing addiction; and advocating for victims of domestic or sexual violence. Coursework includes classes that meet basic requirements for Oregon state certification for chemical dependency counselors. Lane Community College's Human Services Program prepares students for entry-level employment in public and private non-profit agencies. Some human services careers may require a criminal background check.

Learning Outcomes The graduate will:

- be able to communicate effectively with others.
- develop the competency required to work with people from diverse backgrounds.
- assess an individual or a family's needs.
- develop a plan of action using client's strengths, and link people with community resources.
- use appropriate library and information resources to research professional issues and support lifelong learning.
- formulate questions that can be addressed with data and collect, organize and display relevant data to answer them.
- understand and apply evidence-based practices.

Job Openings Projected through 2018

Lane County openings - 10 annually

Statewide openings - 92 annually

Wages

Social and Human Service Assistants
Lane County average hourly - \$11.77; average annual - \$27,083
Oregon average hourly - \$12.99; average annual - \$28,858
Substance Abuse and Behavioral Disorder Counselors
Oregon Median hourly - \$19.70; average annual - \$43,794

Costs (Estimate based on 2011 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees.....	\$9,095
Books and supplies.....	\$3,000
Total Estimate	\$12,095

Human Services course fees and other course fees may change during the year - see the online credit class schedule for fees assigned to courses.

Admission Information Social Science Division 541.463.5427

Academic Advising Resource Moodle site: academicadvising.lanecc.edu/course/view.php?id=30

Cooperative Education (Co-op) Co-op is a significant field placement component that provides opportunities for students to explore their career options while gaining practical experience in the field. Contact Garry Oldham, Human Services Co-op Ed Coordinator, 541.463.5194, oldhamg@lanecc.edu

	Fall
HS 150 Personal Effectiveness for Human Service Workers ^{D,G}	3
HS 201 Introduction to Human Services ^{D,G}	3
HS 226 Ethics and Law ^{D,G}	3
CG 280HS Co-op Ed: Human Service ^{6,D,G}	3
WR 121 Introduction to Academic Writing ^{1,G}	4
Total Credits	16
	Winter
HS 155 Interviewing Theory and Techniques ^{*,D,G}	3
MTH 025 Basic Mathematics Applications or higher.....	3
CG 280HS Co-op Ed: Human Service ^{2,D,G}	3
WR 122 Composition: Argument, Style and Research ^{1,G}	4
Choice of:.....	4
SP 100 Basic Communication ¹	
SP 111 Fundamentals of Public Speaking ¹	
SP 112 Persuasive Speech ¹	
SP 130 Business and Professional Speech ¹	
SP 218 Interpersonal Communication ¹	
Total Credits	17
	Spring
ANTH 103 Cultural Anthropology ^{1,G}	4
CG 280HS Co-op Ed: Human Service ^{2,D,G}	3
HS 231 Advanced Interviewing and Counseling ^{5,D,G}	3
HS 265 Casework Interviewing ^{*,D,G}	3
Directed Elective ^{4,D,G}	4
Total Credits	17

	Fall
CG 280HS Co-op Ed: Human Service ^{2,D,G}	3
HS102 Psychopharmacology ^{D,G}	4
HS 266 Case Management in Human Services [*]	3
Directed Elective ^{4,D,G}	4
PSY 201 General Psychology ¹	3
Total Credits	17

	Winter
HS 267 Cultural Competence in Human Services ^{3,D,G}	3
Directed Elective ^{4,D,G}	2-4
PSY 202 General Psychology ¹	3
CG 280HS Co-op Ed: Human Service ^{2,3,D,G}	3
Science/Math/Computer Science requirement ^{1,G,R}	3
Total Credits	14-16

	Spring
CG 280HS Co-op Ed: Human Service ^{2,D,G}	3
Choice of: ^{1,R}	3
HE 209 Human Sexuality	
HE 250 Personal Health	
HE 252 First Aid	
HE 255 Global Health	
HE 275 Lifetime Health and Fitness	
HS 224 Group Counseling ^{5,D,G}	3
HS 232 Cognitive-Behavioral Strategies ^{5,D,G}	3
PSY 203 General Psychology ¹	3
Total Credits	15

- 1 Transferable to four-year university of college; may be applied to an AAOT degree
- 2 Cooperative Education is a variable credit course (3-12 credits). Cooperative Education is not required every term, but a total of 18 credits must be completed.
- 4 Directed electives – Students are required to take 9 credit hours in electives. Possible choices include:
 - HS 107 Aging: A Social and Developmental Perspective
 - HS 205 Youth Addiction
 - HS 206 Counseling the Criminal Addict
 - HS 209 Crisis Intervention and Prevention
 - HS 211 Family Interventions: Children
 - HS 212 Family Interventions: Adolescents
 - HS 213 Family Interventions: Adults
 - HS 220 Prevention I: Preventing Substance Abuse and other Social Problems
 - HS 228 HIV/AIDS and other Infectious Diseases
 - HS 229 Grief and Loss Across the Lifespan
 - HS 235 The Aging Mind
 - CG 280HS Co-op Ed: Human Service
- 5 Must have taken HS 155 Interviewing Theory and Techniques prior to enrollment.

Adult Development and Aging

Career Pathway Certificate of Completion

Purpose This program prepares students to assist mature and elderly adults in a variety of settings.

Learning Outcomes The graduate will:

- be able to communicate effectively with others.
- develop the competency required to work with people from diverse backgrounds.
- assess an individual or a family's needs.
- describe the aging process and the impact of aging on an individual's intellectual, social, cultural and spiritual life.
- explain the diversity of experiences, and challenges, found amongst the aging population.
- demonstrate skills for effectively interacting with mature and elderly adults

Employment Trends The U.S. Bureau of Labor Statistics projects a 35 percent increase in gerontology-related jobs by 2014. Historically, these careers have been primarily in healthcare

settings. While demand for people to work in health care continues to remain high, opportunities to assist individuals and their families access social services to maintain their health and independence is expected to grow substantially. Additionally, as the general population ages, the nation's workforce will benefit from knowledge about aging and how to meet the needs of this diverse population of older Americans.

Wages In Lane County, wages range from \$9 to \$20 an hour with an average annual salary of \$28,382 (Oregon Employment Division)

Costs in Addition to Tuition (estimate) - Subject to change without notice.

Books \$400

Admission Information Social Science Division, 541.463.5427

Cooperative Education (Co-op) Co-op is a significant field placement component that provides opportunities for students to explore their career options while gaining practical experience in the field. Contact Garry Oldham, Human Services Co-op Coordinator, 541.463.5194, oldhamg@lanecc.edu

	Credits
HS 107 Aging: A Social and Developmental Perspective ^{D,G}	3
HS 229 Grief and Loss Across the Lifespan ^{D,G}	3
HS 235 The Aging Mind ^{D,G}	3
CG 280HS Co-op Ed: Human Service ^{2,D,G}	3
(with a focus on aging)	
Total Credits	12

Human Services: Criminal Justice

Offered by the Social Science Division, 541.463.5427

Two-Year Associate of Applied Science Degree

Purpose To offer men and women preparation for career employment in police, adult and juvenile corrections, security management, and other public service careers. Transferable to four-year colleges and universities, the program is also job entry oriented, depending on the student needs. Public Safety Careers require criminal and personal background checks.

Learning Outcomes The graduate will:

- express a thorough knowledge of the criminal justice system.
- apply sociological theory to better understand criminal behavior.
- describe the dynamics of interviews and interrogations in investigations.
- explain the nature of public safety career paths and their own qualifications for various careers in criminal justice.
- understand the importance of inter-disciplines and the need for a well-rounded education in public safety.
- qualify for education requirements for entry-level public safety careers.
- use appropriate library and information resources to research professional issues and support lifelong learning.
- formulate questions that can be addressed with data and collect, organize and display relevant data to answer them.

Standard footnotes:

* Prerequisite required

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

R Required for AAS degree—see page 48

Employment Trends The market demand remains high in public safety careers in spite of the revenue problems facing most areas. A significant factor in the demand remaining high is the rate of retirement or resignation of public safety personnel. Approximately 40 percent or more of the people currently working in public safety will retire over the next five years. Employment opportunities vary in the state of Oregon. Therefore, students should also consider employment opportunities throughout the region of the western United States for potential public safety employment.

Job Openings Projected through 2018

Lane County openings - 6 annually

Statewide openings - 66 annually

Wages

Oregon average hourly - \$23.98; average annual - \$49,878

Costs (Estimate based on 2011 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees.....	\$9,006
Books and supplies.....	\$3,000
Total Estimate	\$12,006

Human Services: Criminal Justice course fees and other course fees may change during the year - see the online credit class schedule for fees assigned to courses.

Admission Information Social Science Division, John delNero, Program Coordinator, 541.463.5286, delneroj@lanecc.edu

Cooperative Education (Co-op) Co-op provides opportunities for field placements with various local public safety agencies including local police, sheriffs, corrections, court services, and commercial security organizations. Students may participate on a full or part-time basis. Contact John del Nero, Criminal Justice Co-op Coordinator, 541.463.5286, delneroj@lanecc.edu

First Year	Fall
CJA 100 Introduction to Criminal Justice 1 ^{D,G}	3
Directed elective ^{2,3}	3
SOC 204 Introduction to Sociology ^G	3
SP 105 Listening and Critical Thinking.....	4
WR 121 Composition: Introduction to Academic Writing ^{*,G}	4
Total Credits	17

	Winter
Arts and Letters elective ¹	3
CJA 110 Introduction to Criminal Justice ^{2,D,G}	3
SOC 205 Social Stratification and Social Systems ^G	3
SP 100 Basic Communication	4
Choice of:.....	4
WR 122 Composition: Argument, Style and Research ^G	
WR 123 Composition: Research ^G	
Total Credits	17

	Spring
CJA 101 Introduction to Criminology ^{D,G}	3
CS 120 Concepts of Computing: Information Processing or higher computer science course.....	4
SOC 206 Institutions and Social Change ^G	3
Choice of:.....	3
HE 250 Personal Health	
HE 252 First Aid	
HE 275 Lifetime Health and Fitness	
Total Credits	13

Second Year	Fall
Biological or Physical Science requirement ^{1,4}	3-4
CJA 213 Interviewing and Interrogation ^{D,G}	3
CJA 220 Introduction to Criminal Law ^{D,G}	3
PS 201 American Government and Politics.....	3
Choice of:.....	4
PHL 201 Introduction to Philosophy: Ethics	
PHL 205 Contemporary Moral Issues	
ANTH 103 Cultural Anthropology	

Total Credits 16-17

	Winter
Biological or Physical Science elective ^{1,3}	4-5
CJA 222 Criminal Law: Procedural Issues ^{D,G}	3
CJA 280 Co-op Ed: Criminal Justice ^{*,D,G}	3
Directed elective ^{2,3}	3
PS 202 State and Local Government and Politics.....	3

Total Credits 15-16

	Spring
MTH 095 Intermediate Algebra or higher.....	5
CJA 280 Co-op Ed: Criminal Justice ^{D,G}	3
PS 203 American Government.....	3
PSY 203 General Psychology ^G	3
Arts and Letters elective ¹	3

Total Credits 17

1 Courses that satisfy transfer general education requirements are recommended: BI, BOT, Z, CH, G, GS, PH

2 Directed electives (choose 6 credits total)

CJA 201 Juvenile Delinquency ^{D,G}	3 credits
CJA 210 Criminal Investigation 1 ^{D,G}	3 credits
CJA 214 Introduction to Forensic Science ^{D,G,S}	4 credits
CJA 232 Correctional Casework ^{D,G}	3 credits
CJA 243 Narcotics and Dangerous Drugs ^{D,G}	3 credits
SOC 211 Social Deviance ^{D,G}	3 credits

3 CJA 214 Introduction to Forensic Science can be used to meet Directed Elective or Biological/Physical Science Elective.

4 CH 114 Forensic Chemistry can satisfy the Biological or Physical Science requirement

Human Services: Juvenile Corrections

Offered by the Social Science Division, 541.463.5427

Two-Year Associate of General Studies

One-Year Certificate of Completion

Purpose To train individuals to work directly with juvenile offenders in various settings, including Oregon Youth Authority, as well as other public, private, and non-profit agencies/programs.

Learning Outcomes The graduate will:

- provide supervision for juvenile offenders.
- facilitate in the treatment process and crisis intervention.
- provide social and life skills training.
- maintain records and documentation.
- engage in support services.
- monitor and ensure a secure environment.
- use appropriate library and information resources to research professional issues and support lifelong learning.
- formulate questions that can be addressed with data and collect, organize and display relevant data to answer them.

Employment Trends There had been a decline in juvenile crime during the late 1990's, but that trend tends to be shifting. The

resurgence of youth gangs since the year 2000 has reflected an increase in gang homicides and other criminal activity. Nearly all juvenile correction facilities are filled to capacity necessitating more correctional facilities and the demand for more juvenile corrections personnel. This certificate meets the minimum level pre-employment requirement for the Oregon Youth Authority.

Wages Beginning wage for a Group Life Coordinator II is approximately \$2,464-\$3,400 monthly, but salary and benefit packages vary greatly depending on the employing agency and geographical location.

Admission Information Social Science Division, John delNero, Program Coordinator, 541.463.5286, delneroj@lanecc.edu

Cooperative Education (Co-op) Co-op provides opportunities for students to work in regional organizations to develop and expand skills, explore career options, and make contacts for future employment. Students connect theory and practice while earning transferable elective college credit. Contact John del Nero, Juvenile Corrections Co-op Coordinator, 541.463.5286, delneroj@lanecc.edu

Two-Year Associate of General Studies

First Year	Fall
HE 252 First Aid.....	3
HS 206 Counseling the Criminal Addict ^{D,G}	3
MTH 060 Beginning Algebra ^{*,1}	4
WR 121 Introduction to Academic Writing [*]	4
Total Credits	14

	Winter
Arts and Letters Requirement.....	4
CJA 201 Juvenile Delinquency ^{D,G}	3
HS 205 Youth Addiction ^{D,G}	3
WR 122 Composition: Argument, Style and Research ^G	4
Total Credits	14

	Spring
CJA 101 Introduction to Criminology ^{D,G}	3
HS 209 Crisis Intervention and Prevention ^{D,G}	3
Science/Math/Computer Science Requirement	4
SOC 225 Social Problems ^{D,G}	3
Total Credits	13

Second Year	Fall
Arts and Letters Requirement.....	4
PSY 201 General Psychology ^{D,G}	3
Science/Math/Computer Science Requirement	4
Elective	4
Total Credits	15

	Winter
PSY 202 General Psychology ^{D,G}	3
PSY 235 Human Development ^{*,1,D,G}	3
CS 120 Concepts of Computing: Information Processing	4
Arts and Letters Requirement.....	4
Science/Math/Computer Science Requirement	4
Total Credits	18

	Spring
PSY 203 General Psychology ^{D,G}	3
CJA 232 Correctional Casework ^{D,G}	3

PSY 239 Introduction to Abnormal Psychology ^{*,D, G}	3
Science/Math/Computer Science Requirement	4
CJA 280 Co-op Ed: Juvenile Corrections ^{D,G}	3
Total Credits	16

Human Services: Juvenile Corrections

One-Year Certificate of Completion

Gainful Employment Disclosure

Standard Occupational Classification: 21-1021.00

Go to websites below for information about related occupations:

Child, Family, and School Social Workers

onetonline.org/link/summary/21-1021.00

Related Occupation:

Probation Officers and Correctional Treatment Specialists

onetonline.org/link/summary/21-1092.00

How much will the program cost?

(Estimate based on 2011-12 data. Consult Lane's website for updated tuition.)

Resident tuition and fees \$4,829

Books, supplies, program costs \$1,600

On-Campus room and board..... Not offered

Total Estimate \$6,429

What's included?

Program Costs: lanecc.edu/es/feesandexpenses.html

What are financing options to pay for the program?

In addition to any grant and scholarship aid for which they are eligible, 80% of program graduates used loans to finance their education. The median debt for 2010-11 program graduates:

Federal Loans..... \$18,276

Institutional financing..... \$1,061

No 2010-11 program graduates used private educational loans.

How long will it take to complete this program?

The program is designed to take 3 terms, or about 12 months of study to complete.

How many 2010-11 Human Services: Juvenile Corrections graduates completed within the designed program length?

None completed within 12 months.

What are my chances of getting a job when I graduate?

Lane County openings - 11 annually

Statewide openings - 139 annually

Will I be able to pay back student loans?

Most Lane students graduating in 2009-10 who took out federal student loans are successfully repaying them. Lane's federal loan student default rate for that period was 11.3%.

Where are comparable programs offered?

School	City	2009 Graduates
Central Oregon Community College	Bend	2
Chemeketa Community College	Salem	--
Clackamas Community College	Oregon City	2
Linn-Benton Community College	Albany	--
Portland Community College	Portland	6
Rogue Community College	Grants Pass	--
Southwestern Oregon Community College	Coos Bay	1
Tillamook Bay Community College	Tillamook	--
Treasure Valley Community College	Ontario	--
Umpqua Community College	Roseburg	--

	Fall
CJA 101 Introduction to Criminology ^{D,G}	3
HS 206 Counseling the Criminal Addict ^{D,G}	3
MTH 060 Beginning Algebra ^{*,1}	4
PSY 201 General Psychology ^{D,G}	3

Standard footnotes:

* Prerequisite required

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

R Required for AAS degree—see page 48

SOC 225 Social Problems ^{D,G}	3
Total Credits	16
Winter	
CJA 201 Juvenile Delinquency ^{D,G}	3
CS 120 Concepts of Computing: Information Processing	4
HS 205 Youth Addiction ^{D,G}	3
PSY 202 General Psychology ^{D,G}	3
PSY 235 Human Development ^{*1,D,G}	3
PSY 239 Introduction to Abnormal Psychology ^{*,D,G}	3
Total Credits	19
Spring	
CJA 232 Correctional Casework ^{D,G}	3
CJA 280 Co-op Ed: Criminal Justice ^{D,G}	3
HS 209 Crisis Intervention and Prevention ^{D,G}	3
PSY 203 General Psychology ^{D,G}	3
WR 121 Introduction to Academic Writing [*]	4
Total Credits	16

1 Recommend MTH 095 or higher if going on to complete 2-year Criminal Justice AAS

Industrial Mechanics and Maintenance Technology Apprenticeship

**Offered by the Advanced Technology Division,
541.463.5380**

**Associate of Applied Science Degree, Industrial
Mechanics and Maintenance Technology Apprenticeship**

**Certificate of Completion, Industrial Mechanics and
Maintenance Technology Apprenticeship**

Purpose To provide a structured system of training in millwright trades or occupations, leading to certification and journey-level status, only for apprentices who are sponsored by individual employers, accepted by a Joint Apprenticeship Training Committee, and registered with the State of Oregon Bureau of Labor and Industries.

Learning Outcomes The graduate will:

- perform the duties and responsibilities of the millwright trade
- develop machine shop skills in troubleshooting
- demonstrate and use industry safety standards
- identify mechanical and/or electrical industrial systems
- develop attitudes conducive to improved customer relations skills in the millwright trade
- develop communication and critical thinking skills necessary for job advancement
- use appropriate library and information resources to research professional issues and support lifelong learning
- access library, computing, and communications services, and appropriately select information and data from regional, national, and international networks
- apply appropriate formulas to mathematical situations
- adapt to new job requirements to qualify for advancement in becoming lead supervisors.
- complete 8000 hours State of Oregon-approved on-the-job-training.

Job Openings Projected through 2018

Lane County openings - 1 annually
Statewide openings - 23 annually

Wages

Lane County average hourly - \$22.34; average annual - \$46,471
Oregon average hourly - \$24.66; average annual - \$51,293

Although wages vary, the average starting wage of an apprentice is about 50 percent of a journey worker's rate of pay. Apprentices usually earn a five-percent raise every six months if training and school performance is satisfactory. Check the Bureau of Labor and Industries website: boli.state.or.us.

Costs (Estimate based on 2011 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees.....	\$10,325
Books and supplies.....	\$1,350
Total Estimate	\$11,675

Industrial Mechanics & Maintenance Technology Apprenticeship course fees and other course fees may change during the year - see the online credit class schedule for fees assigned to courses.

Costs of books and tools for the related training classes in the millwright program vary.

Program Certification An apprenticeship "Award of Completion" issued by the Oregon Bureau of Labor and Industries Apprenticeship and Training Division certifies that an individual has been trained in all aspects of an occupation and has met the requirements for program completion. This certificate is recognized throughout Oregon and industry-wide as a valid indicator of high quality, standardized training, and it provides on-the-job training documentation for community college credit.

In addition, the Oregon community college Industrial Mechanics and Maintenance Technology Apprenticeship pathway provides statewide transfer opportunities, ladder certificates of completion, and an optional transfer path into Oregon Institute of Technology Bachelor of Science in Operations Management degree. The Industrial Mechanics and Maintenance Technology Apprenticeship pathway includes an advising guide with a set of recommended courses that satisfy both the AAS and the Oregon Transfer Module (OTM). Students who complete the recommended set of OTM courses may apply for 45 credits of guaranteed block transfer to any other community college or Oregon University System institution.

Admission Information Admission to the millwright trade is usually conducted as an internal process with the employer. Information is available at the Oregon Bureau of Labor and Industries website: boli.state.or.us.

Pre-requisites Minimum placement scores – Reading 68, Writing 64, and Math parts A, B, C with 7/10 score. Note: See the counselor or advisor to obtain the suggested entry-level skills for successful completion of these programs.

Criteria Used for Admission Students must be registered apprentices with the State of Oregon Bureau of Labor and Industries and accepted by a Joint Apprenticeship Training Committee. Selection to the program is by a point system from a pool of qualified applicants. Information on the point system is available at the Oregon Bureau of Labor and Industries website: boli.state.or.us. In most cases minimum qualifications to begin an apprenticeship include a minimum age of 18 years, a high school diploma with a GPA of 2.0 or higher or GED, and a minimum of a 'C' grade for one year of high school algebra (or equivalent).

Industrial Mechanics and Maintenance Technology Apprenticeship

Associate of Applied Science

To earn the degree, a student must

- complete 8000 hours State of Oregon-approved on-the-job training and provide a State of Oregon Apprenticeship Training Journey-man card or BOLI-ATD Certificate of Completion
- demonstrate an equivalency of 90 credit hours, with a minimum of 24 credits at Lane, including the last term at Lane
- complete all requirements for an AAS degree as listed below
- earn a cumulative grade point average above 2.0 at Lane or transfer credits earned at other regionally accredited colleges or universities

AAS requirements

	Credits
General Education	
WR 115W Intro to College Writing:	
Workplace Emphasis ^D or higher-level writing.....	3
MTH 060 Beginning Algebra (or higher) ^D	4
PE/Health Requirement ^R	3
Arts and Letters requirement ^R	3
Human Relations requirement ^R	3
Science/Math/Computer Science requirement ^R	3
Choice of:.....	3
Arts and Letters requirement ^R	
Human Relations/Social Science requirement ^R	
Science/Math/Computer Science requirement ^R	
Journeyman card from Oregon Bureau of Labor and Industries	
Apprenticeship and Training Division, prior certification.	22
Millwright Core Related Training.....	42
Program Electives to complete 90 credits for degree:.....	4
APR 101 Trade Skills Fundamentals	
CS 120 Concepts of Computing	
DRF 167 CAD 1	
ET 129 Electrical Theory 1	
HE 252 First Aid	
MFG 201 CNC Mill	
MFG 202 CNC Lathe	
MTH 112 Trigonometry	
WLD 122 Shielded Metal Arc Welding 2	
WLD 139 Welding Lab	
WLD 140 Welder Qualification (Certification) Wire	
WLD 141 Welder Qualification (Certification) SMAW	
WLD 142 Pipe Welding Lab: Carbon Steel	
WLD 151 Fundamentals of Metallurgy	
WLD 154 Wire Drive Welding 2	

Industrial Mechanics and Maintenance Technology Apprenticeship

Certificate of Completion

Students may earn a Certificate of Completion in Industrial Mechanics and Maintenance Technology Apprenticeship by successfully completing 42 core related training credits with a 'C' or better in all courses, and completing related instruction in communications, computation, and human relations.

Learning Outcomes

Graduates will:

- perform the duties and responsibilities of the millwright trade
- identify mechanical and/or electrical industrial systems

To earn the certificate, student must:

- complete State of Oregon-approved on-the-job training and provide a State of Oregon Apprenticeship Training Journey-level card or BOLI-ATD Certificate of Completion, 8000-Hour BOLI-ATD Trade: Industrial Millwright
- complete related instruction credits 10
(communication, computation, human relations)
- complete core-related training credits..... 42

Total Credits 52

Core Related Training requirements 42

APR 150 The Millwright and Shop Safety

APR 151 Millwright Machine Theory and Trade Calculations

APR 152 Millwright: Power Trains/Boilers and Steam

APR 250 Millwright: Industrial Print Reading, Schematics, and Estimating

APR 251 Millwright: Pneumatics and Lubrications

APR 252 Hydraulics for Millwrights

APR 253 Millwright Piping Systems

MTH 076 Applied Geometry for Technicians

WLD 121 Shielded Metal Arc Welding 1

WLD 143 Wire Drive Welding 1

Related Instruction requirements

WR 115W Intro to College Writing:

Workplace Emphasis^D or higher-level writing 3

Human Relations^R 3

MTH 060 Beginning Algebra (or higher)^D 4

Legal Assistant

Two-Year Associate of Applied Science Degree, Legal Assistant

Note This program is no longer offered at Lane. Students interested in this field of study should consider the Two-Year Administrative Office Professional program with Legal directed electives, or the Legal Office Skills Career Pathway Certificate of Completion (see Administrative Office Professional program), or the Paralegal Studies AAS offered through Umpqua Community College (see Paralegal Studies).

Students who transfer to UCC to complete the second year of the AAS Degree in Paralegal Studies will then receive financial aid through Umpqua. The Umpqua courses are all offered online. Please be aware that the Umpqua AAS program is not eligible for financial aid at Lane Community College, and federal regulations do not permit students to receive financial aid for the same term enrollment at more than one institution simultaneously. Therefore, it is the student's responsibility to ensure that (s)he does not accept any financial aid at Lane Community College while enrolled in the Umpqua degree program.

For additional information, contact Deb Hupcey in the Counseling Department, 541.463.5635 or hupceyd@lanecol.edu.

Standard footnotes:

* Prerequisite required

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

R Required for AAS degree—see page 48

Manufacturing Technology

Offered by the Advanced Technology Division,
541.463.5380

Two-Year Associate of Applied Science Degree

Two-Year Associate of Applied Science Degree Option: Computer Numerical Control Technician

Two-Year Certificate of Completion

Certificate of Completion, Basic Manufacturing/Machine Technician

Purpose To provide training in basic principles and fundamentals in manufacturing (machine shop) and related work. A graduate qualifies for entrance occupations as a machinist in manufacturing shops or related machine tool industries. Employment opportunities include machine repair and maintenance shops, tool and die shops, manufacturing industries, metalworking plants, repair and maintenance shops for mill and construction contractors, high tech and specialty machine shops, and production machine shops.

Learning Outcomes The graduate will:

- demonstrate the use of setups and operation of all standard machine tools employed by the modern machine shop.
- demonstrate and use industrial safety standards for safe operation of all machine tools.
- access library, computing, and communications services and obtain information and data from regional and national networks.
- use basic math skills, formulas and right angle trigonometry.

The CNC Option graduate will also:

- set up, program, and operate 3-Axis CNC milling machines with a G-code controller and 2-Axis CNC lathes with a G-code controller.
- design parts with CAM software and apply to CNC machine tools.

Job Openings Projected through 2018

Lane County openings - 11 annually

Statewide openings - 115 annually

Wages

Lane County average hourly - \$18.91; average annual - \$39,333

Oregon average hourly - \$20.61; average annual - \$42,869

Costs (Estimate based on 2011 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees.....	\$10,160
Differential Fees [†]	\$2,376
Other Course/Program Costs.....	\$774
Tools.....	\$1,075
Books and supplies.....	\$850

Total Estimate \$15,205

[†] This is the total of all the differential fees attached to Manufacturing Technology courses. These fees and other course fees may change during the year - see the online credit class schedule for fees assigned to courses.

Prerequisites Minimum placement score— of 68 in Reading OR completion of RD 080 OR prior college. A high school diploma or equivalent is recommended for all applicants to this program.

Note See a counselor or advisor to learn what entry-level skills are suggested for successful completion of this program.

Admission Information See lanecc.edu/advtech/AT/admissionAT.htm or contact the Advanced Technology Division, AdvTechPrograms@lanecc.edu

Cooperative Education (Co-op) Co-op offers students college credit and a grade for on-the-job work experience related to their educational and career goals. Through Co-op, students connect theory and practice, develop skills, expand career knowledge, and make contacts for the future. Work schedules and work sites vary. Under the supervision of the Manufacturing Technology Co-op Coordinator and with instructor consent, a maximum of 18 Co-op credits may be earned in lieu of required Manufacturing Technology course credits. Contact Marv Clemons, Manufacturing Technology Co-op Coordinator, Bldg. 8, Rm. 111, 541.463.3158, clemonsm@lanecc.edu

Two-Year Associate of Applied Science Degree

First Year	Fall
MFG 197 Manufacturing Technology ^{*,D,G}	12
MTH 060 Beginning Algebra ^{*,D,G}	4
or higher mathematics	4
WLD 151 Fundamentals of Metallurgy [*]	3

Total Credits 19

	Winter
CS 120 Concepts of Computing: Information Processing or higher computer science course.....	4
MFG 197 Manufacturing Technology ^{*,D,G}	12
PE/Health requirement ^{D,R}	3
Total Credits	19

Total Credits 19

	Spring
MFG 197 Manufacturing Technology ^{*,D,G}	12
WR 115W Introduction to College Writing: Workplace Emphasis ^D or higher writing.....	3
Total Credits	15

Total Credits 15

Second Year	Fall
DRF 167 CAD 1 [*]	4
MFG 197 Manufacturing Technology ^{*,D,G}	12
MTH 076 Applied Geometry for Technicians [*] or higher mathematics	4

Total Credits 20

	Winter
Arts/Letters requirement ^R	3
MFG 197 Manufacturing Technology ^{*,D,G}	6
Choice of:.....	6
MFG 201 CNC MILL ^{*,D,G}	
MFG 202 CNC Lathe ^{*,D,G}	
Total Credits	15

Total Credits 15

	Spring
MFG 197 Manufacturing Technology ^{*,D,G}	12
WLD 121 Shielded Metal Arc Welding 1 [*]	4
Human Relations requirement ^R	3
Total Credits	19

Total Credits 19

Elective

ENGR 280M Co-op Ed: Manufacturing (optional)

Manufacturing Technology Computer Numerical Control Technician Option

Two-Year Associate of Applied Science Degree

First Year		Fall
MFG 197 Manufacturing Technology ^{*,D,G}		12
MTH 060 Beginning Algebra ^{*,D,G}		4
or higher mathematics		3
WLD 151 Fundamentals of Metallurgy [*]		3
Total Credits		19
		Winter
MFG 197 Manufacturing Technology ^{*,D,G}		12
CS 120 Concepts of Computing: Information Processing or higher computer science course		4
PE/Health requirement ^{D,R}		3
Total Credits		19
		Spring
MFG 197 Manufacturing Technology ^{*,D,G}		6
MFG 210 CAM 1 ^{*,D,G}		3
MFG 211 CAM 2 ^{*,D,G}		3
WR 115W Introduction to College Writing: Workplace Emphasis ^D or higher writing		3
Total Credits		15
Second Year		Fall
DRF 167 CAD 1 [*]		4
MFG 197 Manufacturing Technology ^{*,D,G}		6
MFG 201 CNC Mill ^{*,D,G}		6
MTH 076 Applied Geometry for Technicians [*] or higher mathematics		4
Total Credits		20
		Winter
MFG 197 Manufacturing Technology ^{*,D,G}		6
MFG 202 CNC Lathe ^{*,D,G}		6
Choice of:		4
DRF 121 Mechanical Drafting [*]		
DRF 168 CAD 2 [*]		
Total Credits		16
		Spring
MFG 197 Manufacturing Technology ^{*,D,G}		3
MFG 208 CNC: Special Project ^{*,D,G}		9
Arts/Letters requirement ^R		3
Human Relations requirement ^R		3
Total Credits		18

Elective

ENGR 280M Co-op Ed: Manufacturing (optional)

Manufacturing Technology

Two-Year Certificate of Completion

Gainful Employment Disclosure

Standard Occupational Classification: 17-3026.00

Go to websites below for information about related occupations:

Industrial Engineering Technicians

onetonline.org/link/summary/17-3026.00

Related Occupation:

Materials Engineers

onetonline.org/link/summary/17-2131.00

Inspectors, Testers, Sorters, Samplers, and Weighers
onetonline.org/link/summary/51-9061.00

How much will the program cost?

(Estimate based on 2011-12 data. Consult Lane's website for updated tuition.)

Resident tuition and fees	\$11,738
Books, supplies, program costs	\$2,425
On-Campus room and board	Not offered
Total Estimate	\$14,163

What's included?

Program Costs: lanecc.edu/es/feesandexpenses.html

What are financing options to pay for the program?

In addition to any grant and scholarship aid for which they are eligible, students in this program may use loans to finance their education.

No 2010-11 program graduates used federal loans, private educational loans or institutional financing.

How long will it take to complete this program?

The program is designed to take 6 terms, or about 24 months of study to complete.

How many 2010-11 Manufacturing Technology graduates completed within the designed program length?

None completed within 24 months.

What are my chances of getting a job when I graduate?

Lane County openings - 15 annually

Statewide openings - 209 annually

Will I be able to pay back student loans?

Most Lane students graduating in 2009-10 who took out federal student loans are successfully repaying them. Lane's federal loan student default rate for that period was 11.3%.

Where are comparable programs offered?

School	City	2009 Graduates
Clackamas Community College	Oregon City	--
Linn-Benton Community College	Albany	3
Mt Hood Community College	Gresham	--
Portland Community College	Portland	--

First Year

	Fall
MFG 197 Manufacturing Technology ^{*,D,G}	12
MTH 060 Beginning Algebra or MTH 076 Applied Geometry for Technicians ^{*,D,G,M} or higher mathematics	4
Total Credits	16

	Winter
MFG 197 Manufacturing Technology ^{*,D,G}	12
PE/Health requirement ^D	3
Total Credits	15

	Spring
MFG 197 Manufacturing Technology ^{*,D,G}	12
WLD 111 Blueprint Reading for Welders	3
Total Credits	15

Second Year

	Fall
MFG 197 Manufacturing Technology ^{*,D,G}	12
WLD 121 Shielded Metal Arc Welding 1	4
Total Credits	16

	Winter
MFG 197 Manufacturing Technology ^{*,D,G}	6
WR 115W Introduction to College Writing: Workplace Emphasis D, or higher writing	3

Standard footnotes:

* Prerequisite required

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

R Required for AAS degree—see page 48

Choice of:.....	6
MFG 201 CNC Mill *.G	
MFG 202 CNC Lathe *.G	
Total Credits	15
Spring	
MFG 197 Manufacturing Technology *.D,G	12
Human Relations requirement	3
Total Credits	15

Note: See a counselor or advisor to learn what entry-level skills are suggested for successful completion of this program.

Basic Manufacturing/Machining Technician

Certificate of Completion

Note: This curriculum is under revision during academic year 2012-13. It will no longer be offered as a Statewide Certificate of Completion, and there may be additional course options for students also completing Fabrication/Welding programs. Please consult an Advanced Technology division counselor or advisor for updated information about courses that meet the certificate requirements.

Purpose To provide training in basic principles and fundamentals in manufacturing (machine shop) and related work. This is a basic training certificate in fundamentals, and should not be confused with the proficiency levels acquired through more rigorous outcomes of 2-year programs in Manufacturing or Welding.

Learning Outcomes The graduate will be able to:

- demonstrate the use of setups and operation of all standard machine tools employed by the modern machine shop.
- demonstrate and use industrial safety standards for safe operation of all machine tools.
- use basic math skills, formulas and right angle trigonometry.

	Credits
MFG 197 Manufacturing Technology *.D,G	
Machine Tool Fundamentals.....	3
MTH 060 Beginning Algebra	
or higher mathematics *.D,G	4
WLD 111 Blueprint Reading for Welders*	3
MFG 197 Manufacturing Technology Inspection *.D,G	2
MFG 197 Manufacturing Technology Industrial	
Safety *.D,G	2
Focus Elective	2-4
Total Credits	16-18

Focus Electives

WLD 121	4
WLD 111	3
MFG 201	1-6
MFG 197	1-12

Massage Therapy

Offered by Continuing Education, 541.463.5252

Certificate of Completion, License Exam Preparation Program

Program approved by Oregon Board of Education and Oregon Board of Massage Therapists

Purpose To prepare graduates for careers as a licensed massage therapists (LMT) and to qualify students for the licensure exam administered by the Oregon Board of Massage Therapists.

Learning Outcomes The graduate will:

- demonstrate entry-level knowledge and skills in the clinical curriculum content areas of massage therapy
- demonstrate entry-level knowledge of anatomy/physiology, kinesiology and pathology
- demonstrate professional standards, ethics and competence in the massage profession
- develop therapeutic relationships that support health and well-being
- collect and use client information to determine the appropriateness of massage therapy
- develop a treatment plan
- implement the treatment plan
- evaluate the effectiveness of the treatment plan
- maintain documentation
- influence the advancement of the Massage Therapy profession
- promote the benefits of Massage Therapy to the public

Employment Trends Total job openings are projected to be 28 annually

Statewide. Reasonable, but limited, employment opportunities exist. Most Licensed Massage Therapists are self-employed.

Wages

Oregon average hourly - \$22.74; average annual - \$47,305

Costs (Estimate based on 2011 tuition and fees. Consult Lane's website for updated tuition.) - Subject to change without notice.

Tuition and fees	\$6,199
Textbooks	\$600
Personal liability insurance - required	\$79
Three professional massages	\$240
Miscellaneous supplies	\$75
Total	\$7,193

Licensing or Other Certification Exams Upon completion of the required courses, students are eligible to apply for Oregon Board of Massage Therapists Licensing Exams.

Prerequisite Students must be at least 18 years of age.

Program Contact 541.463.5911, e-mail: calisek@lanecc.edu

Core Pre-licensing Program

Term 1	Contact Hours
XBI 5979 Anatomy/Physiology/Pathology 1	33
XLMT 5972 Introduction to Palpation	39
XLMT 5986 Communication from the Heart	30
Term 2	Contact Hours
XBI 5980 Anatomy/Physiology/Pathology 2	33
XLMT 5973 Massage 1	39
XLMT 5988 Energy Systems	39

Term 3	
XBI 5989 Anatomy/Physiology/Pathology 3	33
XLMT 5974 Massage 2	39
XLMT 5976 Hydrotherapy	30
Term 4	
XBI 5990 Anatomy/Physiology/Pathology 4	33
XLMT 5977 Kinesiology-Lower Body	33
XLMT 5981 Law/Ethics	20
XLMT 5985 Massage Technique Lab	30
Term 5	
XBI 5991 Anatomy/Physiology/Pathology 5	33
XLMT 5975 Massage 3	39
XLMT 5978 Kinesiology-Upper Body	33
XLMT 5982 Professional Practices	30
Term 6	
XLMT 5983 Massage 4	39
XLMT 5984 Community Student Clinic	30
Total Contact Hours in program	635
Electives	
XLMT 5971 Student Practice Lab	10-40

Medical Office Assistant

Offered by the Health Professions Division, 541.463.5617

Two-Year Associate of General Studies

One-Year Certificate of Completion

Purpose To train the graduate for a successful career in the profession of medical assisting, including certification (Certified Medical Assistant®). The Certified Medical Assistant® is a vital member of the ambulatory health care team.

Learning Outcomes The graduate will:

- prepare patients for examination or treatment; take temperatures, measure height and weight, and accurately record information in the patient chart.
- physically assist patients onto and off exam table.
- sterilize instruments and stand by to assist as the physician examines or treats patients, or performs in-office surgeries.
- give medical care to patients, under the physician's supervision, such as giving injections and drawing blood.
- perform certain diagnostic testing in the laboratory.
- perform administrative duties, which include managing an appointment schedule, organizing patients' medical records, bookkeeping procedures, and processing insurance claims.
- use library resources for research and written assignments for a variety of purposes.
- perform mathematical equations associated with medication dosages as well as basic mathematics to process medical insurance claims

Wages

Lane County average hourly - \$15.71; average annual - \$32,657
Oregon average hourly - \$15.61; average annual - \$32,469

Program Accreditation Medical Office Assistant, accredited by the Commission on Accreditation of Allied Health Education Programs, a specialized accrediting board recognized by the Council for Higher Education Accreditation, on recommendation of the Medical Assisting Education Review Board of the American Association of Medical Assistants Endowment. Commission on Accreditation of Allied Health Education Programs, 1361 Park Street, Clearwater, FL 33756, 727.210.2350.

Licensing or Other Certification Exams Required The eligible graduate is qualified to take the national certification examination administered by the American Association of Medical Assistants (AAMA), to become a Certified Medical Assistant®. For detailed information, contact the AAMA, aama-ntl.org.

Admission Information Students are encouraged to consult a program advisor or counselor before applying for admission. The application and information on the point allocation system and transfer students is available in the Counseling and Advising Center and on the Medical Office Assistant website, lanecc.edu/hp/moa.

Cooperative Education (Co-op) During the required unpaid Co-op in spring term, Co-op students rotate through local medical offices and clinics in both clinical and administrative settings to earn college credit and gain actual work experience. Students also receive instruction in the identification and proper use of other medical equipment and valuable on-the-job training. A required weekly seminar during spring term includes resume writing instruction, interviewing techniques, and other job-search skills. Contact Marty Pittman, Medical Office Assistant Cooperative Education Coordinator, Bldg. 4, Rm. 253, 541.463.3177.

Program Advising Contact Counseling and Advising, Student Services Building, or e-mail MOAProgram@lanecc.edu

Enrollment Requirements to be Met by Start of Fall Term Program Each accepted student must submit evidence of a physical examination (within the previous nine months) and receive several vaccinations before classes begin. Students are required to hold a Health Care Provider CPR and a Health Care Provider First Aid card (both must remain current through July of the year of graduation from the certificate program). In addition, students must complete courses outlined below.

Prerequisite Courses Required for Admission

Choice of:	3-4
CG 203 Human Relations at Work	
SP 218 Interpersonal Communication	
HO 100 Medical Terminology 1 ^{D,G}	3
Placement into MTH 052 within the past 9 months, or	
MTH 020 Math Renewal or higher	(3)
WR 115W Intro to College Writing: Workplace Emphasis ^D	
or higher-level writing	3
Total Credits	10-13

Courses Required Prior to Starting Fall Term Program

MTH 052 Math for Introductory Physical Science ^{D,G}	4
(Complete June 2011 or later, or if completed prior to June 2011, demonstrate competency by completing Placement Test, Parts A,B,C,D. Please note: MTH 052 will be required for admission to the program for Fall 2013.)	

Two-Year Associate of General Studies

First Year	Fall
HO 110 Administrative Medical Office Procedures ^{2,3,D,G} ...	3
HO 150 Human Body Systems 1 ^{2,D,G}	3
HO 190 Medical Formatting ^{*,2,D,G}	3
MA 110 Clinical Assistant 1 ^{*,1,D,G}	3
BT 120 MS WORD for Business ^{*,2,3,D,G}	3

Standard footnotes:

* Prerequisite required

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

R Required for AAS degree—see page 48

Choice of:	3-6
PSY 110 Exploring Psychology ^{2,6,D,G} or	
PSY 201 General Psychology ^{2,6,D,G} and	
PSY 203 General Psychology ^{*,2,6,D,G}	
Total Credits	18-21

Winter

BT 165 Introduction to the Accounting Cycle ^{2,3,D,G}	4
HO 114 Medical Coding Procedures ^{*,2,3,D,G}	3
HO 152 Human Body Systems 2 ^{*,2,D,G}	3
HO 220 Legal and Ethical Aspects of Healthcare ^{*,2,3,D,G} ..	3
MA 120 Clinical Assistant 2 ^{*,1,D,G}	3
MA 150 Laboratory Orientation ^{*,1,D,G}	3
Total Credits	19

Spring

HIT160 Practice Management ^{*,1,D,G}	3
HO 112 Medical Insurance Procedures ^{*,2,D,G}	3
MA 130 Clinical Assistant 3 ^{*,1,D,G}	3
MA 280 Co-op Ed: Medical Office Assistant ^{*,1,D,G}	5
MA 206 Co-op Ed. Medical Office Assistant Seminar ^{*,1,D,G}	2
Total Credits	16

Second Year**Fall**

Arts and Letters Requirement ^{2,3}	4
Social Science Requirement ^{2,3,5}	(3)
WR 121 Introduction to Academic Writing ^{2,3,G}	4
Total Credits	8-11

Winter

Science/Math/Computer Science Requirement ^{2,3}	4
Arts and Letters Requirement ^{2,3}	4
HE 252 First Aid ^{2,3,4}	3
Total Credits	11

Spring

Science/Math/Computer Science Requirement ^{2,3}	4
Choice of:.....	3-4
Arts and Letters Requirement ^{2,3,4} or	
Social Science Requirement ^{2,3,4}	
Choice of:.....	3-4
CIS 101 Computer Fundamentals ^{2,3}	
CS 120 Concepts of Computing: Information Processing ^{2,3}	
Total Credits	10-12

- 1 Must be accepted into the program to register for these classes.
- 2 May be taken prior to program entry.
- 3 May be taken any term.
- 4 To meet degree requirements, take Arts & Letters for 4 credits if CG 103 was completed as prerequisite for MOA program admission; take Social Science for 3 credits if SP 218 was completed as prerequisite.
- 5 This degree requirement must be met if only PSY 110 was completed prior to program admission, but it has been met if PSY 201 and 203 were both completed.
- 6 Psychology will not be an enrollment requirement for the 2012-2013 cohort, so students applying between May 23, 2012 and July 3, 2012 will not be required to complete this requirement until the time of graduation. Students applying for admission July 4, 2012 or must complete the Psychology class requirement prior to admission.

Medical Office Assistant**One-Year Certificate of Completion****Gainful Employment Disclosure****Standard Occupational Classification: 31-9092.00**

Go to websites below for information about related occupations:

Medical Assistants

onetonline.org/link/summary/31-9092.00

Related Occupation:

Nursing Assistants

onetonline.org/link/summary/31-1014.00

How much will the program cost?

(Estimate based on 2011-12 data. Consult Lane's website for updated tuition.)

Resident tuition and fees	\$4,707
Differential fees.....	\$554
Student and Program fees.....	\$1,092
Other program costs	\$3,758
On-Campus room and board.....	Not offered
Total Estimate	\$10,111

What's included?

Program Costs: lanecc.edu/es/feesandexpenses.html

What are financing options to pay for the program?

In addition to any grant and scholarship aid for which they are eligible, 79% of program graduates used loans to finance their education. The median debt for 2010-11 program graduates: Federal Loans..... \$11,330
No 2010-11 program graduates used private educational loans or institutional financing.

How long will it take to complete this program?

The program is designed to take 4 terms, or about 12 months of study to complete.

How many 2010-11 Medical Office Assistant graduates completed within the designed program length?

Approximately 3% completed within 12 months.

What are my chances of getting a job when I graduate?

Lane County openings - 24 annually

Statewide openings - 273 annually

Will I be able to pay back student loans?

Most Lane students graduating in 2009-10 who took out federal student loans are successfully repaying them. Lane's federal loan student default rate for that period was 11.3%.

Where are comparable programs offered?

School	City	2009 Graduates
Central Oregon Community College	Bend	14
Clackamas Community College	Oregon City	13
Clatsop Community College	Astoria	2
Columbia Gorge Community College	The Dalles	13
Mt Hood Community College	Gresham	--
Portland Community College	Portland	17
Umpqua Community College	Roseburg	15

Admission Information Students are encouraged to consult a program advisor or counselor before applying for admission. The application and information on the point allocation system and transfer students is available in the Counseling and Advising Center and on the Medical Office Assistant website, lanecc.edu/hp/moa

Prerequisite Courses Required for Admission

Choice of:.....	3-4
CG 203 Human Relations at Work	
SP 218 Interpersonal Communication	
HO 100 Medical Terminology 1 ^{D,G}	3
Placement into MTH 052 within the past 9 months, or	
MTH 020 Math Renewal or higher.....	3
WR 115W Intro to College Writing: Workplace Emphasis ^D or higher-level writing	3

Courses Required Prior to Starting Fall Term Program

MTH 052 Math for Introductory Physical Science ^{D,G}	4
BT 120 MS WORD for Business ^{*,2,3,D,G}	3
HO 110 Administrative Medical Office Procedures ^{2,3,D,G} ..	3
HO 150 Human Body Systems 1 ^{2,D,G}	3
HO 190 Medical Formatting ^{*,2,D,G}	3
MA 110 Clinical Assistant 1 ^{*,1,D,G}	3

Fall

Choice of:.....	3-6
PSY 110 Exploring Psychology ^{6,D,G} or	
PSY 201 General Psychology ^{6,D,G} and	
PSY 203 General Psychology ^{*2,6,D,G}	
Total Credits	18-21

Winter	
BT 165 Introduction to the Accounting Cycle ^{2,3,D,G}	4
HO 114 Medical Coding Procedures ^{*2,3,D,G}	3
HO 152 Human Body Systems 2 ^{*2,D,G}	3
HO 220 Legal and Ethical Aspects of Healthcare ^{*2,3,D,G}	3
MA 120 Clinical Assistant 2 ^{*1,D,G}	3
MA 150 Laboratory Orientation ^{*1,D,G}	3
Total Credits	19

Spring	
HIT160 Practice Management ^{*1,D,G}	3
HO 112 Medical Insurance Procedures ^{*2,D,G}	3
MA 130 Clinical Assistant 3 ^{*1,D,G}	3
MA 206 Co-op Ed. Medical Office Assistant Seminar ^{*1,D,G}	2
MA 280 Co-op Ed: Medical Office Assistant ^{*1,D,G}	5
Total Credits	16

1 Must be accepted into the program to register for these classes.

2 May be taken prior to program entry.

3 May be taken any term.

6 Psychology will not be an enrollment requirement for the 2012-2013 cohort, so students applying between May 23, 2012 and July 3, 2012 will not be required to complete this requirement until the time of graduation. Students applying for admission July 4, 2012 or must complete the Psychology class requirement prior to admission.

Multimedia Design

Offered by the Division of the Arts, 541.463.5409

Two-Year Associate of Applied Science Degree

One-Year Certificate of Completion, Multimedia Design

One-Year Certificate of Completion, Web Design

Purpose To prepare students for entry-level positions in the media industry and careers in multimedia design and production.

Learning Outcomes The graduate will:

- design computer applications incorporating multiple forms of media such as text, graphics, audio, video, and animation.
- understand the concept, potential and implications of communicating ideas using computer-based interactive media technology.
- become proficient in developing and applying effective visual design strategies for creating interactive multimedia, animation, games, web sites, and computer-based training for delivery over the Internet, DVD's and CD-ROM.
- have additional skills in one or more elective areas: software, design, or media.
- use appropriate library and information resources to research media issues, concepts and tools, and support lifelong technical learning.
- manipulate variables using computer software applications.

Job Openings Projected through 2018

Statewide openings - 16 annually

Wages

Lane County average hourly - \$25.85; average annual - \$53,764

Oregon average hourly - \$30.57; average annual - \$63,586

Costs (Estimate based on 2011 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees	\$9,006
Books and supplies.....	\$1,700
Total Estimate	\$10,706

Multimedia Design courses fees and other course fees may change during the year - see the online credit class schedule for fees assigned to courses.

Cooperative Education (Co-op) Opportunities to work directly in the media industry as interns are provided by the Co-op program. Through Co-op, students connect classroom learning with field experience, gain skills, and make contacts for the future. Second-year students will work with professional production teams to gain experience producing a variety of interactive multimedia products. Contact Teresa Hughes, Multimedia Design Co-op Coordinator, Bldg. 17, Rm. 106, (541) 463-3179, hughest@lanec.edu.

Note: Students must earn a grade of "B-" or better in all prerequisite (s) and "C-" or better in major requirements.

Program Contacts Jefferson Goolsby, Bldg. 17, Rm. 105; Teresa Hughes, Bldg. 17, Rm. 106; Merrick Simms Bldg. 17, Rm. 107.

Two-Year Associate of Applied Science Degree

First Year		Fall
ART 131 Introduction to Drawing ^G		3
ART 261 Photography 1 ^{B,G}		3
CIS 195 Web Authoring 1 ^{B,G}		3
FA 250 Concepts of Visual Literacy ^{*B,G}		3
PE/Health requirement		1
WR 121 Introduction to Academic Writing ^{*G}		4
Total Credits		17

Winter	
AUD 120 Audio Production ^{B,G}	4
FA 261 Writing and Interactive Design ^{*G,B}	3
MTH 060 Beginning Algebra or higher mathematics ^{*D,G,R}	4
MUL 210 Multimedia Design ^{*G}	3
MUL 212 Digital Imaging ^{B,G}	3
Total Credits	17

Spring	
ART 151A Media Graphics ^{B,G}	3
FA 231 Multimedia Authoring ^{*B,G}	3
Science, Math, Computer Science Requirement ^{D,G}	4
VP 151 Video Production 1: Camera ^{*B,G}	3
Directed Elective ^{D,G}	3-4
Total Credits	16-17

Second Year		Fall
ART 115 Basic Design: Fundamentals ^{B,G}		3
ART 245 Drawing for Media ^{D,G}		4
MUS 118 Music Technology MIDI/Audio 1 ^{D,G}		4
VP 152 Video Production 2: Editing ^{*B,G}		3
Directed Elective ^{D,G}		3-4
Total Credits		17-18

Winter	
ART 289 Web Production ^{*D,G}	3
CG 203 Human Relations at Work ^{B,G}	3
MDP 246 Multimedia Production 1 ^{*B,G}	4
MDP 280 Co-op Ed: Multimedia ^{*D,G}	3

Standard footnotes:

* Prerequisite required

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

R Required for AAS degree—see page 48

PE/Health requirement.....	1
Total Credits	14
Spring	
MDP 247 Multimedia Production 2 ^{*,D,G}	4
MDP 280 Co-op Ed: Multimedia ^{*,D,G}	3
PE/Health requirement.....	1
Directed elective ^{D,G}	6-8
Total Credits	14-16

One-Year Certificate of Completion in Multimedia Design Gainful Employment Disclosure

Standard Occupational Classification: 27-1014.00

Go to websites below for information about related occupations:
Multimedia Artists and Animators

onetonline.org/link/summary/27-1014.00

Related Occupation:

None

How much will the program cost?

(Estimate based on 2011-12 data. Consult Lane's website for updated tuition.)

Resident tuition and fees	\$6,351
Books, supplies, program costs	\$1,700
On-Campus room and board.....	Not offered
Total Estimate	\$8,051

What's included?

Program Costs: lanec.edu/es/feesandexpenses.html

What are financing options to pay for the program?

In addition to any grant and scholarship aid for which they are eligible, 100% of program graduates used loans to finance their education. The median debt for 2010-11 program graduates:

Federal Loans	\$4,342
Institutional financing.....	\$269

No 2010-11 program graduates used private educational loans.

How long will it take to complete this program?

The program is designed to take 3 terms, or about 12 months of study to complete.

How many 2010-11 Multimedia Design graduates completed within the designed program length?

None completed within 12 months.

What are my chances of getting a job when I graduate?

Lane County openings - 7 annually

Statewide openings - 12 annually

Will I be able to pay back student loans?

Most Lane students graduating in 2009-10 who took out federal student loans are successfully repaying them. Lane's federal loan student default rate for that period was 11.3%.

Where are comparable programs offered?

School	City	2009 Graduates
Portland Community College	Portland	1

Fall	
ART 115 Basic Design: Fundamentals ^{D,G}	3
ART 131 Introduction to Drawing ^{B,G}	3
ART 261 Photography 1 ^{B,G}	3
FA 250 Concepts of Visual Literacy ^{*,B,G}	3
WR 121 Introduction to Academic Writing ^{B,G}	4
Total Credits	16

Winter	
AUD 120 Audio Production ^{B,G}	4
FA 261 Writing and Interactive Design ^{*,B,G}	3
MTH 060 Beginning Algebra or higher mathematics ^{D,G}	4
MUL 210 Multimedia Design ^{*,B,G}	3

MUL 212 Digital Imaging ^{B,G}	3
Total Credits	17
Spring	
ART 151A Media Graphics ^{B,G}	3
CG 203 Human Relations at Work ^{B,G}	3
FA 231 Multimedia Authoring ^{*,B,G}	3
Science, Math, Computer Science course ^G	4
VP 151 Video Production 1 / Camera ^{*,B,G}	3
Total Credits	16

Directed Electives (Software, Design, or Media)

Contact Art and Applied Design Department for additional choices.

Software

CIS 125G Software Tools 1: Game Development.....	4
CIS 125W Software Tools 1: Web	3
CIS 195 Web Authoring 1.....	3
CS 120 Concepts of Computing.....	4
CS 133JS Beginning Programming: JavaScript.....	4
CS 161C+ Computer Science 1.....	4
CS 295N Web Development 1: ASP.NET.....	4
CS 295P Web Development 1: PHP.....	4

Design

ART 116 Basic Design: Color	3
ART 119 Typography.....	3
ART 216 Digital Design Tools	4
ART 225 Digital Illustration	3
ART 231 Intermediate Drawing	3
ART 234 Figure Drawing	3
ART 290 Design Concepts for the Web	3

Media

ART 220 Documentary Photography.....	3
ART 262 Photography 2.....	3
FA 221 Computer Animation.....	3
FA 222 Computer Animation 2.....	3
FA 254 Fundamentals of Lighting.....	3
FA 255 Understanding Movies: American Cinema	3
FA 256 Lighting for Photography	3
J134 Photojournalism	3
J234 Photojournalism 2	4
MDP 248 Multimedia Production 3	4
MUL 214 Digital Photography.....	3
MUL 216 Multimedia for the Web.....	3
MUL 218 Business Practices for Media Arts.....	2
MUS 119 Music Technology MIDI/Audio 2.....	4
MUS 298 IS: Music Technology.....	1-6

Web Design

One-Year Certificate of Completion

Purpose The Web Design certificate is for students considering entry-level positions in web design and production, new media design, or positions with a focus on designing for the web.

Learning Outcomes Graduates will:

- develop proficiency in multiple forms of media design which includes writing for the web, graphic and web design, working with visual imagery, video, sound and animation.
- understand the concept, potential and implications of communicating ideas using computer-based interactive media technology.
- become proficient in developing and applying effective visual design strategies for creating web sites, interactive multimedia, animation, games, and computer-based training for deliver over the Internet, DVD's and CD-Rom. Develop additional skills in one or more elective areas: software, design, or media.
- understand the concepts of media and its effect on society,

and how to use media ethically.

- learn to use appropriate library and information resources to research media topics and issues, concepts and tools, and support lifelong technical and aesthetic learning.
- manipulate variables using computer software applications.

Program Coordinator Jefferson Goolsby, Bldg. 17, Rm. 105.

Gainful Employment Disclosure

Standard Occupational Classification: 15-1199.03

Go to websites below for information about related occupations:

Web Administrators

onetonline.org/link/summary/15-1199.03

How much will the program cost?

(Estimate based on 2011-12 data. Consult Lane's website for updated tuition.)

Resident tuition and fees	\$6,173
Books, supplies, program costs	\$1,700
On-Campus room and board.....	Not offered
Total Estimate	\$7,873

What's included?

Program Costs: lanecc.edu/es/feesandexpenses.html

What are financing options to pay for the program?

The Web Design certificate is not eligible for financial aid. Scholarships and private funds may be used.

How long will it take to complete this program?

The program is designed to take 3 terms, or about 12 months of study to complete.

How many 2010-11 Web Design graduates completed within the designed program length?

This is a new program, and data is not yet available on graduates.

What are my chances of getting a job when I graduate?

In Lane County, 12 positions are forecast to be available annually between 2008-2018, and 166 positions are forecast statewide.

Where are comparable programs offered?

School	City	2009 Graduates
Clackamas Community College	Oregon City	1
Mt Hood Community College	Gresham	2
Portland Community College	Portland	5
Southwestern Oregon Community College	Coos Bay	1

		Fall
ART 115 Basic Design: Fundamentals ^{B,G}		3
CIS 125W Software Tools 1: Web ^{B,G}		3
CIS 195 Web Authoring 1 ^{D,G}		3
MTH 060 Beginning Algebra or higher math ^{D,G}		4
MUL 212 Digital Imaging ^{B,G}		3
Total Credits		16

		Winter
ART 245 Drawing for Media ^{B,G}		4
ART 289 Web Production ^{B,G}		3
CS 133JS Beginning Programming: JavaScript ^{B,G}		4
WR 121 Introduction to Academic Writing ^{D,G}		4
Total Credits		15

		Spring
ART 151A Media Graphics ^{B,G}		3
ART 290 Design Concepts for the Web ^{*,B,G}		3
CG 203 Human Relations at Work ^{D,G}		3
CS 295P Web Development 1: PHP ^{*,D,G}		4
MUL 216 Multimedia for the Web ^{*,B,G}		3
Total Credits		16

Nursing

Offered by the Health Professions Division 541.463.5617

Two-Year Associate of Applied Science Degree

Purpose To prepare the graduate to practice as an associate degree registered nurse, to be eligible to take the National Council Licensure Examination (NCLEX)-RN. Acceptance to the program allows for co-admission to Lane Community College and Oregon Health Sciences University nursing programs.

Learning Outcomes Nursing care competencies recognize that a competent nurse provides safe care across the lifespan directed toward the goals of helping clients (individuals, families or communities) promote health, recover from acute illness and/or manage a chronic illness and support a peaceful and comfortable death. As a member of the Oregon Consortium for Nursing Education the Lane Nursing curriculum supports the following nursing competencies. A competent nurse:

- bases personal and professional actions on a set of shared core nursing values
- develops insight through reflection, self-analysis and self-care
- engages in self-directed learning
- demonstrates leadership in nursing and healthcare
- collaborates as part of a health care team
- practices relationship-centered care
- makes sound clinical judgments
- uses the best available evidence

Job Openings Projected through 2018

Lane County openings - 129 annually

Statewide openings - 1,272 annually

Wages

Lane County average hourly - \$36.04; average annual - \$74,972

Oregon average hourly - \$36.74; average annual - \$76,419

Costs (Estimate based on 2011 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees	\$9,181
Differential Fees [†]	\$10,561
Other program costs	\$3,165
(Criminal background check, uniform, shoes, stethoscope, physical exam, immunizations, etc.)	
Books and supplies.....	\$1,400
Total Estimate	\$24,307

[†] This is the total of all the differential fees attached to Nursing courses in the 2-yr program. These fees and other course fees may change during the year - see the online credit class schedule for fees assigned to courses.

Admission Information Program website: lanecc.edu/hp/nursing/
Application Website: lanecc.edu/hp/nursing/admissions.htm.
Oregon residency required.

Standard footnotes:

* Prerequisite required

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

R Required for AAS degree—see page 48

Prerequisites required prior to beginning of program

- Courses - See Prerequisite Courses for Program Admission
- Other - Immunizations, drug testing, criminal background check required. Information pertaining to criminal background checks and disqualifying crimes can be found at the Oregon Board of Nursing: arcweb.sos.state.or.us/rules/OARS_800/OAR_851/851_045.html

Accreditation Oregon State Board of Nursing (OSBN) 17938 SW Upper Boones Ferry Rd, Portland, OR, 971673-0685, oregon.gov/OSBN. LANE is a member of the Oregon Consortium for Nursing Education (OCNE) and offers a competency-based curriculum jointly developed by nursing faculties from eight community colleges and OHSU consortium partners.

Cooperative Education Co-op internships may be taken as an optional elective any of the last five terms of the program. Contact the Cooperative Education Division for the Nursing Co-op Coordinator at (541) 463-5617.

Academic Advising/Counseling For assistance with meeting application or program requirements contact Counseling and Advising in Building 1 room 103 or E-mail NursingProgram@lanecc.edu with your specific questions. An online Academic Advising resource can be found by going to lanecc.edu. Choose the "Moodle" link and in search of courses type in Nursing and select Academic Advising Resources for nursing.

Program Coordinator Patricia Tully, RN, MS - tullyt@lanecc.edu 541.463.5754

Prerequisite Courses for Program Application To be eligible to apply a minimum of 30 credits must be completed by application deadline and include MTH 095 or higher level math and BI 231 Human Anatomy and Physiology 1.

Prerequisite Courses for Program Enrollment (45 credits must be completed prior to beginning program)

BI 231 Human Anatomy and Physiology 1 ^{*,1,G} 4

Note: see BI 231 course description for required prerequisites.

BI 232 Human Anatomy and Physiology 2 ^{*,1,G} 4

BI 233 Human Anatomy and Physiology 3 ^{*,1,G,4} 4

Nutrition course, choice of:..... 4

FN 225 Nutrition ^{1,G}

FN 240 Introduction to Nutrition and Metabolism ^{1,G}

Human Development course(s), choice of:..... 3-6

PSY 215 Lifespan Developmental Psychology ^{*,1,G}

or

(PSY 235 Human Development 1 ^{*,1,G} and

PSY 236 Human Development 2 ^{*,1,G,5})

or

(HDFS 226 Child Development ^{*,1,G} and

PSY 236 Human Development 2 ^{*,1,G,5})

MTH 095 Intermediate Algebra or higher, or competency testing * 4-5

WR 121 Introduction to Academic Writing ^{*,G,1,2} 4

WR 122 Composition: Argument, Style and Research ^{*,G,1,2} 4

Social Science/Human Relations requirement ^{G,R,1} 3

Any college level 100 or 200 transferable non-studio humanities, social science or science electives 3-6

Students must be enrolled in the Nursing Program to register for any NRS classes.

First Year

BI 234 Introductory Microbiology ^{*,1,4,G} 4

Fall

Biology with genetics: 3-4

BI 112 + BI 233 or

BI 112 + BI 102G or

BI 101F + BI 233 or

BI 211 + BI 233 or

BI 101K + BI 233 or

BI 101K + BI 102G

NRS 110A Foundations of Nursing:

Health Promotion ^{*,1,G} 4

NRS 110B Foundations of Nursing:

Health Promotion Clinical Lab 5

Total Credits 16-17

Winter

NRS 111A Foundations of Nursing in

Chronic Illness 1 ^{*,1,G} 2

NRS 111B Foundations of Nursing in Chronic Illness Lab

(pass/no pass) * 4

NRS 230 Clinical Pharmacology 1 ^{*,1,G} 3

NRS 232 Pathophysiology Processes 1 ^{*,1,G} 3

Choice of:..... 4

WR 123 Composition: Research ^{*,1,2,3,G}

WR 227 Technical Writing ^{*,1,2,3,G}

Elective:

NRS 280 Co-op Ed: Nursing (2)

Total Credits 16-18

Spring

NRS 112A Foundations of Nursing in Acute Care 1 ^{*,1,G} 2

NRS 112B Foundations of Nursing in Acute Care 1

Clinical Lab * 4

NRS 231 Clinical Pharmacology 2 ^{*,1,G} 3

NRS 233 Pathophysiology Processes 2 ^{*,1,G} 3

Social Science/Human Relations requirement ^{1,G,R} 3-4

Elective:

NRS 280 Co-op Ed: Nursing (2)

Total Credits 15-18

Second Year**Fall**

NRS 221A Nursing in Chronic Illness 2

and End-of-Life ^{*,1,G} 4

NRS 221B Nursing in Chronic Illness 2

and End-of-Life Lab * 5

Arts and Letters, Social or Natural Science electives ^{*,1,G} .. (6)
(required for BS, not for AAS)

Elective:

NRS 280 Co-op Ed: Nursing (2)

Total Credits 9-17

Winter

NRS 222A Nursing in Acute Care 2

and End-of-Life ^{*,1,G} 4

NRS 222B Nursing in Acute Care 2

and End-of-Life Clinical Lab * 5

Arts and Letters, Social or Natural Science electives ^{*,1,G} .. (6)
(required for BS, not for AAS)

Total Credits 9-15

Spring

NRS 224A Integrative Practicum 1 ^{*,1,G} 2

NRS 224B Integrative Practicum 1

Clinical Lab (pass/no pass) * 7

Arts and Letters, Social or Natural Science electives ^{*,1,G} .. (6)
(required for BS, not for AAS)

Electives as required to complete 90 credits for AAS..... (0-16)

Total Credits 9-31

1 Must be passed with a "C" or better.

2 Waived with completion of previous U.S. Bachelors Degree or higher from U.S. regionally accredited institution

- 3 Waived if WR 121 and WR 122 are taken as 4 credit courses effective summer term 2010
- 4 The most recent course must have been completed within 7 years prior to starting the nursing program (taken Fall term 2006 or later).
- 5 PSY 236 is not offered at Lane.

Practical Nursing

Certificate of Completion

Purpose Completion of this program gives the student a certificate in Practical Nursing (PN) which meets the educational requirements for the national exam for PN licensure (NCLEX-PN).

Learning Outcomes The graduate will:

- demonstrate understanding of how to develop a nursing care plan and identify the difference between the LPN and RN roles in developing and implementing the plan
- identify issues and care for clients in acute care settings
- pathophysiology, medical management and nursing intervention in caring for clients with all conditions to include acute, chronic, obstetrics, psychiatric and terminal illnesses
- understand the principles of pharmacodynamics and pharmacokinetics

Gainful Employment Disclosure

Standard Occupational Classification: 29-2061.00

Go to websites below for information about related occupations: Licensed Practical and Licensed Vocational Nurses
onetonline.org/link/summary/29-2061.00

Related Occupation:

Psychiatric Aides

onetonline.org/link/summary/31-1013.00

How much will the program cost?

(Estimate based on 2011-12 data. Consult Lane's website for updated tuition.)

Resident tuition and fees	\$3,818
Differential fees.....	\$3,351
Books	\$350
Other program costs	\$2,203
On-Campus room and board.....	Not offered
Total Estimate	\$9,722

What's included?

Program Costs: lanecc.edu/es/feesandexpenses.html

What are financing options to pay for the program?

In addition to any grant and scholarship aid for which they are eligible, students may use loans to finance their education.

No 2010-11 program graduates used federal loans, private educational loans or institutional financing.

How long will it take to complete this program?

The program is designed to take 3 terms, or about 12 months of study to complete.

How many 2010-11 Practical Nursing graduates completed within the designed program length?

This program was reinstated winter 2012 and will graduate the first class by January 2013.

What are my chances of getting a job when I graduate?

Lane County openings - 21 annually

Statewide openings - 149 annually

Will I be able to pay back student loans?

Most Lane students graduating in 2009-10 who took out federal student loans are successfully repaying them. Lane's federal loan student default rate for that period was 11.3%.

Where are comparable programs offered?

School	City	2009 Graduates
Blue Mountain Community College	Pendleton	23
Central Oregon Community College	Bend	32
Chemeketa Community College	Salem	45
Clatsop Community College	Astoria	10
Mt. Hood Community College	Gresham	21
Oregon Coast Community College	Newport	19
Rogue Community College	Grants Pass	14
Treasure Valley Community College	Ontario	28
Umpqua Community College	Roseburg	16

Wages

Lane County average hourly - \$20.67; average annual - \$43,445

Oregon average hourly - \$21.85; average annual - \$45,228

Application Information Consult lanecc.edu/hp/nursing/Immunizations, drug testing, criminal background check required. Information pertaining to criminal background checks and disqualifying crimes can be found at the Oregon Board of Nursing at: arcweb.sos.state.or.us/rules/OARS_800/OAR_851/851_045.html

Program Endorsement Accreditation is obtained by the Oregon State Board of Nursing (OSBN) 17938 SW Upper Boones Ferry Rd, Portland, OR, 971673-0685, oregon.gov/OSBN

Academic Advising/Counseling For assistance with meeting application or program requirements contact Counseling and Advising in Building 1 room 103 or E-mail NursingProgram@lanecc.edu with your specific questions. An online Academic Advising resource can be found by going to lanecc.edu. Choose the "Moodle" link and in search of courses type in Practical Nursing and select Academic Advising Resources for practical nursing.

Program Coordinator Patricia Tully, RN, MS, tullyt@lanecc.edu 541.463.5754

Prerequisite Courses for Program Application	Credits
MTH 065 Elementary Algebra or higher *	4
WR 121 Introduction to Academic Writing.....	4
HO 100 Medical Terminology 1	3
BI 231 Human Anatomy and Physiology 1 ¹	4
BI 232 Human Anatomy and Physiology 2 ¹	4
BI 233 Human Anatomy and Physiology 3 ¹	4
CIS 101 Computer Fundamentals or documented computer proficiency	3
PSY 201 General Psychology.....	3
Current Certified Nursing Assistant (CNA) CPR Certified	

First Year	Winter
PN 101A Practical Nursing ^{G,2}	8
PN 101B Practical Nursing Lab *	4
Human Relations Requirement ^{1,G,R}	3-4
Total Credits	15-16

	Spring
PN 102A Practical Nursing ^{G,2}	8
PN 102B Practical Nursing Lab *	4
Total Credits	12

	Summer
PN 103A Practical Nursing ^{G,2}	8
PN 103B Practical Nursing Lab *	4
PN 104 Practical Nursing.....	1
Total Credits	13

Standard footnotes:

* Prerequisite required

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

R Required for AAS degree—see page 48

- 1 The most recent course must have been completed within 7 years prior to starting the PN Program.
- 2 Must be passed with "C" or better.

Practical Nursing Bridge

Eligibility for Entry into the Second Year Nursing Associate of Applied Science

Purpose Completion of these requirements gives a Licensed Practical Nurse eligibility to enter the second year of any Oregon Consortium for Nursing Education (OCNE) two-year associate degree registered nursing program.

Learning Outcomes

- reflect on own practice using the 10 OCNE competencies, rubrics and benchmarks
- develop evidenced based plans of care that are family centered, developmentally and culturally appropriate
- identify potential legal and ethical issues related to patient decision-making and informed consent in acute care settings
- identify roles of health care team members involved in patient care and delegation needs for patient care with experienced nurses
- describe similarities and differences between the role of the LPN and RN including scope of practice
- pathophysiology, medical management and nursing intervention in caring for clients with all conditions to include acute, chronic, obstetrics, psychiatric and terminal illness
- understand the principles of pharmacodynamics and pharmacokinetics

Costs (Estimate based on 2011 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees	\$1,927
Differential Fees	to be determined
Other program costs	\$900
Books and supplies.....	to be determined

Application Information

- Program - Consult lanecc.edu/hp/nursing/
- Application Process - Selection to the program is by point system from a pool of qualified applicants.
- Application Requirements - Consult lanecc.edu/hp/nursing/
- Courses - See Prerequisite Courses for Program Information
- Applicants may apply for advanced placement in any OCNE partner program, or for slots in one or more OCNE partner programs of their choice.

Enrollment Information

- Program enrollment by application process.
- Courses - See Prerequisite Courses for Program Admission

Program Endorsement Approval by the OCNE Coordinating Council, 3455 SW U.S. Veterans Hospital Rd, Portland, OR 97239, ocne.org

Academic Advising/Counseling For assistance with meeting application or program requirements contact Counseling and Advising in Building 1 room 103 or E-mail NursingProgram@lanecc.edu with your specific questions. An online Academic Advising resource can be found by going to lanecc.edu. Choose the "Moodle" link then select "Academic Advising." Choose the Resource titled "Nursing LPN and RN Programs." Section 7 of this resource provides the LPN and LPN Bridge information.

Program Coordinator Patricia Tully, RN, MS, tullyt@lanecc.edu
541.463.5754

Prerequisite Courses for Program Application To be eligible for admission the LPN applicant must have completed the 45 credits (minimum) of prerequisites by the application deadline.

BI 231 Human Anatomy and Physiology 1 ^{*,G,S,1}	4
Note: see BI 231 course description for required prerequisites.	
BI 232 Human Anatomy and Physiology 2 ^{*,G,S,1}	4
BI 233 Human Anatomy and Physiology 3 ^{*,G,S,1,4}	4
FN 225 Nutrition ^{G,1}	4
Human Development course, choice of:.....	3-6
PSY 215 Lifespan Developmental Psychology ^{*,G,1}	
or	
(PSY 235 Human Development 1 ^{*,G,1} and	
PSY 236 Human Development 2 ^{*,G,1,5})	
or	
(HDFS 226 Child Development ^{*,G,1} and	
PSY 236 Human Development 2 ^{*,1,5,G})	
MTH 095 Intermediate Algebra or higher, or	
competency testing [*]	4-5
WR 121 English Composition: Exposition and	
Introduction to Argument ^{*,1,2,G}	4
WR 122 Composition: Style and Argument ^{*,1,2,G}	4
Social Science course/Human Relations	
Requirement ^{1,G,R}	3
Any college level 100 or 200 transferable non-studio	
Arts/Letters, social science or science electives	3-12
Minimum of 500 LPN practice hours	
Unencumbered Oregon LPN License	
Completion of ATI LPN Step Exam	

Prerequisites required prior to enrollment in Nursing Courses

To be allowed to enroll in NRS 230 Pharmacology and NRS 232 Pathophysiology the following requirements must be completed:

BI 234 Introductory Microbiology ^{*,1,4,G}	4
Biology with genetics:.....	3-4
BI 112 + BI 233 or	
BI 112 + BI 102G or	
BI 101F + BI 233 or	
BI 211 + BI 233 or	
BI 101K + BI 233 or	
BI 101K + BI 102G	

Program Course Listing Only students accepted to the LPN Bridge may register for the any of the NRS courses below.

	Winter
NRS 230 Clinical Pharmacology 1 ^{*,1,G}	3
NRS 232 Pathophysiology Processes 1 ^{*,1,G}	3
	Spring
NRS 231 Clinical Pharmacology 2 ^{*,1,G}	3
NRS 233 Pathophysiology Processes 2 ^{*,1,G}	3
	Summer
NRS 115A LPN Transition to OCNE ^{*,1,G}	5
NRS 115B LPN Transition to OCNE-Lab [*]	1

- 1 Must be passed with a "C" or better.
- 2 Waived with completion of previous U.S. Bachelors Degree or higher from U.S. regionally accredited institution
- 3 Waived if WR 121 and WR 122 are taken as a 4 credit courses effective summer term 2010
- 4 Most recent course must have been completed within 7 years prior to starting the nursing program (taken fall term 2005 or later).
- 5 PSY 236 is not offered at Lane.

Occupational Skills Training

**Offered by the Cooperative Education Division,
541.463.5203**

One-Year Certificate of Completion

Purpose To offer students the opportunity to design and pursue a career path that is not currently available as a certificate or degree program at Lane.

Learning Outcomes The graduate will:

- gain knowledge and skills to prepare for employment in a chosen occupation.
- improve communication, human relations, and critical thinking and problem-solving abilities.
- complete occupation-specific classes and work site education/training.
- access library, computing and communications services and obtain information and data from regional, national, and international networks.
- formulate questions that can be addressed with data and collect, organize and display relevant data to answer them.
- interpret the concepts of a problem-solving task and translate them into mathematics.

Employment Trends Employment varies by occupation.

Wages Vary by occupation.

Costs (Estimate based on 2011 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees.....	\$4,316
Other Course/Program Costs.....	Varies

Admission Information Cooperative Education Division office, Bldg. 19, Rm. 231, 541.463.5203

Cooperative Education (Co-op) Co-op provides students with on-the-job learning opportunities in a business, industry, government, or community organization. Students will have the opportunity to connect theory with practice, develop skills, and network with professionals and employers while earning college credit. Twenty to 26 credits of Co-op are required to earn a certificate of completion. Contact Chuck Fike, Occupational Skills Co-op Coordinator, Bldg. 19, Rm. 231C, 541.463.5078.

Program Lead Chuck Fike, fike@lanecc.edu, 541.463.5078

	Fall
OST 280 Co-op Ed: Occupational Skills ^{D,G}	6
Occupation-specific course work ^{1,D}	6
Choice of:.....	3-4
WR115 Introduction to College Writing ^G	
WR115W Introduction to College Writing: Workplace Emphasis ^G	
Total Credits	15-16
	Winter
OST 280 Co-op Ed: Occupational Skills ^{D,G}	6
Occupation-specific course work ^{1,D}	6
MTH 025 Basic Mathematics Applications or higher.....	3
RTEC 101 Gateway to College and Careers (optional)	(1-3)
Total Credits	15-18

	Spring
OST 280 Co-op Ed: Occupational Skills ^{D,G}	9
Occupation-specific course work ^{1,D}	3
CG 203 Human Relations at Work.....	3
Total Credits	15

1 Program occupation - specific course work must be graded unless course is offered as P/NP only

Paralegal Studies

**Offered by the Umpqua Community College Business
Department, 541.440.4663**

Two-Year Associate of Applied Science Degree, Paralegal Studies

Students may complete first-year classes at Lane and second-year classes at Umpqua to become eligible for the AAS Degree in Paralegal Studies through Umpqua Community College.

It is expected that Lane students will have completed the Legal Office Skills Career Pathway Certificate of Completion at Lane (see Administrative Office Professional program) before transferring to Umpqua. The remaining Umpqua courses are all offered online, and Cooperative Education (internship) is arranged locally through Lane, so students are able to transfer to Umpqua and complete the AAS degree without the need to travel out of the Lane County area for classes.

Students who transfer to UCC to complete the second year of the AAS Degree in Paralegal Studies will then receive financial aid through Umpqua. The Umpqua courses are all offered online. Please be aware that the Umpqua AAS program is not eligible for financial aid at Lane Community College, and federal regulations do not permit students to receive financial aid for the same term enrollment at more than one institution simultaneously. Therefore, it is the student's responsibility to ensure that (s)he does not accept any financial aid at Lane Community College while enrolled in the Umpqua degree program.

CC Paralegal Coordinator Crystal Sullivan, 541.440.4663, Crystal.Sullivan@umpqua.edu

See Umpqua's catalog for program requirements and a term-by-term listing of second-year courses.

Physical Therapist Assistant

Offered by the Health Professions Division, 541.463.5617

Two-Year Associate of Applied Science Degree

Refer to lanecc.edu/pathways/maps/healthservices-phystherapistasst.html for AAS PTA degree career pathways.

Purpose Prepare the graduate to qualify for the National Physical Therapy Examination administered by the Federation of State Boards of Physical Therapy and practice as an entry-level, licensed physical therapist assistant (PTA).

Learning Outcomes Physical Therapist Assistant (PTA) program learning outcomes are defined by the Commission on

Standard footnotes:

* Prerequisite required

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

R Required for AAS degree—see page 48

Accreditation in Physical Therapy Education (CAPTE). Program graduates must demonstrate broad, integrative and specialized knowledge, technical and communication skills, and behavior and conduct consistent with entry-level PTA practice. Learning outcomes have a strong emphasis on safely and effectively implementing a plan of care under the direction of a supervising physical therapist. PTAs work under the direction of the supervising physical therapist in helping clients (individuals, families or communities) promote health and recovery from acute or chronic neuromuscular, musculoskeletal, cardiovascular, pulmonary, metabolic, and integument injury or disease.

Learning Outcomes The graduate:

- communicates verbally and non-verbally with the patient, the physical therapist, health care delivery personnel, and others in an effective, appropriate, and capable manner
- recognizes individual and cultural differences and responds appropriately in all aspects of physical therapy services.
- exhibits conduct that reflects a commitment to meet the expectations of the members of the profession of physical therapy and members of society receiving health care services
- exhibits conduct that reflects safe practice standards that are legal, ethical and safe
- communicates an understanding of the plan of care developed by the physical therapist to achieve short and long term goals and intended outcomes.
- demonstrates competence in implementing selected components of interventions identified in the plan of care established by the physical therapist, including functional training, infection control, manual therapy, physical and mechanical agents, therapeutic exercise, and wound management
- demonstrates competency in performing components of data collection skills essential for carrying out the plan of care, including tests and measures for aerobic capacity, pain, cognition, assistive and prosthetic devices, joint motion, muscle performance, neuromotor development, posture, self-care and home/community management, ventilation, respiration, and circulation
- recognizes and initiates clarifications with the supervising physical therapist when indicated
- adjusts treatment interventions within the plan of care to optimize patient safety, progress, and comfort; reports outcomes to the supervising physical therapist
- instructs and educates patients, family members, and caregivers as directed by the supervising physical therapist
- instructs members of the health care team as directed by the supervising physical therapist, using appropriate instructional materials and approaches
- demonstrates a commitment to meeting the needs of the patients and consumers
- interacts with other members of the health care team in patient care and non-patient care activities
- provides accurate and timely information for billing and reimbursement purposes
- participates in quality assurance activities
- demonstrates an awareness of social responsibility, citizenship and advocacy, including participation in community and service organizations and activities
- identifies career and lifelong learning opportunities

Job Openings Projected through 2018

Statewide openings - 22 annually

Wages

Lane County average hourly - \$26.67; average annual - \$55,465

Oregon average hourly - \$24.46; average annual - \$50,870

Costs (Estimate based on 2011 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition	\$7,560
Differential Fees*	\$1,393
Student and Program Fees	\$2,643
Other Program Costs.....	\$3,924
Total Estimate \$15,520	

* This is the total of all the differential fees attached to Physical Therapist Assistant courses. These fees and other course fees may change during the year - see the online credit class schedule for fees assigned to courses.

More Cost Information Cooperative education courses will have additional costs for room and board, parking, and transportation to and from co-op sites. Students are responsible for costs associated with national examination and licensing.

Program Accreditation The Physical Therapist Assistant Program at Lane Community College is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), 1111 North Fairfax Street, Alexandria, VA 22314; phone: 703.706.3245; e-mail accreditation@apta.org; website: capteonline.org.

Licensing or Other Certification Graduates are eligible to take the National Physical Therapy Examination during fixed date testing.

Prerequisites PTA is a concentrated program with a heavy emphasis on on-line and hybrid learning. An applicant must complete a PTA application. The most current information regarding the curriculum, prerequisites, admission standards and procedures is available at lanecc.edu/hp/pta.

Admission Information Please consult lanecc.edu/hp/pta.

Academic Advising/Counseling Registration in on-line (Moodle) Academic Advising for Physical Therapist Assistant is highly recommended. Drop-in advising is available in Building 1, Room 103. E-mail pta@lanecc.edu

Cooperative Education (Co-op) Co-op is required for students enrolled in the Physical Therapist Assistant Program. Students must complete 18 credits of Co-op, resulting in 648 hours of supervised clinical instruction at a program-designated co-op site. Contact the PTA Co-op Coordinator/ACCE, Beth Thorpe, PTA, 541.463.3274. thorpeb@lanecc.edu

Program Coordinator Christina Howard, MPT 541.463.5764, howardc@lanecc.edu

Prerequisites Required to Apply:	Credits
WR 121 Introduction to Academic Writing , higher writing, or prior bachelor's degree, verified by transcript from US accredited institution. ^{R,1}	3-4
HO 100 Medical Terminology 1	3
Choice of:.....	3-4
HO 150 Human Body Systems 1	
BI 231 Human Anatomy and Physiology 1*	
MTH 070 Introductory Algebra ^{*,1}	5
(or MTH 060 +MTH 065 or higher/current placement testing)	
Choice of:.....	3
PSY 201 General Psychology ^{*,1}	
PSY 202 General Psychology ^{*,1}	

Total Credits 17-19

Two-Year Associate of Applied Science Degree**First Year**

	Fall
PTA 100 Introduction to Physical Therapy ^{1,G}	3
PTA 101 Introduction to Clinical Practice 1 ^{1,G}	5
PTA 101L Introduction to Clinical Practice 1 Lab ^{1,G}	2
Choice of:.....	3-4
HO 152 Human Body Systems 2 *	
BI 233 Human Anatomy and Physiology 3 *	

**Note: Either HO 152 or BI 233 must be completed by fall term

Total Credits 13-14

Winter

PTA 103 Introduction to Clinical Practice 2 ^{*,1,G}	5
PTA 103L Introduction to Clinical Practice 2 Lab ^{*,1,G}	2
PTA 132 Applied Kinesiology 1 ^{*,1,G}	2
PTA 132L Applied Kinesiology 1 Lab ^{*,1,G}	2
SP 115 Introduction to Intercultural Communication	4

Total Credits 15

Spring

HE 262 First Aid 2 - Beyond the Basics ^{*,P}	3
PTA 104 PT Interventions – Orthopedic Dysfunctions ^{*,1,G}	5
PTA 104L PT Interventions – Orthopedic Dysfunctions Lab ^{*,1,G}	2
PTA 133 Applied Kinesiology 2 ^{*,1,G}	2
PTA 133L Applied Kinesiology 2 Lab ^{*,1,G}	2

Total Credits 14

Second Year**Fall**

PTA 204 PT Interventions – Neurological Dysfunctions ^{*,1,G}	5
PTA 204L PT Interventions – Neurological Dysfunctions Lab ^{*,1,G}	2
PTA 280A Co-op Ed: First Clinical Affiliation ^{*,1,G}	6

Total Credits 13

Winter

PTA 205 PT Interventions – Complex Medical Dysfunctions ^{*,1,G}	4
PTA 205L PT Interventions – Complex Medical Dysfunctions Lab ^{*,1,G}	2
PTA 280B Co-op Ed: Second Clinical Affiliation ^{*,1,G}	6
Human Relations Requirement ^R	3

Total Credits 15

Spring

PTA 200 Professionalism, Ethics and Exam Preparation ^{*,1,G}	4
PTA 203 Contemporary Topics in Physical Therapy ^{*,1,G}	2
PTA 280C Co-op Ed: Third Clinical Affiliation ^{*,1,G}	6

Total Credits 12

1 Must be passed with grade of "C" or better.

Respiratory Care

Offered by Health Professions Division, 541.463.5617

Two-Year Associate of Applied Science Degree

Purpose To prepare graduates to demonstrate competence in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains of respiratory care practice as performed by registered respiratory therapists (RRTs).

Learning Outcomes The graduate will:

- provide age-specific treatment, management, control, and care of patients with deficiencies and abnormalities associated with respiration.
- provide patients with therapeutic use of medical gases, air and oxygen administering apparatus.
- appropriately use environmental control systems, humidification and aerosols, medications, ventilatory control.
- provide pulmonary hygiene appropriate to patient's condition
- perform cardiopulmonary resuscitation, and measures and maintenance of natural, artificial, and mechanical airways.
- use clinical decision skills to create appropriate patient care plans
- use appropriate library and information resources to research professional issues and support lifelong learning.
- formulate questions that can be addressed with data, and collect, organize and present relevant data to answer them.

Job Openings Projected through 2018

Lane County openings - 5 annually

Statewide openings - 44 annually

Wages

Oregon average hourly - \$28.10; average annual - \$58,448

Costs (Estimate based on 2011 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees.....	\$8,484
Differential Fees [†]	\$4,533
Student and Program Fees	\$1,482
Other Program Costs.....	\$4,460
Total Estimate	\$18,959

[†] This is the total of all the differential fees attached to Respiratory Care courses. These fees and other course fees may change during the year - see the online credit class schedule for fees assigned to courses.

Student health insurance is required in the program. This can be obtained through the student health insurance (information available at the student health clinic) or other health insurance providers. (Cost variable based on individual circumstances.) A physical examination, immunizations, and criminal background check are required for the program. Criminal background check must pass clinical affiliate criteria for student to participate in required clinical courses. (Cost of meeting these requirements can vary between \$250 and \$500.)

Costs incurred while in the program related to transportation and childcare, and post-graduate credentialing and state licensure, are not included in this estimate. Costs related to completion of program course pre-requisites are not included, Cost of travel to, and parking at, clinical affiliates varies with assignment. Licensure and post-graduate credentialing can cost up to

Standard footnotes:

* Prerequisite required

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

R Required for AAS degree—see page 48

\$730 depending on the level of credentialing and State Licensure Fees. For further information related to licensure process or fees in Oregon, contact: Oregon Health Licensing Agency, Respiratory Therapist Licensing Board 503.378.8667. Students should consider the additional costs of these requirements.

Licensing or Other Certification Exams Required Graduates are eligible to take the Entry-Level and Advanced Practitioner exams to obtain national credentialing as a Registered Respiratory Therapist. (National Board for Respiratory Therapy, 913.599.4200, nbrc.org). Successful completion of the Entry Level exam qualifies the graduate for state licensure as a Respiratory Care Practitioner. (Oregon State Respiratory Care Practitioner License - Oregon Health Licensing Agency, 503.378.8667, oregon.gov/OHLA/RT)

Prerequisites An applicant must complete a Respiratory Care Program application. The most current information regarding the curriculum, program prerequisites, admission standards and procedures is available at lanecc.edu/hp/rc.

Admission Information The application information packet, submission timeline, and first-day enrollment requirements are found on the program web page, lanecc.edu/hp/rc

Program Accreditation The Respiratory Care Program is accredited by the Commission on Accreditation for Respiratory Care, coarc.com.

Cooperative Education (Co-op) Respiratory care students earn college credit for participation in job-related activities in respiratory care professional settings under direct supervision. Through Co-op, enrolled students develop skills, connect classroom theory with practice, expand career knowledge, and make contacts for potential future employment in respiratory care. Co-op may be taken as an optional elective, and is a required course as the clinical capstone ICU practicum course in the final term. Contact Norma Driscoll, Respiratory Care Co-op Coordinator, Bldg. 30, Rm. 210, 541.463.3176, driscolln@lanecc.edu

Counseling and Advising For assistance in meeting program or application requirements, please go to Counseling and Advising in Building 1, Room 103, or e-mail RCProgram@lanecc.edu. Registration in on-line (Moodle) Academic Advising for Respiratory Care is highly recommended. Drop-in advising is available in Building 1, Room 103.

Prerequisite Courses for Program Application In order to apply for fall entry all applicants must complete the following minimum prerequisites as indicated below. Other specialized program requirements will be described in acceptance materials.

- MTH 095 Intermediate Algebra (5 credits), or higher (4 or more credits) graded C- or better.
- CH 112 Chemistry for Health Occupations * and BI 112 Cell Biology for Health Occupations * (3 credits each), or 100-level or higher college chemistry course (5 credits or more) pass/no pass option okay, or grade equal to C- or better
- BI 231 Human Anatomy and Physiology 1 (4 credits) Graded "C-" or better
- HO 100 Medical Terminology 1 (3 credits) pass/no pass option okay, or grade equal to C- or better
- WR 121 Introduction to Academic Writing * (4 credits) pass/no pass option okay, or grade equal to C- or better

Prerequisite Courses for Program Entrance The following first day enrollment requirements must be completed, and approved documentation submitted, prior to enrolling in fall term program course. For more information, see lanecc.edu/hp/rc.

- BI 232 Human Anatomy and Physiology 2 (4 credits) (Graded – "C-" or better)
- Evidence of a physical examination (within the previous nine months)
- CPR Certification for Health Care Professionals – 2-year certification preferred
- Physical Exam
- Proof of required immunizations
- Criminal background check

Program Coordinator Norma Driscoll, BS, RRT, 541.463.3176, driscolln@lanecc.edu

Two-Year Associate of Applied Science Degree

First Year	Fall
BI 233 Human Anatomy and Physiology 3 ^{*4,G}	4
RT 112 Respiratory Care Science ^{1,4,G}	2
RT 114 Fundamentals of Respiratory Care ^{1,4,G}	2
RT 146 Introduction to Clinical Respiratory Care ^{1,3}	3
Human Relations requirement ^{4,R,G}	3
The following are preferred:	
CG 203 Human Relations at Work	
CG 191 Issues in Cultural Diversity	
HO 102 Diversity Issues in Health Care	
Total Credits	14
	Winter
BI 234 Microbiology ^{*4,G}	4
RT 116 Basic Respiratory Assessment ^{*4,G}	2
RT 127 Respiratory Care Diseases and Medications ^{*4,G}	4
RT 141 Principles of Respiratory Care Lab ^{*4,G}	1
RT 144 Principles of Respiratory Care ^{*4,G}	3
Total Credits	14
	Spring
RT 126 Respiratory Care Case Review - Part 1 ^{*4,G}	2
RT 236 Clinical Practice 1 ^{*3}	8
RT 251 Pulmonary Diagnostics and Monitoring Lab ^{*4,G}	1
RT 254 Pulmonary Diagnostics and Monitoring ^{*4,G}	3
Total Credits	14
	Summer
RT 110 Introduction to Mechanical Ventilation ^{*4,G}	3
RT 136 Respiratory Care Case Review - Part 2 ^{*4,G}	4
RT 248 Clinical Practice 2 ^{*3}	6
Total Credits	13
Second Year	Fall
RT 216 Respiratory Care Case Review - Part 3 ^{*4,G}	2
RT 241 Principles of Mechanical Ventilation Lab ^{*4,G}	1
RT 244 Principles of Mechanical Ventilation ^{*4,G}	3
RT 258 Clinical Practice 3 ^{*3}	8
Total Credits	14
	Winter
RT 256 Respiratory Care Case Review - Part 4 ^{*4,G}	2
RT 262 Neonatal/Pediatric Respiratory Care ^{*4,G}	3
RT 266 Emergency and Critical Care - Part 1 ^{*4,G}	3
RT 268 Clinical Practice 4 ^{*3}	8
Total Credits	16

	Spring
Health/PE requirement ^{2,4,R,G}	3
Preferred: HE 275 Lifetime Health and Fitness ²	
RT 270 Clinical Competency Assessment * ³	1
RT 274 Credentialing Topics * ^{4,G,D}	2
RT 276 Emergency and Critical Care - Part 2 * ^{4,G}	2
RT 280 Co-op Ed: Respiratory Therapy * ^{4,G}	4
Arts and Letters ^{4,R,G}	4
The following are preferred:	
SP 111 Fundamentals of Public Speaking	
SP 115 Introduction to Intercultural Communication	
SP 218 Interpersonal Communication	
SP 220 Communication, Gender and Culture	
Total Credits	16

- 1 Must be accepted into Respiratory Care Program.
 2 Students fulfilling Physical Education degree requirements via PE courses must complete activity courses over at least two terms.
 3 Graded Pass/No Pass
 4 Must be passed with grade of "C-" or better

Optional courses each term:

RT 148 Advanced Placement Clinical Practice
 RT 298 Independent Study
 RT 280 Co-op Ed

Retail Management

Offered by the Business Department, 541.463.5221

Two-Year Associate of Applied Science Degree

One-Year Certificate of Completion

Career Pathway Certificate of Completion

Purpose This two-year Retail Management Associate of Applied Science degree program provides a program of study for retail employees and for students who would like to advance to retail store supervision, store management, and be qualified to move forward into corporate leadership. This program represents skills identified by the retail industry at the statewide level, as represented by the Western Association of Food Chains.

Learning Outcomes The graduate of the Associate of Applied Science program will:

- understand the purpose, context, concepts, and processes of retailing and the retail environment and the responsibilities of the retail operations function.
- understand the advantages, disadvantages, and circumstantial uses of various leadership styles.
- understand various ethical tools and the reasoning behind various ethical positions.
- determine appropriate and inappropriate interview, hiring, and employee supervision procedures.
- understand the opportunities and challenges posed by a team-based, multicultural work force and the responsibilities of management in handling and motivating employees to achieve organizational objectives.
- apply leadership skills to achieve a motivational and productive culture and climate.
- understand the impact of technology on marketing and recognize how the major elements of the marketing process apply to actual marketing situations.
- define theories and strategies of business management, including human resources management and operations management.

- understand the basic terms and concepts of accounting, and the content of financial statements and be able to understand and interpret the information they contain.
- understand communication theory and give well-organized, clear written and oral business presentations that inform, recommend, and train.
- prepare mathematical business computations for industry requirements, including discounts and mark-ups, returns and allowances, and data to maintain good records.
- learn and demonstrate proficiency with office suite products, including word processing, spreadsheets, database, communication, and presentation software.
- know, demonstrate, and appreciate good work ethics, including dependability, attention to detail, good customer relations, professionalism, and good teamwork relationships.
- appreciate the significance of meeting employer/retailer needs in providing superior customer service and apply communication skills to improve customer service and work relationships.
- use appropriate library and information resources to research business topics.
- apply critical thinking and analytical skills in decision-making and problem solving.

Job Openings Projected through 2018

Lane County openings - 47 annually

Statewide openings - 525 annually

Wages

Lane County average hourly - \$19.52; average annual - \$40,587

Oregon average hourly - \$19.11; average annual - \$39,740

Costs (Estimate based on 2011 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees.....	\$8,650
Books and Materials.....	\$2,550
Total Estimate	\$11,200

Retail Management courses fees and other course fees may change during the year - see the online credit class schedule for fees assigned to courses.

Note All Business Department majors must have a computer that meets minimum system requirements. Contact the department or advisor for details.

Cooperative Education (Co-op) Co-op offers students graded college credit for on-the-job work experience related to educational and career goals. Through Co-op students connect theory and practice, develop skills, expand career knowledge, and make contacts for future employment. Three credits of Co-op are required for the AAS degree. Additional Co-op credit is strongly recommended as an elective. Contact Jamie Kelsch, Retail Management Co-op Coordinator, Bldg. 19, Rm. 253A, 541.463.5540, kelschj@lanecc.edu

Standard footnotes:

* Prerequisite required

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

R Required for AAS degree—see page 48

Retail Management

Two-Year Associate of Applied Science Degree

Recommended Prerequisites

BT 010 Computer Keyboarding ^{1,G}	3
BT 020 10-Key Calculator ^{1,G}	3
BT 108 Business Proofreading and Editing ^{2,G}	4
MTH 060 Beginning Algebra ³	4
WR 115 Introduction to College Writing ³	4
Total Recommended Prerequisite Credits	18

First Year

BA 101 Introduction to Business ^{4,G}	4
BT 120 MS WORD for Business ^{*1,4,G}	3
CS 120 Concepts of Computing: Information Processing ^{4,G}	4
Choice of:.....	4
SP 111 Fundamentals of Public Speaking ^{4,G}	
SP 100 Basic Communication ^{4,G}	
SP 130 Business and Professional Speech ^{4,G}	
Total Credits	15

Winter

BA 224 Human Resource Management ^{*,D,G}	3
BA 223 Marketing ^{*,4,G}	4
WR 121 Introduction to Academic Writing ^{*,3,4,G}	4
Choice of:.....	4
BT 165 Introduction to the Accounting Cycle ^{4,G}	
BA 211 Financial Accounting ^{*,4,G}	
Total Credits	15

Spring

BA 214 Business Communications ^{*,2,4,G}	4
BA 249 Retailing ^{*,4,G}	4
BA 206 Management Fundamentals ^{*,4,G}	3
BT 206 Co-op Ed: Business Seminar ^{*,4,G}	2
MTH 060 Beginning Algebra or higher ^{*,4,G}	4
Total Credits	17

Second Year

BA 278 Leadership and Team Dynamics ^{4,G}	4
BT 123 MS EXCEL for Business ^{*,1,4,G}	4
HE 252 First Aid ^{4,G}	3
SP 115 Intercultural Communication ^{4,G}	4
Total Credits	15

Winter

BT 221 Budgeting for Managers ^{*,4,G}	4
BA 226 Business Law ^{4,G}	4
ECON 200 Principles of Economics: Introduction to Economics ^{4,G}	3
SP 105 Listening and Critical Thinking ^{4,G}	4
Total Credits	15

Spring

BA 238 Sales ^{4,G}	3
BA 251 Supervisory Management ^{4,G}	3
Choice of:.....	4
BA 250 Small Business Management ^{*,4,G}	
CIS 245 Project Management ^{*,4,G}	
BA 280RM Co-op Ed: Retail ^{4,G}	3
Total Credits	13

1 Before enrolling in BT 120 MS WORD for Business or BT 123 MS EXCEL for Business, students are expected to have a basic knowledge of the Windows operating system and the ability to type 30 words per minute accurately and key 130-132 strokes per minute on an electronic

calculator (or numeric keypad). The Business Department offers free placement tests to assist students in determining their skill levels. Additional testing information and schedule details are available at: lanecc.edu/business/testing

- Before enrolling in BA 214 Business Communications, students must pass a Language Skills and Proofreading test in the Testing office or pass BT 108 Business Proofreading and Editing.
- Students must place at least into WR 121 and MTH 065, or take classes to reach these levels before enrolling in program courses.
- Must be passed with grade of "C" or better to satisfy program requirement.

Retail Management

One-Year Certificate of Completion

Purpose The Retail Management Certificate of Completion represents skills identified by the retail industry, which desires to provide a program of study for their employees and for students who would like to become retail employees. The certificate builds on the Career Pathway Certificate of Completion and incorporates additional coursework in writing and business. This program is recognized by retail employers and identifies skills that lead to professional growth, hiring, and advancement opportunities. This program is a body of study that prepares the student for retail sales and management responsibilities; those who complete the program may be given preference in hiring, and/or may be eligible for promotions.

Learning Outcomes

The graduate will:

understand the purpose of retailing and the retail environment and the responsibilities of the retail operations function.

- understand the advantages, disadvantages, and circumstantial uses of various leadership styles.
- understand various ethical tools and the reasoning behind various ethical positions.
- determine appropriate and inappropriate interview and hiring questions.
- understand the opportunities and challenges posed by a multi-cultural work force and the responsibilities of management in handling and motivating employees in the current business environment.
- understand the impact of technology on marketing and recognize how the major elements of the marketing process apply to actual marketing situations.
- define theories and strategies of business management, including human resources management and operations management.
- understand the basic terms and content of financial statements and be able to understand and interpret the information they contain.
- understand communication theory and give well-organized, clear business presentations that inform, recommend, and train.
- understand the basics of word processing, spreadsheets, database management, and internet communications.
- use appropriate library and information resources to research business topics.
- apply critical thinking and analytical skills in decision-making and problem solving.

Gainful Employment Disclosure

Standard Occupational Classification: 41-9099.00

Go to websites below for information about related occupations:

Sales and Related Workers, All Other
oneline.org/link/summary/41-9099.00

Related Occupation:

First-Line Supervisors of Retail Sales Workers
oneline.org/link/summary/41-1011.00

How much will the program cost?

(Estimate based on 2011-12 data. Consult Lane's website for updated tuition.)

Resident tuition and fees	\$6,934
Books, supplies, program costs	\$2,550
On-Campus room and board.....	Not offered
Total Estimate	\$9,484

What's included?

Program Costs: lanecc.edu/es/feesandexpenses.html

What are financing options to pay for the program?

In addition to any grant and scholarship aid for which they are eligible, 100% of program graduates used loans to finance their education. The median debt for 2010-11 program graduates:

Federal Loans.....	\$25,465
Institutional financing.....	\$269

No 2010-11 program graduates used private educational loans.

How long will it take to complete this program?

The program is designed to take 3 terms, or about 12 months of study to complete.

How many 2010-11 Retail Management graduates completed within the designed program length?

None completed within 12 months.

What are my chances of getting a job when I graduate?

Lane County openings - 7 annually

Statewide openings - 93 annually

Will I be able to pay back student loans?

Most Lane students graduating in 2009-10 who took out federal student loans are successfully repaying them. Lane's federal loan student default rate for that period was 11.3%.

Where are comparable programs offered?

School	City	2009 Graduates
Rogue Community College	Grants Pass	7
Fall		
BA 101 Introduction to Business ^{4,G}		4
CS 120 Concepts of Computing:		
Information Processing ^{4,G}		4
MTH 060 Beginning Algebra or higher ^{*,4,G}		4
Choice of:.....		4
SP 100 Basic Communication ^{4,G}		
SP 111 Fundamentals of Public Speaking ^{4,G}		
SP 130 Business and Professional Speech ^{4,G}		
Total Credits		16
Winter		
BA 223 Marketing ^{*,4,G}		4
BA 224 Human Resource Management ^{*,4,G}		3
WR 121 Introduction to Academic Writing ^{*,4,G}		4
Choice of:.....		4
BT 165 Introduction to the Accounting Cycle ^{4,G}		
BA 211 Financial Accounting ^{*,4}		
Total Credits		15
Spring		
BA 214 Business Communications ^{*,4,G}		4
BA 249 Retailing ^{*,4,G}		4
BA 278 Leadership and Team Dynamics ^{4,G}		4
BA 206 Management Fundamentals ^{*,4,G}		3
Total Credits		15

4 Must be passed with grade of "C" or better to satisfy program requirement.

Retail Management**Career Pathway Certificate of Completion**

Purpose This Career Pathway Certificate of Completion represents skills identified by the retail industry, as represented by the Western Association of Food Chains, which desires to provide a program of study for their employees and for students who would like to become retail employees. This program is recognized by retail employers and identifies skills that lead to professional growth, hiring, and advancement opportunities. This program is a body of study that prepares the student for retail sales and management responsibilities. Those who complete the program will be given preference in hiring, will be eligible for promotions, and will receive compensation to recognize their educational achievement.

Learning Outcomes The graduate will:

- understand the purpose of retailing and the retail environment and the responsibilities of the retail operations function.
- understand the advantages, disadvantages, and circumstantial uses of various leadership styles.
- understand various ethical tools and the reasoning behind various ethical positions.
- determine appropriate and inappropriate interview and hiring questions.
- understand the opportunities and challenges posed by a multi-cultural work force and the responsibilities of management in handling and motivating employees in the current business environment.
- understand the impact of technology on marketing and recognize how the major elements of the marketing process apply to actual marketing situations.
- define theories and strategies of business management, including human resources management and operations management.
- understand the basic terms and content of financial statements and be able to understand and interpret the information they contain.
- understand communication theory and give well-organized, clear business presentations that inform, recommend, and train.
- understand the basics of word processing, spreadsheets, database management, and internet communications.
- use appropriate library and information resources to research business topics.
- apply critical thinking and analytical skills in decision-making and problem solving

Fall	
BA 101 Introduction to Business ^{4,G}	4
CS 120 Concepts of Computing:	
Information Processing ^{4,G}	4
MTH 060 Beginning Algebra or higher ^{*,4,G}	4
Choice of:.....	4
SP 111 Fundamentals of Public Speaking ^{4,G}	
SP 100 Basic Communication ^{4,G}	
SP 130 Business and Professional Speech ^{4,G}	
Total Credits	16
Winter	
BA 223 Marketing ^{*,4,G}	4
BA 224 Human Resource Management ^{*,4,G}	3

Standard footnotes:

* Prerequisite required

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

R Required for AAS degree—see page 48

Choice of:.....	4
BT 165 Introduction to the Accounting Cycle ^{4,G}	
BA 211 Financial Accounting ^{*,4,G}	

Total Credits	11
---------------	----

Spring

BA 214 Business Communications ^{*,4,G}	4
BA 249 Retailing ^{*,4,G}	4
BA 278 Leadership and Team Dynamics ^{4,G}	4

Total Credits	12
---------------	----

4 Must be passed with grade of "C" or better to satisfy program requirement.

Sustainability Coordinator

**Offered by the Advanced Technology Division,
541.463.5380**

Two-Year Associate of Applied Science Degree

Purpose To prepare students for careers as sustainability coordinators, resource management technicians, corporate social responsibility coordinators, environmental specialists, recycling coordinators, pollution prevention specialists and energy or waste reduction analysts. Graduates may work for public agencies, school districts, colleges or universities, non-governmental organizations, nonprofit organizations, private businesses or corporations.

Learning Outcomes Graduates will have the knowledge and skills to:

- demonstrate holistic understanding of interdisciplinary subjects related to sustainability including physical and biological sciences, social and behavioral sciences, economics, the regulatory environment, and business management.
- develop policies that support the triple bottom line of sustainability: healthy economy, healthy environment, and healthy communities.
- obtain information from public and research libraries, online sources, and regional, national, and international networks.
- demonstrate skills in data collection and analysis, statistical analysis, and basic mathematics.
- demonstrate skills in the use of computer programs and databases that track and measure.
- perform environmental audits, perform laboratory and field tests, conduct and coordinate research, and prepare written reports for internal and external stakeholders.
- demonstrate understanding of the causes and the ecological, social, and economic costs of challenges to sustainability including pollution, climate change, loss of biodiversity, water quality and supply, and human health.
- apply practical and technical strategies to objectives including pollution prevention, climate change reduction, energy conservation and use of alternative energy, efficient resource use, waste reduction and recycling, LEED and other green building tools, water conservation, stormwater and wastewater management, indoor air quality, transportation, closed loop production and life cycle analysis.
- articulate verbal and written understanding of laws and regulations related to sustainable environment, business and community.
- develop and implement action plans based on best practices; coordinate project management goals and tasks.
- conduct public relations and social marketing efforts; develop educational materials; and create community networks and resources to support sustainability practices in business and community.
- demonstrate the ability to organize events, meetings, workshops, conferences and fundraising.

- utilize collaborative team skills in the design and implementation of sustainable practices.

Employment Trends Sustainability Coordinator is an emerging occupation for which State of Oregon historical data are not yet available. Market surveys of regional and statewide employers indicate job growth potential is significant and expected to increase.

Wages Based on Oregon Employment Department wage data for related occupations including environmental science technician, environmental engineering technician, life-physical-social science technician, and public relations specialist predicted average wages: Statewide hourly- \$20-\$23, Lane County hourly - \$19-\$22. Predicted entry-level wages are \$11-\$16 hourly.

Costs (Estimate based on 2011 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees.....	\$8,887
Books and supplies.....	\$2,500

Total Estimate	\$11,387
----------------	----------

Sustainability Coordinator course fees and other course fees may change during the year - see the online credit class schedule for fees assigned to courses.

Prerequisites/Application Requirements Students must qualify for MTH 095 and WR 121, either by placement testing or by completing prerequisite courses. Students are expected to be comfortable working on a computer. Students should consult with a counselor or advisor to plan a program of study.

Admission Information Students typically enter in fall term. For consent to enroll in certain major courses, students must attend a program orientation for fall term (dates available in Counseling or Enrollment Services). Contact advisor/counselor for possible entry in winter or spring terms. Contact the Advanced Technology Division, AdvTechPrograms@lanecc.edu

Cooperative Education (Co-op) Co-op internship is a required and important part of the Sustainability Coordinator program. Through Co-op students connect theory and practice, develop skills, expand career knowledge, and make contacts for the future. Work schedules and work sites vary. Contact the Cooperative Education Division, Bldg. 19, Rm. 231, 541.463.5203.

Two-Year Associate of Applied Science Degree

First Year		Fall
WR 121 Introduction to Academic Writing ^{*,D}	.....	4
HE 255 Global Health and Sustainability	.....	4
ENVS 181 Terrestrial Environment ^{D,G}	.....	4
GS104 Physical Science	.....	4
Total Credits		16

Winter		
ENVS182 Atmospheric Environment and Population ^{D,G}	...	4
SUST 101 Introduction to Sustainability ²	.....	3
CG 203 Human Relations at Work ^D	.....	3
CH 104 Introductory Chemistry	.....	5
Total Credits		15

Spring		
BI 103J General Biology: Forest Ecology ^{D,G}	.....	4
BI 103M General Biology: Biodiversity and Sustainability ^{D,G}	.....	4

ECON 260 Introduction to Environmental and Natural Resource Economics: Water ^{D,G}	4
ENVS 184 Global Climate Change ^{D,G}	4
Total Credits	16

Second Year**Fall**

MTH 095 Intermediate Algebra ^{*D}	5
BT 123 MS Excel for Business	4
WR 227 Technical Writing ^{*D}	4
WATR 202 Fostering Sustainable Practices	3
Total Credits	16

Winter

MTH 105 Introduction to Contemporary Mathematics ^{*D} ..	4
PS 297 Environmental Politics ^{D,G}	4
ECON 250 Class, Race and Gender in the US Economy ^{D,G}	4
CST 201 Sustainable Building Practices	3
IDS 206S Co-Op Ed: Sustainability Coordinator Seminar..	1
Total Credits	16

Spring

IDS 201 Sustainability Systems Seminar.....	1
IDS 280S Co-Op Ed: Sustainability Coordinator.....	3
DRF 211 Mechanical Systems ^{D,G}	4
BT 124 MS Access for Business ^{*D}	3
ENVS 183 Aquatic Environment ^{D,G}	4
Total Credits	15

Lane's Sustainability and Learning Committee approves sustainability-focused courses.

1 Instructor permission required

2 Department permission required

Water Conservation Technician

Offered by the Science Division, 541.463.5446**Two-Year Associate of Applied Science Degree**

Purpose This degree prepares graduates for careers in the water field as water efficiency technicians, coordinators, and specialists, or as water management specialists and technicians. The program prepares students to design, implement and evaluate water conservation programs.

Learning Outcomes The graduate will:

- evaluate indoor and outdoor water use patterns for rural, urban, residential and commercial sites
- recommend water efficiency measures, wise water landscapes and efficient plumbing solutions
- design, implement and evaluate water conservation programs
- convey water conservation strategies to a broad audience using multiple communication methods
- understand regional regulatory context and international code trends as they pertain to water conservation
- develop basic knowledge of water resource economics and how economics relates to supply and demand
- understand water distribution, flow and elimination systems as well as time of use
- create technical reports and collect, interpret, display and explain data
- perform systems analysis using water bills, meters and other evidence to solve problems.

Employment Trends The annual projected number of openings in Oregon is growing moderately and in the future will grow rapidly along with population growth and global climate change. In addition to openings resulting from growth, the need to replace retirees or those who transfer to other occupations will provide numerous job openings. Graduates must consider the entire nation for job placement to enhance their opportunities.

Wages Statewide range from \$32,000 to \$48,500 annually plus benefits.

Costs (Estimate based on 2011 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees.....	\$9,510
Other Course/Program Costs.....	\$750
Total Estimate	\$10,260

Water Conservation Technician course fees and other course fees may change during the year - see the online credit class schedule for fees assigned to courses.

Admission Information A high school diploma (or equivalent) and completion of Math 065 or 070 is required for entry into the Water Conservation Technician Program along with a completed Water Program application form. This is a limited enrollment program.

Program Information Roger Ebbage, 541.463.3997, Science Division, Bldg. 16, Rm. 253, ebbager@lanecc.edu or Ginny Young, 541.463.4729, Bldg. 16, Rm. 252, youngg@lanecc.edu

Cooperative Education Cooperative Education is a field experience where students integrate theory and practice while developing skills and exploring career options. Students must complete a minimum of nine and a maximum of 18 Co-op credits. Co-op learning sites and hours vary. Contact the Cooperative Education Division, Bldg. 19, Rm. 231, 541.463.5203.

First Year	Fall
BT 123 MS Excel for Business ^{*D,G}	4
GIS 151 Digital Earth ^{D,G}	4
WATR 101 Intro to Water Resources ^{1,D,G}	3
WATR 102 Water Careers Exploration.....	4
WR 121 Introduction to Academic Writing ^{2,5,6,G}	4
Total Credits	19

Winter	
MTH 095 Intermediate Algebra ^{*2,G}	5
SUST 101 Intro to Sustainability ^{1,D,G}	3
WATR 105 Water Conservation: Residential ^{1,D,G}	4
WATR 206 Co-op Ed: Water Conservation Seminar ^D	1
WR 227 Technical Writing ^{*5,6,G}	4
Choice of:.....	1
Physical Education Activity Requirement ^{5,6,R}	
Health requirement ^{5,6,R}	
Total Credits	18

Spring	
CG 203 Human Relations at Work ⁵	3
ECON 260 Introduction to Environmental and Natural Resource Economics ^{*1,D,G}	4
ENVS 181 Terrestrial Environment.....	4

Standard footnotes:

* Prerequisite required

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

R Required for AAS degree—see page 48

WATR 107 Water Conservation: Outdoor ^{1,D,G}	4
Choice of: ^{5,6,R}	2
Physical Education Activity Requirement	
Health requirement	
Total Credits	17

Second Year

Fall	
WATR 208 Water Conservation:	
Agricultural ^{1,D,G}	4
WATR 210 Water Conservation:	
Industrial, Commercial ^{1,D,G}	4
WATR 261 Regional Water Policy ^{1,D,G}	3
WATR 280 Co-op Ed: Water Conservation ^{4,D,G}	3
Directed electives ^{5,7,D,G}	3
Total Credits	17

Winter

GIS 245 Maps and Spatial Information ^{*,D,G}	4
WATR 202 Fostering Sustainable Practices ^{1,D,G}	3
WATR 206 Co-op Ed Water Conservation Seminar.....	1
WATR 215 Integrated Water Resources	
Management ^{1,D,G}	4
WATR 280 Co-op Ed: Water Conservation ^{4,D,G}	3
Arts/Letters requirement ^{5,6,R}	3
Total Credits	18

Spring

WATR 220 Water Conservation Program	
Development ^{1,D,G}	4
WATR 221 Water Mechanical Systems ^{1,D,G}	4
WATR 280 Co-op Ed: Water Conservation ^{4,D,G}	3
Directed Elective ^{5,7,D,G}	3
Total Credits	14

- 1 Instructor permission required
- 2 Must be completed before spring term of the first year
- 3 Contains computation instruction to meet industry requirements
- 4 May also be taken during summer
- 5 Can be taken any term
- 6 See catalog for AAS requirements
- 7 Directed Electives:
 - ECON 200 Principles of Economics: Introduction to Economics
 - ECON 201 Principles of Economics: Introduction to Microeconomics
 - ECON 202 Principles of Economics: Introduction to Macroeconomics
 - ENVS 182 Atmospheric Environment and Population
 - ENVS 183 Aquatic Environment
 - ENVS 184 Global Climate Change
 - SOC 206 Institutions and Social Change
 - SP 100 Basic Communication
 - SP 105 Listening and Critical Thinking
 - SP 111 Fundamentals of Public Speaking
 - SP 112 Persuasive Speech
 - SP 115 Introduction to Intercultural Communication
 - SP 130 Business and Professional Speech
 - Any Business Administration (BA) or Business Technology (BT) classes
 - Any Energy Management (NRG) classes
 - Any Geographic Information Science (GIS) classes
 - Any Graphic Design (GD), Multimedia (MUL) or Multimedia Production (MDP) classes
 - Any Landscape/Nursery Technology (LAT)
 - Any Spanish (SPAN) Language classes

Watershed Science Technician

Offered by the Science Division, 541.463.5446

Two-Year Associate of Applied Science Degree

Purpose The Watershed Science Technician program will train graduates for entry-level positions in environmental sustainability careers related to conserving, enhancing, restoring and protecting ecological processes in watersheds (stream drainage basins). Graduates will be able to work in multidisciplinary fields that survey and assess watersheds and develop strategies and solutions to maintain and restore healthy water resources. This curriculum prepares students to work in the following jobs: watershed resource conservation professionals; stream restoration or water quality technicians; assistant stream ecologists; assistant forest ecologists; environmental technicians; or natural resource specialists for public agencies, non-governmental organizations, nonprofit conservation and restoration organizations, consulting firms, and private restoration companies.

Learning Outcomes The graduate will:

- demonstrate use of concepts and principles of ecological processes and their interdisciplinary connections that influence the practice of watershed science, including:
 - Hydrologic Processes and Watersheds
 - Erosion, Sedimentation, Water Quality
 - Ecology of Aquatic and Wetland Environments
 - Ecology of Terrestrial Environments
- identify common species, ecosystems and ecological processes relevant to watershed assessments, with an emphasis on the Pacific Northwest.
- perform field identification, field test procedures and ecological surveys using proper, precise, and safe application of measurement tools and technologies.
- utilize intermediate algebra skills, computer programs, databases, and basic geographic information systems to collect, organize, interpret and communicate watershed data.
- apply standard water management approaches and best practices to develop effective conservation and management strategies to meet watershed goals.
- communicate effectively and accurately with supervisors, colleagues, funding agencies and the public using the spoken and written word and visual representations of information.
- use appropriate library and information resources to research professional issues and support lifelong learning and job advancement.

Employment Trends Watershed Science Technician is an emerging career. Related occupations such as Forest and Conservation Technicians, Environmental Science and Protection Technicians, Conservation Scientists, Zoologists and Wildlife Biologists and hydrologists are estimated to have 9% to 29% growth nationally and 0.4 to 12.6% growth in Oregon over the next decade. Forest and Conservation Technicians alone are expected to have 12 regional openings per year and 171 annual openings in Oregon as a whole.

Surveys of professionals in the natural resource protection field indicate that jobseekers entering the field of Watershed Science Technician with hands-on experience and relevant field skills will be at an advantage for employment and job advancement. Students must consider the entire Pacific Northwest when seeking employment, as those willing to relocate will have greater opportunities.

Wages A fulltime beginning technician's salary may range from \$24,660 to \$38,480 annually.

Costs (Estimate based on 2011 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees.....	\$9,537
Other Course/Program Costs.....	\$1,700

Total Estimate \$10,737

Watershed Science Technician course fees and other course fees may change during the year - see the online credit class schedule for fees assigned to courses.

Program Admission Requirements A high school diploma (or equivalent); completion or math placement tests scores for Math 065 or Math 070; completion or writing placement tests scores for WR 115 or above; and, a completed Watershed Science Technician Program application form. Application forms will be accepted beginning Aug. 1 and continuing through Nov. 30, annually. Students may begin Fall term courses in the program prior to submitting an application. This is a limited enrollment program.

Prerequisite Courses

BT 123 MS Excel for Business or equivalent skills and knowledge

Program Information Science Office, 541.463.5446, Denise Elder, elderd@lanecc.edu.

Cooperative Education (Co-op) Cooperative Education is a required and important part of the Watershed Science Technician Program. Through Co-op students connect theory and practice, develop skills, expand career knowledge, and make contacts for the future. Co-op learning sites and hours vary. Contact the Cooperative Education Division, Bldg. 19/Rm. 231, 541.463.5203.

First Year

	Fall
GS 101 Nature of the Northwest	4
GS 102 General Science: Introduction to Watershed Field Methods	2
MTH 095 Intermediate Algebra	5
WATR 101 Introduction to Water Resources	3
WATR 102 Water Careers Exploration.....	4
Total Credits	18

Winter

ENVS 181 Terrestrial Environment ¹	4
GIS 151 Digital Earth	4
Human Relations ²	3
SUST 101 Introduction to Sustainability	3
WR 121 Introduction to Academic Writing	4
Total Credits	18

Spring

BI 103F General Biology: Wildflowers of Oregon	4
ENVS 183 Aquatic Environment.....	4
WATR 222 Stormwater Best Management Practices.....	4
WST 205 Soils Field Methods.....	2
WST 206 Co-op Ed: Watershed Science Technician Seminar	2
Total Credits	16

Second Year

	Fall
BI 103J General Biology: Forest Ecology.....	4
WATR 261 Regional Water Policy	3
WST 225 Riparian Field Methods	2
WST 226 In-stream Field Methods	2
WR 227 Technical Writing ³	4
Total Credits	15

Winter

GIS 245 Maps and Spatial Information.....	4
HE 255 Global Health and Sustainability	4
WATR 202 Fostering Sustainable Practices	3
WST 230 Watersheds and Hydrology	4
WST 280 Co-op Ed: Watershed Science Technician *	3
Total Credits	18

Spring

GIS 246 Introduction to GIS	4
WST 234 Watershed Best Practices.....	4
WST 280 Co-op Ed: Watershed Science Technician *	3
Choice of Field Methods:	4-6
WST 221 Invasive Species Field Methods (1 credit)	
WST 222 Threatened and Endangered Species Field Methods (1 credit)	
WST 223 Prairies to Woodlands Field Methods (2 credits)	
WST 224 Wetland Field Methods (2 credits)	
Total Credits	15-17

1 ENVS, BI and GIS prefix courses meet the AAS Science/Math/Computer Science discipline studies requirement and are also AAOT transfer courses.

2 Choose from these courses, selected from the Human Relations list:

BT 112 Team Building Skills
CG 100 College Success
CG 203 Human Relations at Work
GEOG 142 Introduction to Human Geography
PS 213 Peace and Conflict Studies: Local
SOC 204 Introduction to Sociology
SOC 206 Institutions and Social Change
SOC 207 Women and Work
WS 101 Introduction to Women's Studies

3 Meets the AAS Arts/Letters discipline studies requirement.



Standard footnotes:

* Prerequisite required

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

R Required for AAS degree—see page 48

Note Transfer plans in this section represent only some of the majors students may pursue at Lane. For a complete list of transfer majors, see pages 51-52, contact Counseling and Advising, 541.463.3200, or see lanecc.edu/counseling

American Indian Experience

Offered by Multiple Departments

Transfer Plan

This Transfer Plan offers students courses with focus on American Indian Languages, Art, Anthropology, Biology, Cooperative Education, Ethnic Studies, and Literature.

These courses provide needed credits for graduation and transfer, and a supportive and community environment. Students who directly benefit from these offerings include:

- students who wish to study an American Indian language as their language requirement¹ at a four-year college or university
- students who plan to study Native American (or American Indian) Studies at a four-year college or university
- students who prefer that their educational experience be less institutional and more in keeping with American Indian culture and tradition
- anyone who has a strong interest in American Indian cultures, histories, languages, or literatures

A notable feature of this course of study is the opportunity to participate in three excellent Learning Communities. Learning communities link subjects and classes to integrate assignments and ideas. Students work closely with and learn from both faculty and peers to gain deeper understanding of the combined subject matter. These Learning Communities are:

Native Circles An entry for students into career planning and college success accomplished in an American Indian cultural context.

Reconnecting with Nature BI 103G Global Ecology; REL 243 Nature, Religion, and Ecology; and PS 297 Environmental Politics. Exploration of reconnecting with nature from the perspectives of science, spirituality, and political activism.

This transfer plan offers the following disciplines and course sequences:

American Indian Languages

AIL 100 Foundations of American Indian Languages

AIL 101 Chinuk Wawa – first year

AIL 102 Chinuk Wawa – first year

AIL 103 Chinuk Wawa – first year

Successful completion of two terms of first-year courses fulfills the Oregon University System's language requirement for admission to state universities.

AIL 201 Chinuk Wawa – second year

AIL 202 Chinuk Wawa – second year

AIL 203 Chinuk Wawa – second year

Successful completion of this second-year series of courses will fulfill the Oregon University System's language requirement for graduation.

AIL 280 Cooperative Education, integrates classroom learning with field experience

ART 203 Survey of American Indian Art and Architecture: North and Central America

Anthropology

ANTH 231 American Indian Studies, northeastern and southeastern states

ANTH 232 American Indian Studies, central and southwestern states

ANTH 233 American Indian Studies, west of the Rockies

Biology

BI 103G Global Ecology, examine nature through Indian eyes and western science

Ethnic Studies

ES 211 Chicano/Latino Experience: Historical and Ideological

ES 241 Native American Experience,

Consequences of Native Americans and European Contact

ES 242 Native American Experience, 19th Century Federal-Indian Relations

ES 243 Native American Experience, Contemporary Native American Issues

History

HST 257 American Indian History

Literature

ENG 232 Native American Literature

Human Relations

CG 101 Native Circles: College Success Native American Style

Additional courses needed for the AAOT Degree:

AAOT Arts and Letters requirement	3-9
AAOT Electives (enough to bring total credits to 90)	Varies
AAOT Health/Wellness/Fitness requirement	3
AAOT non-lab Science, Math, Computer	
Science requirement	3-4
AAOT Oral Communication requirement	4
AAOT Science with lab requirement	8
MTH 105 Introduction to Contemporary Mathematics *	4
WR 121 Introduction to Academic Writing *	4
WR 122 Composition: Argument, Style and Research *	4

* Prerequisite required

1 Earning an AAOT does not guarantee admission to Oregon public universities. Some universities may have additional course or GPA requirements. Students who graduated or received a GED in spring of 1997 or thereafter are required to have foreign language for admission to public universities in Oregon. Some students may have met this requirement in high school. Consult with an academic advisor or counselor to determine whether or not you need to take college level foreign language. AAOT graduates admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes.

Important American Indian support at Lane Community College is provided by:

- Native American Program, a program dedicated to counseling Lane's American Indian and Alaska Native students.
- Native American Student Association (NASA), an American Indian student organization and club open to all students that fosters traditional values and unity among students
- Longhouse: Lane Community College has an American Indian long house on campus for Native programs and activities
- Rites of Passage: Umista is a Summer Academy for Native American youth in middle and high schools

For more information, contact:

James Florendo, 541.463.5238, florendoj@lanecc.edu

Jeff Harrison, 541.463.5145, harrisonj@lanecc.edu

Michael Samano 541.463.5186, samanom@lanecc.edu

Drew Viles, 541.463.5480, vilesa@lanecc.edu

Carol Watt, 541.463.5749, wattc@lanecc.edu

Please note A total of 90 transferable credits are needed for the AAOT degree. Earning an AAOT does not guarantee admission to

Oregon public universities. Some universities may have additional course or GPA requirements. Students who graduated or received a GED in spring of 1997 or thereafter are required to have foreign language for admission to public universities in Oregon. Some students may have met this requirement in high school. Consult with an academic advisor or counselor to determine whether or not you need to take college level foreign language. AAOT graduates admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes.

Art Transfer

Offered by the Arts Division, 541.463.5409

Two-Year Associate of Arts Oregon Transfer Degree

This curriculum is designed for the student who intends to complete requirements for an Associate of Arts Oregon Transfer (AAOT) degree and transfer to a four-year university with a major in Art. Detailed information about the AAOT can be found under the Degrees and Certificates section of the catalog.

The curriculum is comprised of general education requirements, major requirements and electives. Completion of the AAOT degree will satisfy all the lower division (freshman and sophomore) general education requirements at any four-year *public university in the state of Oregon*. Completion of the Art courses listed below will typically satisfy lower division Art major requirements for most schools. Some Art programs may require additional coursework. Students planning to transfer to private art colleges or out-of-state schools should consult with an advisor at the intended transfer college to select appropriate courses at Lane.

Please Note A total of 90 transferable credits are needed for the AAOT degree. Earning an AAOT does not guarantee admission to Oregon public universities. Some universities may have additional course or GPA requirements. Students who graduated or received a GED in spring of 1997 or thereafter are required to have foreign language for admission to public universities in Oregon. Some students may have met this requirement in high school. Consult with an academic advisor or counselor to determine whether or not you need to take college level foreign language. AAOT graduates admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes.

It is very important that each student works closely with Lane's Arts advisors as well as advisors at an intended transfer school to tailor this curriculum to meet the specific requirements of the desired transfer institution. Many transfer schools require a separate application to the Art major that also includes a portfolio. Students are encouraged to begin their transfer planning one year prior to their date of transfer.

Since requirements at transfer schools may change after the catalog has been printed, students are encouraged to refer to online advising resources for Arts and Related Majors by clicking on the Academic Advising tab within Moodle (academicadvising.lanecc.edu/). Please follow the directions to enroll.

First Year	Fall
WR 121 Intro to Academic Writing ¹	4
Choice of.....	4-5
MTH 105 Introduction to Contemporary Math ¹	
MTH 111 College Algebra ¹	
ART 115 Basic Design: Fundamentals	3
ART 131 Introduction to Drawing	3
AAOT Physical Education	1
Total Credits	15-16

	Winter
Choice of.....	4
WR 122 Composition: Argument Style and Research	
WR 227 Technical Writing	
AAOT Social Science.....	3
ART 117 Basic Design: 3-Dimensional	3
ART 231 Intermediate Drawing	3
(Or other advanced drawing class based on transfer school requirements)	
AAOT Physical Education	1
Total Credits	14

	Spring
AAOT Speech	4
AAOT Social Science	3
ART 116 Basic Design: Color	3
AAOT Science with lab.....	4-5
AAOT Physical Education	1
Total Credits	15-16

Second Year	Fall
ART 204 History of Western Art	3
ART Studio Class based on transfer school requirements	3
AAOT Science with lab.....	4-5
AAOT Social Science/Cultural Literacy ⁴	3
AAOT Elective or Foreign Language as needed ³	3-5
Total Credits	16-19

	Winter
ART 205 History of Western Art	3
ART Studio Class based on transfer school requirements	3
AAOT Science with lab.....	4-5
AAOT Arts & Letters (not ART prefix)	3
AAOT Elective or Foreign Language as needed ³	3-5
Total Credits	16-19

	Spring
ART 206 History of Western Art	3
ART Studio Class based on transfer school requirements	3
AAOT Science/Math/Computer Science	3-4
AAOT Social Science	3
AAOT Elective(s) as needed.....	3-5
Total Credits	15-18

- Many students do not place directly into college transfer level writing or math. Consult with an academic advisor or counselor for a review of your placement test results and the appropriate sequence of courses to reach writing and math needed for the AAOT degree. Students needing to take preparatory courses will need to plan for additional credits and/or terms at Lane prior to transfer.
- For planning purposes it is best to apply for transfer admission, program admission and financial aid by January 15th of the desired transfer year. Check specific transfer program for application deadlines.
- A total of 90 transferable credits are needed for the AAOT degree. Students who graduated or received a GED in spring of 1997 or thereafter are required to have foreign language for admission to public universities in Oregon. Some students may have met this requirement in high school. Consult with an academic advisor or counselor to determine whether or not you need to take college level foreign language.
- See AAOT degree course list for classes that satisfy the Cultural Literacy requirement.

Biology Transfer

Offered by Science Division, 541.463.5446
Transfer Plan for Associate of Science and
Associate of Arts Oregon Transfer degrees

This transfer plan is for students interested in pursuing a bachelor's degree in biology. Lane Community College offers the first two years of college core science and general education courses needed for most biology majors. The transfer plan shown below includes lower division general education requirements needed for a degree at a public university in Oregon.

Many Lane biology students transfer to the University of Oregon (U of O), and many have continued successfully at other colleges and universities. Students who wish to complete all of the lower division general education requirements for U of O before they transfer may earn an Associate of Science (AS) degree or an Associate of Arts Oregon Transfer (AAOT) degree while at Lane. In addition to the U of O general education and biology core requirements, only a few additional credits are required to earn the AS or AAOT degree from Lane. See Lane's Science academic advisor or counselor for more information.

Associate of Science (AS) and Associate of Arts Oregon Transfer (AAOT) degree plan for Biology Transfer Students to the University of Oregon The following plan for Biology students satisfies the requirements for an Associate of Science degree or the Associate of Arts Oregon Transfer degree from Lane Community College, including all required Biology and all necessary general education courses. Completing all courses may take longer than two years.

Please note A total of 90 transferable credits are needed for the AAOT degree. Earning an AAOT does not guarantee admission to Oregon public universities. Some universities may have additional course or GPA requirements. Students who graduated or received a GED in spring of 1997 or thereafter are required to have foreign language for admission to public universities in Oregon. Some students may have met this requirement in high school. Consult with an academic advisor or counselor to determine whether or not you need to take college level foreign language. AAOT graduates admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes.

Additionally, these general education courses will satisfy all of the lower division general education requirements for graduating from the University of Oregon. Requirements can change, so it is critical that you see one of Lane's Science advisors for assistance in choosing these specific courses to ensure that they meet both Lane and the U of O requirements.

Students who are prepared to begin Calculus in their first year should substitute MTH 251 and MTH 252 (Calculus 1 & 2) for the mathematics courses listed below. These students can complete the requirements for either the AS or AAOT degree in two years by adding one or two summer terms to their course plans. Students should consult with Lane's Science academic advisor or counselor for assistance in course planning.

Associate of Science degree or AAOT degree at Lane.

Arts and Letters requirement (for AS or AAOT) ^{3,4}	3-4
Arts and Letters requirement (for AS or AAOT) ^{3,4,5}	3-4
Arts and Letters requirement (for AS or AAOT) ^{3,4}	3-4
BI 211 Principles of Biology *	4
BI 212 Principles of Biology *	4
CH 221 General Chemistry 1 *	5
CH 222 General Chemistry 2 *	5
CH 223 General Chemistry 3 *	5
CH 241 Organic Chemistry *	5
CH 242 Organic Chemistry *	5
CH 243 Organic Chemistry *	5
Choice of:	4
BOT 213 Principles of Botany *	
Z 213 Principles of Zoology *	
Health ⁴	3
MTH 097 Geometry *	4
MTH 111 College Algebra *	5
MTH 112 Trigonometry *	4
MTH 251 Calculus1 (Differential Calculus) *	5
MTH 252 Calculus 2 (Integral Calculus) *	5
PH 201 General Physics *	5
PH 202 General Physics *	5
PH 203 General Physics *	5
Social Science (for AS or AAOT) ³	3-4
Social Science requirement (for AS or AAOT) ^{3,4}	3-4
Social Science requirement (for AS or AAOT) ^{3,4}	4
Social Science requirement (for AS or AAOT) ^{3,4}	3-4
Speech (for AAOT or AS Arts and Letters) ^{3,4}	4
WR 121 Introduction to Academic Writing *	4
WR 122 Composition: Argument, Style and Research *	4

* Prerequisite required

- See AS degree requirements for approved courses; and see Biology academic advisor for course selection assistance
- See AAOT degree requirements for approved Health, Arts and Letters and Social Science courses. All AAOT degree courses must be completed with a minimum grade of C-. One Arts and Letters or Social Science course must also satisfy the AAOT Cultural Literacy requirement. See Biology academic advisor for course selection assistance.
- Earning an AAOT does not guarantee admission to Oregon public universities. Some universities may have additional course or GPA requirements. Students who graduated or received a GED in spring of 1997 or thereafter are required to have foreign language for admission to public universities in Oregon. Some students may have met this requirement in high school. Consult with an academic advisor or counselor to determine whether or not you need to take college level foreign language. AAOT graduates admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes.

Business Administration and Accounting Transfer

Offered by the Business Department, 541.463.5221

Lane Community College offers lower division Business major and general education courses for most Oregon public universities, and some private four-year colleges and Business schools. General Education requirements can be completed with an Associate of Arts Oregon Transfer degree, an Associate of Science Oregon Transfer: Business degree, or a Direct Transfer plan. Direct Transfer plans are different for each four-year university. Information about Lane's Associates degrees and Direct Transfer plans can be obtained from Lane's Business Academic Advising team. Additionally, the Academic Advising team can provide information about Lane's equivalent Business lower division major courses for the various Business schools.

Admission to Oregon Business schools is competitive and most programs have limited enrollment. Students are encouraged to prepare for application to more than one four-year college. Many of these programs require: 90 transferable credits; specific grade point average for overall transfer credits; specific grade point average for lower division major requirements; completion of specific freshman and sophomore major requirements; a separate program application; and interviews and/or essays. These requirements vary for each Oregon four-year Business school.

Note Business majors will need to be at a WR 121 level before starting Business courses and at a Math 111 level before starting Economics courses to be successful in the major requirements. A total of 90 transferable credits are needed for the AAOT or ASOT-Business degree. Earning an AAOT or ASOT does not guarantee admission to Oregon public universities. Some universities may have additional course or GPA requirements. Students who graduated or received a GED in spring of 1997 or thereafter are required to have foreign language for admission to public universities in Oregon. Some students may have met this requirement in high school. Consult with an academic advisor or counselor to determine whether or not you need to take college level foreign language. AAOT and ASOT graduates admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes.

For more information about becoming a Business major, please visit this web site: academicadvising.lanecc.edu/course/view.php?id=19

Computer Science Transfer

Offered by the Computer Information Technology Department, 541.463.5826

Transfer Plan

This is a transfer plan for students interested in pursuing a bachelor's degree in computer science.

Lane Community College offers the first two years of college core computer science and general education courses needed for computer science major disciplines. The AAOT course of study shown below includes lower division general education requirements accepted for a degree at a 4-year state institution in Oregon. Certain computer science degree options may require additional courses. Most Lane students transfer to the University of Oregon or Oregon State University, but many have continued successfully at other well-known schools. At the earliest opportunity, an interested student should meet with one of Lane's Computer Science program advisors. A well-planned course of study at Lane is essential to ensure a smooth transition to a university. In addition, it is very important for a transfer student to consult the computer science advisor at the specific intended transfer college or university.

Please Note A total of 90 transferable credits are needed for the AAOT degree. Earning an AAOT does not guarantee admission to Oregon public universities. Some universities may have additional course or GPA requirements. Students who graduated or received a GED in spring of 1997 or thereafter are required to have

foreign language for admission to public universities in Oregon. Some students may have met this requirement in high school. Consult with an academic advisor or counselor to determine whether or not you need to take college level foreign language. AAOT graduates admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes.

Transfer Plan

AAOT Arts & Letters requirement ^{2,5}	9-12
AAOT Health/Wellness/Fitness requirement ²	3
AAOT Social Science requirement ^{2,5}	12-16
CIS125D Software Tools 1: Databases ⁴	4
CS 160 Orientation to Computer Science ^{4,G}	4
CS 161J or CS161C+ Computer Science 1 ^G	4
CS 162J or CS162C+ Computer Science 2 ^G	4
CS 260 Data Structures ^{4,G}	4
CS 271 Computer Architecture and Assembly Language ^{4,G}	4
CS 275 Database Program Development ^{4,G}	4
MTH 111 College Algebra	5
MTH 112 Trigonometry	4
MTH 231 Discrete Mathematics 1 ^G	4
MTH 232 Discrete Mathematics 2 ^G	4
MTH 233 Discrete Mathematics 3 ^{3,G}	4
MTH 251 Calculus 1 ^G	5
MTH 252 Calculus 2 ^G	5
MTH 253 Calculus 3 ^G	5
PH 211 General Physics w/Calculus ^{1,4,G}	5
PH 212 General Physics w/Calculus ^{1,4,G}	5
PH 213 General Physics w/Calculus ^{1,4,G}	5
SP 111 Fundamentals of Public Speaking ^{4,G}	4
WR 121 Introduction to Academic Writing ^G	4
WR 122 Composition: Argument, Style and Research ^{*,4,G}	4
WR 227 Technical Writing ^G	4

Total Credits 123-130

- 1 UO also allows other science sequences, including CH 221, CH 222, CH 233 or BI 211, BI 212, BOT/Z 213
 - 2 See Associate of Arts Oregon Transfer (AAOT) Degree for courses that meet this requirement.
 - 3 Discrete Math 3 is not required at OSU.
 - 4 See the Lane academic advisor for more specific information.
 - 5 One Arts & Letters or Social Science course needs to meet the AAOT Cultural Literacy requirement. Students who graduated or received a GED in spring of 1997 or thereafter are required to have foreign language for admission to public universities in Oregon. Some students may have met this requirement in high school. Consult with an academic advisor or counselor to determine whether or not you need to take college level foreign language.
- G Must be taken for a grade, not P/NP; major requirement

Criminal Justice Transfer

Offered by Social Science Division, 541.463.5427

Associate of Arts Oregon Transfer (AAOT) Degree

This plan is for students who want an AAOT degree and plan to major in criminal justice or criminology at a 4-year Oregon university. Students may also earn an Associate of Applied Science (AAS) degree in Criminal Justice by completing an additional 22 credits beyond those required for the AAOT Degree (see Notes following the transfer plan for specific course suggestions for the AAS degree).

Please Note Earning an AAOT does not guarantee admission to Oregon public universities. Some universities may have

additional course or GPA requirements. Students who graduated or received a GED in spring of 1997 or thereafter are required to have foreign language for admission to public universities in Oregon. Some students may have met this requirement in high school. Consult with an academic advisor or counselor to determine whether or not you need to take college level foreign language. AAOT graduates admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes.

This outline is current at the time this catalog was printed, and is subject to change. Be sure to contact an academic advisor or program counselor for any updates that may have occurred after this catalog went to print. For the latest information please visit: academicadvising.lanecce.edu/mod/book/view.php?id=641&chapterid=1599

First Year		Fall
CJA 100 Introduction to Criminal Justice 1		3
SOC 204 Introduction to Sociology		3
SP 100 Basic Communication		4
WR 121 Introduction to Academic Writing		4
Total Credits		14
		Winter
AAOT Lab science		4
CJA 110 Introduction to Criminal Justice 2		3
SOC 205 Social Stratification and Social Systems		3
AAOT Arts/Letters		3
WR 122 Composition: Argument, Style and Research		4
Total Credits		17
		Spring
CJA 101 Introduction to Criminology		3
SOC 206 Institutions and Social Change		3
CS 120 or higher computer course		4
Choice of		3
HE 250 Personal Health		
HE 252 First Aid		
HE 275 Lifetime Health and Fitness		
AAOT Lab Science		4
Total Credits		17
Second Year		Fall
CJA 213 Interviewing and Interrogation		3
CJA 220 Introduction to Criminal Law		3
PS 201 U.S. Government and Politics		3
ANTH 103 Cultural Anthropology		4
AAOT Lab Science		4
Total Credits		17
		Winter
CJA 222 Criminal Law: Procedural Issues		3
SP 105 Listening and Critical Thinking		4
AAOT Non-lab science		3-4
PS 202 U.S. Government and Politics		3
Total Credits		13-14
		Spring
MTH 111 College Algebra		5
PS 203 State and Local Government and Politics		3
PSY 203 General Psychology		3
AAOT Arts/Letters		3
Total Credits		14
Total credits: 92-93		

Students who also want to earn an AAS Degree in Criminal Justice need to complete an **additional** 22 credits beyond the AAOT degree requirements listed above. For the AAS degree, these credits should include:

a) Select two Directed Electives from list below:

	Credits
CJA 232 Correctional Casework	3
CJA 210 Criminal Investigation 1	3
CJA 214 Introduction to Forensic Science	4
CJA 243 Narcotics and Dangerous Drugs	3
CJA 201 Juvenile Delinquency	3
SOC 211 Social Deviance	3

b) Complete two terms of 3 credits each of cooperative education:

CJA 280 Co-op Ed.: Criminal Justice	3
CJA 280 Co-op Ed.: Criminal Justice	3

c) Complete ten additional credits chosen from the above list of Directed Electives, additional credits of CJA 280 Co-op Ed: Criminal Justice, or open electives.

Dance Transfer

Offered by Music, Dance and Theatre Arts, 541.463.5209

Transfer Plan

This curriculum is designed for the student who intends to complete requirements for an Associate of Arts Oregon Transfer degree (AAOT) and transfer to a four-year college or university as a major in dance.

Please Note A total of 90 transferable credits are needed for the AAOT degree. Earning an AAOT does not guarantee admission to Oregon public universities. Some universities may have additional course or GPA requirements. Students who graduated or received a GED in spring of 1997 or thereafter are required to have foreign language for admission to public universities in Oregon. Some students may have met this requirement in high school. Consult with an academic advisor or counselor to determine whether or not you need to take college level foreign language. AAOT graduates admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes.

To prepare for transfer, students work toward the goal of achieving technical proficiency in dance equivalent to that of a third-year (junior) student, while completing the requirements for an AAOT degree. Though the following course of study is a general curriculum designed for the full-time student, part-time students may also use it as a guide. Individual technical progress will vary, but it is recommended that a student take a full year of Modern and Ballet at the appropriate level before moving up to a higher level. This transfer plan is for beginning level students. Dancers with previous training begin at the appropriate technical level in the genre. Group requirements vary with degree goals and prospective college. Students interested in pursuing an associate's or bachelor's degree should see a Music, Dance and Theatre Arts advisor as well as dance program director Bonnie Simoa Reid, for information and advice.

Beginning	Fall
D 177 Modern Dance 1	2
D 185 Ballet 1	2
Choice of:	2
D169 Musical Theatre	

D 173 African Dance	
D175 Tap Dance	
D184 Hip Hop 1	
D 196 Balinese Dance	
Choice of:.....	2
D 153 Pilates Mat Work 1	
D 154 Pilates Mat Work 2	
D 161 Gyrokinesis	
D 172 Dancing the Fluid Body	
D 183 Body Mind Stretch and Relaxation	
WR 121 Composition: Introduction to Academic Writing ..	4
AAOT Social Science requirement ⁴	3-4
Total Credits	15-16

Winter	
D 177 Modern Dance 1	2
D 185 Ballet 1	2
Choice of:	2
D 169 Musical Theatre	
D 173 African Dance	
D 175 Tap Dance	
D 184 Hip Hop 1	
D 196 Balinese Dance	
Choice of:.....	2
D 153 Pilates Mat Work 1	
D 154 Pilates Mat Work 2	
D 161 Gyrokinesis	
D 172 Dancing the Fluid Body	
D 183 Body/Mind Stretch and Relaxation	
D251 Looking at Dance ^{1,2,3}	4
AAOT Health requirement	3
Total Credits	15

Spring	
D 177 Modern Dance	2
D 185 Ballet 1	2
D 257 Dance Improvisation.....	2
Choice of:.....	2
D 153 Pilates Mat Work 1 or	
D 154 Pilates Mat Work 2	
D 176 Fluid Yoga ³	
D 183 Body Mind Stretch and Relaxation	
D 161 Gyrokinesis	
Choice of:.....	4
WR 122Composition: Argument, Style, and Research *	
WR 227 Technical Report Writing *	
AAOT Oral Communication requirement.....	4
Total Credits	16

Intermediate	
Fall	
D 178 Modern Dance 2	2
D 186 Ballet 2.....	2
D 160 Dance Composition ³	3
D 188 Jazz Dance 1	2
D 256 Body Fundamentals/Body as Knowledge ^{1,2,3}	4
AAOT Social Science requirement ⁴	3-4
Total Credits	16-17

Winter	
D 178 Modern Dance 2	2
D 186 Ballet 2	2
D 188 Jazz Dance 1	2
D 260 Group Choreography ³	3
Choice of:.....	2
D 153 Pilates Mat Work 1 or	
D 154 Pilates Mat Work 2	
D 161 Gyrokinesis	
D 172 Dancing the Fluid Body	
D 257 Improvisation	
MTH 105 Intro to Contemporary Mathematics *	4
Total Credits	15

Spring	
D 178 Modern Dance 2	2
D 186 Ballet 2	2
D 261 Rehearsal and Performance	2
ED 225 Multiple Intelligence in Motion ³	3
Choice of:.....	2
D 169 Musical Theatre	
D 173 African Dance	
D 175 Tap Dance	
D 176 Fluid Yoga ³	
Choice of:.....	2
D 153 Pilates Mat Work 1 or	
D 154 Pilates Mat Work 2	
D 161 Gyrokinesis	
D 257 Dance Improvisation	
AAOT Science with lab requirement.....	4
Total Credits	17

Advanced	
Fall	
D 179 Modern Dance 3	2
D 187 Ballet 3	2
D 261 Rehearsal and Performance	2
Choice of:.....	2
D 153 Pilates Mat Work 1 or	
D 154 Pilates Mat Work 2	
D161 Gyrokinesis	
D 172 Dancing the Fluid Body	
D 257 Dance Improvisation	
AAOT Science with lab requirement.....	4
AAOT Social Science requirement ⁴	3-4
Total Credits	15-16

Winter	
D 179 Modern Dance 3	2
D 187 Ballet 3	2
D 261 Rehearsal and Performance	2
Choice of:.....	2
D 153 Pilates Mat Work 1 or	
D 154 Pilates Mat Work 2	
D 161 Gyrokinesis	
D 176 Dancing the Fluid Body	
D 257 Dance Improvisation	
AAOT Science with lab requirement.....	4
AAOT Arts & Letters requirement (not Dance) ⁴	3-4
Total Credits	15-16

Spring	
D 179 Modern Dance 3	2
D 187 Ballet 3	2
D 261 Rehearsal and Performance	2
Choice of:.....	2
D 153 Pilates Mat Work 1 or	
D 154 Pilates Mat Work 2	
D 161 Gyrokinesis	
D 176 Fluid Yoga 3	
D 257 Dance Improvisation	
AAOT non-lab science, math, computer sci. requirement .	3-4
AAOT Social Science requirement ⁴	3-4
Total Credits	17-19

* Prerequisite required

- 1 This course satisfies the U of O Dance Department requirement for such a course.
- 2 This course satisfies a U of O Arts and Letters "distribution" requirement.
- 3 Offered only once a year.
- 4 One Social Science or Arts & Letters course needs to meet the AAOT Cultural Literacy requirement

Dental Assisting Transfer

Associate of General Studies Transfer Plan (includes Dental Assisting One-year Certificate of Completion)

Purpose Prepares graduates for employment in the dental field with emphasis on current concepts and hands-on skills for clinical chairside assisting. Included classes also offer some cross-training and pathways to receptionist-bookkeeper.

Learning Outcomes The graduate will:

- demonstrate knowledge and skills required to collect diagnostic data systematically
- demonstrate knowledge and skills required to perform a variety of clinically supportive treatments
- demonstrate knowledge and skill required to accurately expose, develop and mount diagnostic radiographs
- demonstrate knowledge and skills required for business office procedures
- demonstrate knowledge and skills required to access information via dental journals and web sites
- demonstrate knowledge and skills needed to compute mixing amounts for impression materials, cements, and disinfecting/sterilizing solutions, as well as calculate plaque indexing and inverse square law formulas
- demonstrate knowledge and ability to write/edit multiple types of professional communications

Gainful Employment Disclosure

Standard Occupational Classification: 31-9091.00

Go to websites below for information about related occupations:

Dental Assistants

onetonline.org/link/summary/31-9091.00

Related Occupation:

Surgical Technologists

onetonline.org/link/summary/29-2055.00

Costs (estimate for 2-year degree based on tuition and fees for 2011)

Resident tuition and fees	\$10,275
Differential Fees †	\$932
Books	\$1200
Other Program Costs (uniforms, National & State Board exams, etc.)	\$4,402
Total estimate	\$16,809

† This is the total of all the differential fees attached to Dental Assisting courses. These fees and other costs may change during the year - see the online credit class schedule for fees assigned to courses.

What's included?

Program Costs: lanecc.edu/es/feesandexpenses.html

What are financing options to pay for the program?

In addition to any grant and scholarship aid for which they are eligible, 100% of program graduates used loans to finance their education. The median debt for 2010-11 one-year certificate program graduates:

Federal Loans..... \$12,734

No 2010-11 program graduates used private educational loans or institutional financing.

How long will it take to complete this program?

The one-year certificate program is designed to take 3 terms, or about 12 months of study to complete.

How many 2010-11 Dental Assisting Certificate graduates completed within the designed program length?

84% completed within 12 months.

What are my chances of getting a job when I graduate?

Lane County openings - 19 annually

Statewide openings - 210 annually

100% of 2011 Lane graduates found employment in Lane County within six months of graduation.

Will I be able to pay back student loans?

91% of Lane students who took out federal student loans are successfully repaying them.

Where are comparable programs offered?

Community College	City	2009 Graduates
Blue Mountain Community College	Pendleton	13
Carrington College	Portland	155
Central Oregon Community College	Bend	22
Chemeketa Community College	Salem	26
Clackamas Community College	Oregon City	16
Linn-Benton Community College	Albany	19
Portland Community College	Portland	37
Rogue Community College	Grants Pass	8
Umpqua Community College	Roseburg	12

Starting salary in the Eugene/Springfield area ranges from \$14-17 hourly or \$28,560-34,680 annually.

Program Accreditation American Dental Association's Commission on Dental Accreditation, a specialized accrediting board recognized by the U.S. Department of Education

Licensing or Other Certification Students complete three National Board examinations each year administered by the Dental Assisting National Board, and are also eligible to receive all state required credentials, by submitting one clinical board and successfully completing the program.

Admission Information Contact the Health Professions Department or see lanecc.edu/hp/dental/da.htm

For assistance with meeting application or program requirements, contact Counseling and Advising in Building 1 room 103 or E-mail DAProgram@lanecc.edu with your specific questions. An online Academic Advising resource can be found by going to lanecc.edu/. Choose the "Moodle" link and in search courses type in the program name (e.g. Dental Assisting). Select "Academic Advising Resources for Dental Assisting".

Dental Assisting is a concentrated program that requires good reading and study skills. Students are encouraged to take DA 110 Health Sciences and DA 103 Dental Law and Ethics prior to entry into the program. Evidence of a physical examination (within the previous nine months) must be submitted prior to admission to the program.

Prerequisites for Dental Assisting program within Associate of General Studies degree:

MTH 052 Math for Introductory	
Physical Science (or higher) *	4
Human Relations requirement ^G	4
WR 121 Introduction to Academic Writing ^G	4
Choice of.....	3-4
CIS 101 Computer Fundamentals	
CS 120 Concepts of Computing: Information Processing	
Total Credits	15-16

Students must be admitted to the Dental Assisting program to enroll in the following Dental Assisting courses, with the exceptions of DA 110 Health Sciences and DA 103 Dental Law and Ethics, which students are encouraged to take prior to entry into the certificate program. These classes are offered summer term as well as the following terms. Evidence of a physical examination (within the previous nine months) must be submitted prior to admission to the program.

	Fall
DA 107 Dental Health Education 1 [*] ,1,2,3,G	1
DA 110 Health Sciences 1,3,G	3
DA 115 Dental Anatomy [*] ,1,2,3,G	3
DA 192 Dental Materials 1 [*] ,2,3,G	3
DA 195 Chairside Procedures [*] ,1,2,3,G	6
DA 210 Dental Radiology [*] ,1,2,3,G	4
Total Credits	20
	Winter
DA 108 Dental Health Education 2 [*] ,2,3,G	3
DA 193 Dental Materials 2 [*] ,2,3,G	3
DA 194 Dental Office Procedures [*] ,2,3,G	3
DA 196 Chairside Procedures 2 [*] ,2,3,G	7
DA 211 Dental Radiology 2 [*] ,2,3,G	2
Total Credits	18
	Spring
DA 102 Advanced Clinical Experiences [*] ,3,G	3
DA 103 Dentistry, Law and Ethics [*] ,3,4	2
DA 280 Co-op Ed: Dental Assisting [*] ,2,3,G	6
Total Credits	11
Second Year	Fall
Science/Math/Computer Science Requirement	3
Arts and Letters Requirement	4
Choice of:	4
WR 122 Composition: Argument, Style and Research ^G	
WR 227 Technical Writing	
HE 252 First Aid	3
Total Credits	14
	Winter
Arts and Letters Requirement	4
Social Science Requirement	4
Science/Math/Computer Science Requirement	4
Total Credits	12
	Spring
Arts and Letters Requirement	4
Social Science Requirement	4
Science/Math/Computer Science Requirement	4
Total Credits	12

Dental Hygiene Transfer

Transfer plan to Oregon Institute of Technology

Offered by Health Professions Division, 541.463.5617

This is a transfer plan for students interested in pursuing a Bachelor's degree in Dental Hygiene at Oregon Institute of Technology. This plan does not guarantee articulation for OIT program and degree requirements. Students are responsible for contacting the institution directly (oit.edu) to confirm that an individual plan will work when transferring.

Lane Community College offers the prerequisite and degree completion requirements that align for the Associate of Applied Science (AAS) Degree in Dental Hygiene. Students preparing to transfer to OIT will have the option to complete a general education two-year degree like the Associate of Arts Oregon Transfer Degree or to complete a "Direct Transfer" process. The outline listed below aligns the AAS and the AAOT program plans to allow a student to more easily transition and progress toward completing the OIT requirements for a Bachelor's Degree in Dental Hygiene.

Please Note A total of 90 transferable credits are needed for the AAOT degree. Earning an AAOT does not guarantee admission to Oregon public universities. Some universities may have additional course or GPA requirements. Students who graduated or received a GED in spring of 1997 or thereafter are required to have foreign language for admission to public universities in Oregon. Some students may have met this requirement in high school. Consult with an academic advisor or counselor to determine whether or not you need to take college level foreign language. AAOT graduates admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes.

For the most current information, please refer to lanecc.edu and select "Moodle," then "Academic Advising" and then "Dental Hygiene." Review Section 5 "OIT DH Program Information" and review Items 1-4 under "Table of Contents."

Associate of Arts Oregon Transfer Degree

Transfer Plan for students who want to earn an AAOT at Lane prior to transferring to OIT to pursue a bachelor's degree in Dental Hygiene

WR 121 Composition: Introduction to Academic Writing ..	4
WR 227 Technical Writing	4
MTH 111 College Algebra	5
FN 225 Nutrition	4
SP 111 Fundamentals of Public Speaking	4
AAOT Arts and Letters – 3 courses ³	9-12
chosen from AAOT list with prefix of	
ART ³ , ENG, FA, HUM, MUS ³ , PHL, REL, OR TA ³	
Choice of:	3
SOC 204 Introduction to Sociology	
SOC 205 Social Stratification and Social Systems	
SOC 206 Institutions and Social Change	
Choice of:	3
PSY 201 General Psychology	
PSY 202 General Psychology	
PSY 203 General Psychology	
Additional PSY course - one chosen from AAOT list	3
AAOT Social Science course -	
one chosen from AAOT list	3
BI 112 Cell Biology for Health Occupations	3
CH 112 Chemistry for Health Occupations	3
BI 231 Human Anatomy and Physiology 1	4
BI 232 Human Anatomy and Physiology 2	4
BI 233 Human Anatomy and Physiology 3	4
BI 234 Microbiology	4
WR 122 Composition: Argument, Style, and Research	4
(OIT requirement)	
CH 221 General Chemistry 1 (OIT requirement)	5
CH 222 General Chemistry 2 (OIT requirement)	5
CH 223 General Chemistry 3 (OIT requirement)	5
HO 100 Medical Terminology	3
MTH 243 Introduction to Probability and Statistics	4
AAOT Electives (enough to bring total credits to 90)	varies

- 1 Students intending to transfer to a 4-year school in the Oregon University System must satisfy the Second Language requirement for admission.
- 2 See AAOT Degree requirements for courses that can be used to satisfy degree requirements and for limitations on electives. One course must satisfy the Cultural Literacy requirement for the AAOT degree.
- 3 OIT requires 9 Humanities credits. However, only 3 Humanities credits can be studio/performance based.

Engineering Transfer

Offered by Mathematics Divisions, 541.463.5392

Transfer Plan

This transfer plan is for students interested in pursuing a bachelor's degree in engineering. A transfer plan is not the same as a state-approved vocational program in which a student earns a degree or certificate with a vocational major issued by the Lane Board of Education.

Lane Community College offers the first two years of college core science, engineering, and general education courses needed for most engineering major disciplines. The course of study shown below includes lower division general education requirements needed for a degree at a state university in Oregon. Certain engineering disciplines may require additional courses that are not offered at Lane. See one of Lane's Engineering advisors for more information.

Most Lane engineering students transfer to Oregon State University (OSU), but many have continued successfully at other well-known professional schools. Students who wish to complete all of the lower division general education requirements for OSU before they transfer may wish to consider earning an Associate of Science (AS) degree or an Associate of Arts Oregon Transfer (AAOT) degree while at Lane. In addition to the OSU general education and engineering core requirements, only a few additional credits are required to earn the AS or AAOT degree from Lane. See Lane's Engineering academic advisor or counselor for more information.

At the earliest opportunity, an interested student should meet with one of Lane's Engineering advisors. Most engineering courses at Lane are offered only once each academic year, and they must be taken in sequence. A well-planned course of study at Lane is essential to ensure a smooth transition to a university. In addition, it is very important for a transfer student to consult the engineering advisor at the specific intended transfer university.

Please Note A total of 90 transferable credits are needed for the AAOT degree. Earning an AAOT does not guarantee admission to Oregon public universities. Some universities may have additional course or GPA requirements. Students who graduated or received a GED in spring of 1997 or thereafter are required to have foreign language for admission to public universities in Oregon. Some students may have met this requirement in high school. Consult with an academic advisor or counselor to determine whether or not you need to take college level foreign language. AAOT graduates admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes.

See the mathematics and science division counselors or advisors for assistance in term-by-term schedule planning and for answers to questions about transfer requirements of various universities.

Associate of Science (AS) and Associate of Arts Oregon Transfer (AAOT) degree plan for Engineering Transfer students:

The following three-year plan for Engineering students satisfies the requirements for an Associate of Science degree or the Associate of Arts Oregon Transfer degree from Lane Community College, including all required engineering courses and all necessary general education courses. Additionally, these general education courses will satisfy all of the lower division general education requirements for graduating from Oregon State University. Requirements can change, so it is critical that you see one of Lane's engineering advisors for assistance in choosing these specific courses to ensure that they meet both Lane and OSU requirements.

Note Students who are prepared to begin Calculus in their first year: should substitute MTH 251, 252, and 253 (Calculus 1,2,3) for the mathematics courses listed in the First Year plan below. These students can complete the requirements for either the AS or AAOT degree in two years by adding one or two summer terms to their course plans. Students should consult with Lane's engineering academic advisor or counselor for assistance in course planning.

Engineering Transfer Plan

Associate of Science degree or AAOT degree at Lane

First Year		Fall
MTH 111 College Algebra *	.....	5
WR 121 Introduction to Academic Writing *,1,G	.....	4
HE 275 Lifetime Health and Fitness 4	.....	3
Arts and Letters requirement (for AS or AAOT) 3,4	.....	3-4
Total Credits		15-16

		Winter
MTH 097 Geometry *	.....	4
CH 221 General Chemistry 1 *,1,G	.....	5
Social Science requirement (for AS or AAOT) 3,4	.....	3-4
Total Credits		12-13

		Spring
MTH 112 Trigonometry *	.....	4
CH 222 General Chemistry 2 *,2,G	.....	5
WR 227 Technical Writing *,1,G	.....	4
Total Credits		13

Second Year		Fall
MTH 251 Calculus 1 *,1,G	.....	5
ENGR 101 Engineering Orientation *,2,G	.....	3
Social Science requirement (for AS or AAOT) 3,4	.....	3-4
Choice of:.....		4
SP 111 Fundamentals of Public Speaking 1,G		
SP 112 Persuasive Speech 1,G		
Total Credits		15-16

		Winter
MTH 252 Calculus 2 *,1,G	.....	5
PH 211 General Physics w/Calculus *,1,G	.....	5
ENGR 102 Engineering Orientation 2 *,1,G	.....	4
Total Credits		14

		Spring
MTH 253 Calculus 3 *,1,G	.....	5
MTH 261 Linear Algebra *,1,G	.....	2

PH 212 General Physics w/Calculus ^{*,1,G}	5
ENGR 115 Engineering Graphics ^{*,1,2,G}	3
Total Credits	15
Third Year	
Fall	
MTH 254 Vector Calculus 1 ^{*,1,G}	4
ENGR 211 Statics ^{*,1,G}	4
PH 213 General Physics w/Calculus ^{*,1,2,G}	5
Social Science requirement (for AAOT degree) ⁴	
or Elective (for AS degree) ³	3-4
Total Credits	16-17
Winter	
ENGR 221 Electrical Fundamentals ^{*,1,G}	4
Biological Science requirement (for A.S. degree) ³	
or Arts & Letters requirement (for AAOT degree) ⁴	3-4
MTH 265 Statistics for Scientists and Engineers ^{*,2,G}	4
Choice of:	4
MTH 255 Vector Calculus 2 ^{*,1,2,G}	
ENGR 213 Strength of Materials ^{*,2,G}	
Total Credits	15-16
Spring	
MTH 256 Differential Equations ^{*,1,G}	4
ENGR 212 Dynamics ^{*,1,2,G}	4
Social Science requirement (for AS or AAOT) ^{3,4}	3-4
Arts and Letters requirement (for AS or AAOT) ^{3,4}	3-4
Total Credits	14 -16

* Prerequisite required

- 1 Will be used to meet requirements for OSU Engineering Core GPA. Must earn a grade of "C" or better, not P/NP. (OSU will not accept "C-".)
- 2 Required for graduation in specific engineering majors. Must earn a grade of "C" or better, not P/NP. (OSU will not accept "C-".)
- 3 See AS degree requirements for approved courses; and see Math/Engineering academic advisor for course selection assistance.
- 4 See AAOT degree requirements for approved Health, Arts and Letters and Social Science courses. All AAOT degree courses must be completed with a minimum grade of C-. One Arts and Letters or Social Science course must also satisfy the AAOT Cultural Literacy requirement. See Math/Engineering academic advisor for course selection assistance.

G Must be taken for a grade, not P/NP

Ethnic Studies Transfer

Offered by Social Science Division, 541.463.5427

Transfer Plan

The National Association for Ethnic Studies defines the discipline as "an interdisciplinary voice for the continuing focused study of race and ethnicity." Ethnic Studies is concerned with how all ethnic and racial groups interact, but focuses primarily on those groups that have been largely ignored as having contributed to the creation and shaping of this country.

Ethnic Studies at Lane Community College was created over 40 years ago. The discipline strives to provide for the interdisciplinary study of the histories and experiences of the four major racial minority groups in the United States: Americans of African and Asian descent, Chicanas/os and Latinas/os, and the indigenous peoples of the Americas, Caribbean, and Pacific Islands. In addition, Ethnic Studies provides space for students to critically analyze the intersections of race and ethnicity with other variables such as: gender identity, sexuality, disability, class, nationalism, and globalization. As active scholars, the affiliated faculty members of Ethnic Studies at Lane are dedicated to an academic

discipline that assists in the intellectual and humanistic development of students by helping them to combine critical thinking skills with an ability to understand and value difference from a social justice perspective. Because of the skills learned in class, students with a foundation in Ethnic Studies can be found pursuing a wide variety of occupational interests.

For those students interested in pursuing degrees with a focus in Ethnic Studies, there are many courses offered in alternative years from which to choose. All Ethnic Studies course offerings fulfill both the Social Sciences category of the Associate of Arts Oregon Transfer (AAOT) degree, and the AAOT Cultural Literacy graduation requirement. For further information, contact Michael Sámano, Coordinator of Ethnic Studies at 541.463.5186 or samanom@lanecol.edu.

Note A total of 90 transferable credits are needed for the AAOT degree. Earning an AAOT does not guarantee admission to Oregon public universities. Some universities may have additional course or GPA requirements. Students who graduated or received a GED in spring of 1997 or thereafter are required to have foreign language for admission to public universities in Oregon. Some students may have met this requirement in high school. Consult with an academic advisor or counselor to determine whether or not you need to take college level foreign language. AAOT graduates admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes.

Cooperative Education (Co-op) Ethnic Studies co-op is an important field placement opportunity that allows students to hone their cultural competency skills. Co-op students are encouraged to work with local service agencies that serve underrepresented minority communities, or organizations with a social justice perspective. Placement provides opportunities for students to explore their career options while gaining practical experience in the field. Students may participate on a full- or part-time basis.

Discipline Studies: Social Science

ES 101 Historical Racial and Ethnic Issues

ES 102 Contemporary Racial and Ethnic Issues

Select two same area courses in African American, Asian American, Chicano/Latino, or Native American Studies

ES 221, 222, 223 African American Experience

ES 231, 232, 233 Asian American Experience

ES 211, 212, 213 Chicano/Latino Experience

ES 2412, 242, 243 Native American Experience

Discipline Studies: Arts and Letters requirement or electives

ENG 222 Literature and Gender1

SP 115 Introduction to Intercultural Communication1

Discipline Studies: Social Science requirement or electives

ANTH 103 Cultural Anthropology

ECON 250/ES 250 Class, Race, and Gender in the U.S. Economy

ES 280 Co-op Ed: Ethnic Studies

HIST 195 History of Vietnam

PS 275 Legal Processes through Civil Rights and Liberties

PS 297 Environmental Politics

REL 243 Nature, Religion and Ecology

SOC 207 Women and Work

SOC 213 Race and Ethnicity

SOC 215 Social Class

SOC 216 Global Social Movements

WS 101 Introduction to Women's Studies

Transfer Plan - AAOT Degree

(see AAOT degree requirements in Lane catalog for details)

Students who also complete the following additional requirements (credits) can earn the AAOT Degree. Consult with your program advisor/counselor for details.

WR121 Introduction to Academic Writing *	4
WR122 Composition: Argument, Style and Research *	4
MTH 105 Intro to Contemporary Mathematics or higher *	4-5
AAOT Health/Wellness/Fitness requirement (HE 255 Global Health and Sustainability recommended)	3-4
AAOT Oral Communication requirement	4
AAOT Arts and Letter requirement ¹	9-12
AAOT Social Science requirement (select one course other than Ethnic Studies)	3-4
AAOT Science(s) with Lab requirement	12
AAOT Non-Lab Science, Math, Computer Science requirement	3-4
AAOT Electives (to bring total transfer credits to 90)	Varies

Note: Students must complete all degree requirements with a minimum grade of C-.

* Prerequisite required

1 ENG 222 and SP 115 are approved courses for the Arts & Letters requirement for the AAOT

2 The UO Ethnic Studies Program accepts either Lane's ES 241/242 course as equivalent to their ES 256.

Exercise and Sport Science Transfer

Offered by Health, Physical Education and Athletics Division, 541.463.5545

Associate of Arts Oregon Transfer (AAOT) Degree Plan

This transfer plan is for Pre-Exercise and Sport Science majors, including Physical Education, Athletic Training and Fitness and Nutrition (not Dietetics) at Oregon State University. Students wishing to pursue a Bachelor of Science in Human Physiology and/or a Master of Science in Athletic Training degree at the University of Oregon should consult with the Lane counselor or advisor for the Human Physiology major.

Please Note A total of 90 transferable credits are needed for the AAOT degree. Earning an AAOT does not guarantee admission to Oregon public universities. Some universities may have additional course or GPA requirements. Students who graduated or received a GED in spring of 1997 or thereafter are required to have foreign language for admission to public universities in Oregon. Some students may have met this requirement in high school. Consult with an academic advisor or counselor to determine whether or not you need to take college level foreign language. AAOT graduates admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes.

First Year	Fall
MTH 097 Geometry *	4
HE 275 Lifetime Health and Fitness	3
WR 121 Introduction to Academic Writing *	4
Choice of.....	4
SP 111 Fundamentals of Public Speaking	
SP 218 Interpersonal Communication	
PSY 201 General Psychology.....	3
Total credits	18

	Winter
MTH 111 College Algebra *	5
Choice of.....	4
WR 122 Composition: Argument, Style and Research *	
WR 227 Technical Writing *	
Biobonds Learning Community:	
BI 112 Cell Biology for Health Occupations	3
CH 112 Chemistry for Health Occupations *	3
Total Credits	15

	Spring
Arts and Letters (any choice from AAOT list) ^{1,2}	3-4
PSY215 Lifespan Developmental Psychology	3
BI 231 Human Anatomy and Physiology 1 *	4
MTH 112 Trigonometry *	4
Total credits	14-15

Second Year	Fall
BI232 Human Anatomy and Physiology 2 *	4
PH 201 General Physics *	5
CH 221 General Chemistry 1 *	5
Social Science from approved list ^{1,2}	3-4
Total Credits	17-18

	Winter
Choice of.....	4
SP 130 Business and Professional Speech	
SP 115 Introduction to Intercultural Communication	
SP 220 Communication, Gender and Culture	
CH 222 General Chemistry 2 *	5
BI 233 Human Anatomy and Physiology 3 *	4
PHL 201 Ethics	4
Total Credits	17

	Spring
Arts and Letters (from approved list) ^{1,2}	3-4
BI 234 Microbiology *	4
CH 223 General Chemistry 3 *	5
Total Credits	12-13

* Prerequisite or placement test required

- 1 One Social Science or Arts and Letters course must meet the AAOT Cultural Literacy Requirement
- 2 To ensure that 90 total credits are completed for the AAOT degree, at least one of the Arts and Letters or Social Science electives should be a 4-credit course.

Health Education Transfer

Offered by Health, Physical Education and Athletics Division, 541.463.5545

Transfer Plan

As our world becomes more connected and the use of technology increases, individuals and societies can become negatively impacted. The number of illnesses and deaths from chronic diseases, such as heart disease, cancer, diabetes, and stroke are in part, outcomes of personal health behavior and choices.

In addition, new and emerging infectious diseases are stretching the available resources to combat them. Therefore, the achievement of a attaining and nurturing all areas of health remains a worldwide priority in the twenty-first century. The primary role of a health educator is to act as an "agent of change" to help both individuals and society reach their fullest potential.

The Health Education course of study is designed for students who would like to further their career goals in any of the

following health areas: health, public health and social services, health care administration, health promotion, environmental health and occupational health and related fields. These fields provide career opportunities that include, but are not limited to: teacher/educator, administrator, researcher, epidemiologist (person who studies disease), sanitarian, occupational health specialist, environmental toxicologist, and public health specialist.

Please Note A total of 90 transferable credits are needed for the AAOT degree. Earning an AAOT does not guarantee admission to Oregon public universities. Some universities may have additional course or GPA requirements. Students who graduated or received a GED in spring of 1997 or thereafter are required to have foreign language for admission to public universities in Oregon. Some students may have met this requirement in high school. Consult with an academic advisor or counselor to determine whether or not you need to take college level foreign language. AAOT graduates admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes.

First Year		Fall
HE 275 Lifetime Health and Fitness.....		3
		Winter
HE 252 First Aid.....		3
		Spring
HE 250 Personal Health		3
HE 222 Consumer Health		3
Second Year		Fall
HE 152 Drugs Society and Behavior		3
HE 209 Human Sexuality.....		3
		Winter
HE 125 Workplace Health and Safety.....		3
		Spring
HE 255 Global Health.....		4

Additional courses needed to complete the AAOT degree:

WR 121 Introduction to Academic Writing *	4
Choice of.....	4
WR 122 Composition: Argument, Style, and Research *	
WR 227 Technical Writing *	
Choice of.....	4-5
MTH 105 Intro. to Contemporary Mathematics *	
MTH 111 College Algebra * (or any higher Math course)	
AAOT Oral Communication requirement.....	4
AAOT Arts and Letters requirement ¹	9-12
AAOT Social Science requirement ¹	12-16
AAOT Science with lab requirement.....	12
AAOT non-lab Science, math, computer science requirement.....	3-4
AAOT Electives	5-14

* Prerequisite required

¹ One Arts and Letters or Social Science course must meet the AAOT Cultural Literacy requirement

Health Informatics Transfer

Also see Computer Information Systems - Health Informatics AAS in the Career Technical section

Offered by the Computer Information Technology Department, 541.463.5826

Transfer Plan

This transfer plan is for students who want to earn an Associate of Arts Oregon Transfer (AAOT) degree at Lane Community

College and complete courses that will be accepted in transfer to the health informatics program at Oregon Institute of Technology. The guide below includes courses required for Oregon Institute of Technology's Bachelor of Science degree in Information Technology – Health Informatics Option, as well as necessary general education requirements for an AAOT.

Transfer institutions require additional coursework for a health informatics degree, and may change prerequisites from year-to-year. Any student interested in transfer must accept responsibility to work very closely with a Lane academic advisor, and also to be aware of changes in prerequisites for programs at potential transfer institutions.

General education courses completed within an AAOT degree satisfy lower division general education requirements for any of Oregon's public universities and will transfer intact. Courses numbered below 100 generally do not transfer. See a Lane science advisor for assistance in course selection and transfer policies.

Please Note A total of 90 transferable credits are needed for the AAOT degree. Earning an AAOT does not guarantee admission to Oregon public universities. Some universities may have additional course or GPA requirements. Students who graduated or received a GED in spring of 1997 or thereafter are required to have foreign language for admission to public universities in Oregon. Some students may have met this requirement in high school. Consult with an academic advisor or counselor to determine whether or not you need to take college level foreign language. AAOT graduates admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes.

Transfer Plan:

WR 121 Introduction to Academic Writing ^{*,4}	4
WR 122 Composition: Style and Argument ^{*,3,4}	4
WR 227 Technical Writing ^{*,3,4}	4
MTH 111 College Algebra ^{*,4}	5
AAOT Health requirement ¹	3-4
SP 111 Public Speaking ^{3,4}	4
SP 219 Small Group Discussion ^{3,4}	4
AAOT Arts and Letters requirement ^{2,3,4}	9
AAOT Social Science requirement ^{2,3,4}	6
ECON 201 Introduction to Microeconomics ^{*,3,4}	3
ECON 202 Introduction to Macroeconomics ^{*,3,4}	3
PSY 201 General Psychology ^{3,4}	3
AAOT Science with lab ^{1,3,4}	12
BI 102I Human Biology ^{3,4}	4
BA 211 Financial Accounting ^{*,3,4}	4
BT 114 MS Excel for Business ^{*,3,4}	4
CIS 140 Operating Environments: Managing Windows ^{3,4}	4
ET 287 Computer Hardware ^{3,4}	4
CIS 244 Systems Analysis ^{*,3,4}	4
CS 161C+ Beginning C++ Programming or CS 161J Computer Science 1 ^{3,4}	4
CS 162C+ Intermediate C++ Programming for Games or CS 162J Computer Science 2 ^{3,4}	4
CS 275 Database Program Development ^{3,4}	4
CS 240W Windows Server Administration ^{3,4}	4
HO 100 Medical Terminology ^{3,4}	3

Total Credits 107-108

* Prerequisite required

¹ See science advisor for course selection

- 2 One Social Science or Arts and Letters course needs to meet Cultural Diversity Requirement
- 3 Major requirement-see advisor for other choices
- 4 must be taken for a letter grade and earn a grade of a C or higher

Music Transfer

Offered by Music, Dance and Theatre Arts, 541.463.5209

Transfer Plan

Lane's Music, Dance and Theatre Arts Department offers a complete range of lower-division (freshman and sophomore) courses in music—everything needed by students intending to transfer to a four-year college or university and major in music, and by students intending to meet their needs entirely at Lane, with or without a degree. Whatever the goal of music studies, one of the Transfer Plans suggested below—or some modification of it—will be appropriate.

This curriculum is designed for the student who intends to complete requirements for an Associate of Arts Oregon Transfer (AAOT) degree and transfer to a four-year university with a major in music. Detailed information about the AAOT can be found in the Degrees and Certificates section of the catalog.

The curriculum is comprised of general education requirements, major requirements and electives. Completion of the AAOT degree will satisfy all the lower division (freshman and sophomore) general education requirements at any four-year public university in Oregon. Completion of the music courses listed below will typically satisfy lower division music requirements for most schools. Some music programs may require placement testing in Music Core courses. Students planning to transfer to private colleges or out-of-state schools should consult with advisors at the transfer institution to plan their course of study at Lane.

It is very important that students work closely with Lane's Arts advisors and advisors at their transfer school to tailor this curriculum to meet the specific requirements of the desired transfer institution. Most transfer schools require an audition, and some require a separate application to the music major. Students are encouraged to begin their transfer planning immediately. Since requirements at transfer schools may change after catalog printing, students are encouraged to refer to on-line advising resources for Arts and Related Majors by selecting the Academic Advising tab within Moodle (academicadvising.lanecce.edu/). Please follow the directions online to enroll.

Please note A total of 90 transferable credits are needed for the AAOT degree. Earning an AAOT does not guarantee admission to Oregon public universities. Some universities may have additional course or GPA requirements. Students who graduated or received a GED in spring of 1997 or thereafter are required to have foreign language for admission to public universities in Oregon. Some students may have met this requirement in high school. Consult with an academic advisor or counselor to determine whether or not you need to take college level foreign language. AAOT graduates admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes.

First Year		Fall
MUS 111 Music Theory 1 ^{1,3}	.....	4
MUS 127 Keyboard Skills 1 ^{1,3}	.....	2
MUS 114 Sight Reading/Ear Training 1 ^{1,3}	.....	2
Ensemble (large and/or small)	.....	2
Individual Lessons ²	.....	2
WR 121 Composition:		
Introduction to Academic Writing ^{*,W}	.....	4
Total Credits		16

Winter		
MUS 112 Music Theory 1 ^{*,1}	.....	4
MUS 115 Sight Reading/Ear Training ^{*,1}	.....	2
MUS 128 Keyboard Skills 1 ^{*,1}	.....	2
Ensemble (large and/or small)	.....	2
Individual Lessons ²	.....	2
WR122 Composition: Argument, Style and Research	.....	4
Total Credits		16

Spring		
MUS 113 Music Theory 1 ^{*,1}	.....	4
MUS 116 Sight Reading/Ear Training 1 ^{*,1}	.....	2
MUS 129 Keyboard Skills 1 ^{*,1}	.....	2
Ensemble (large and/or small)	.....	2
Individual Lessons ²	.....	2
Choice of:.....		4-5
MTH 105 Contemporary Mathematics [*] or		
MTH 111 College Algebra ⁴		
(MTH 095 or placement test required before		
MTH 105 or MTH 111)		
Total Credits		16-17

Summer		
AAOT Science (with lab) ⁵	.....	4
AAOT Science (with lab) ⁵	.....	4
AAOT Science (with lab) ⁵	.....	4
Choice of:.....		3
Health class ⁵ (see AAOT list)		
Combination of 3 PE activity courses ⁵		
Total Credits		15

Second Year		Fall
MUS 211 Music Theory 2 ^{*,1}	.....	3
MUS 214 Keyboard Skills 2 ¹	.....	1
MUS 261 Music History 1 [*]		4
MUS 224 Sight Reading/Ear Training ^{*,1}	.....	2
Ensemble (large and/or small)	.....	2
Individual Lessons ²	.....	2
AAOT Social Science ^{5,6}	.....	4
Total Credits		18

Winter		
MUS 212 Music Theory 2 ^{*,1}	.....	3
MUS 215 Keyboard Skills 2 ^{*,1}	.....	1
MUS 225 Sight Reading/Ear Training 2 ^{*,1}	.....	2
MUS 262 Music History 2 [*]		4
Ensemble (large and/or small)	.....	2
Individual Lessons ²	.....	2
AAOT Social Science ^{5,6}	.....	4
Total Credits		18

Spring		
MUS 213 Music Theory 2 ^{*,1}	.....	3
MUS 216 Keyboard Skills 2 ^{*,1}	.....	1
MUS 263 Music History 3 [*]		4
MUS 226 Sight Reading/Ear Training 2 ^{*,1}	.....	2
Ensemble (large and/or small)	.....	2
Individual Lessons ²	.....	2
AAOT Social Science ^{5,6}	.....	4
Total Credits		18

	Summer
Science (with or without lab) ⁵	3-4
Choice of:.....	4
SP 100 Basic Communication	
SP111 Fund. of Public Speaking	
AAOT Social Science ^{5,6}	3
AAOT Arts/Letters ^{5,6} (non-music:	3
Art History or World Literature).....	
Total Credits	13-14

- 1 Indicates music courses that must be taken in the order given. Since there are so many variables, transfer students are strongly advised to see a counselor for Music, Dance and Theatre Arts, or the music advisor in Bldg. 6.
- 2 Techniques of Instrumental/Vocal Performance, MUS 185 or MUS 186, is co-requisite when offered.
- 3 Placement test in Music, Dance and Theatre Arts Department required for admission to class.
- 4 Several terms of pre-requisite Math may be necessary, depending on Placement Test results. MTH 105 or MTH 111 is required for transfer.
- 5 See AAOT Degree for list of courses that meet this requirement.6 One Social Science or Arts & Letters course needs to meet the AAOT Cultural Literacy requirement.

Music Industry Transfer

AAOT Transfer plan

For students pursuing music technology options, the following is a seven-term plan, including the Associate of Arts Oregon Transfer Degree (AAOT), prepares students for transfer to 4-year institutions for a B.S. degree.

	Fall
MUP 100 Individual Lessons.....	1
MUS 101 Music Fundamentals.....	3
MUS 131 Group Piano.....	2
WR 121 Introduction to Academic Writing *	4
AAOT Social Science (non-ECON) ^{5,6}	3
AAOT Arts & Letters (non-music) ^{5,6}	3
Total Credits	16

	Winter
MUS 118 Music Technology - MIDI Audio 1.....	4
MUS 131 Group Piano.....	2
MUP 100 Individual Lessons.....	1
Choice of:.....	4
WR 222 Composition: Argument Style and Research *	
WR 227 Technical Writing *	
Choice of:.....	4-5
MTH 105 Introduction to Contemporary Mathematics ⁴	
MTH 111 College Algebra ⁴	
Total Credits	15-16

	Spring
MUS 119 Music Technology - MIDI/Audio 2.....	4
MUS 134 Group Voice.....	2
MUP 100 Individual Lessons.....	1
MTH 243 Introduction to Probability and Statistics *	4
AAOT Science with lab ⁵	4
AAOT Health/Wellness/Fitness/requirement ⁶	3
Total Credits	17

	Summer
AAOT Science (with lab) ⁵	4
AAOT Science (with lab) ⁵	4
AAOT Speech ⁵	4
Total Credits	12

	Fall
MUS 107 Audio Engineering 1 *	3
MUS 111 Music Theory 1 ^{*,1,3}	4
MUS 114 Sight Reading/Ear Training ^{1,3}	2

MUS 127 Keyboard Skills ^{1,3}	2
MUP 100 Individual Lessons.....	2
ECON 200 Principles of Economics:	
Introduction to Economics	3
Total Credits	16

	Winter
ECON 201 Principles of Economics:	
Introduction to Microeconomics	3
MUP 100 Individual Lessons.....	2
MUS 109 Audio Engineering 2 ^{*,1}	4
MUS 112 Music Theory 1 ^{*,1}	4
MUS 115 Sight Reading/Ear Training ¹	2
MUS 128 Keyboard Skills ^{1,3}	2
Total Credits	17

	Spring
MUP 100 Individual Lessons.....	2
MUS 110 Audio Engineering 3 ^{*,1}	4
MUS 113 Music Theory 1 ^{*,1}	4
MUS 116 Sight-reading and Ear Training ^{*,1}	2
MUS 129 Keyboard Skills 1 ^{*,1}	2
ECON 202 Principles of Economics:	
Introduction to Macroeconomics	3
Total Credits	17

* Prerequisite required

- 1 Indicates music courses that must be taken in the order given. Since there are so many variables, transfer students are strongly advised to see a counselor for Music, Dance and Theatre Arts, or the Music Advisor in Bldg. 6.
- 2 Techniques of Instrumental/Vocal Performance, MUS 185 or MUS 186, is co-requisite when offered.
- 3 Placement test in Music, Dance and Theatre Arts Department required for admission to class.
- 4 Several terms of pre-requisite Math may be necessary, depending on Placement Test results. MTH 105 or MTH 111 is required for transfer.5 See AAOT Degree for list of courses that meet this requirement.
- 6 One Social Science or Arts & Letters course needs to meet the AAOT Cultural Literacy requirement.

Peace Studies Transfer

Offered by Multiple Departments

Transfer Plan leading to Associate of Arts Oregon Transfer Degree

This is a transfer plan related to Peace Studies for students pursuing an Associate of Arts Oregon Transfer at Lane Community College, or for students completing elective courses in peace studies for transfer to a baccalaureate program elsewhere. Peace Studies at Lane Community College are defined in broad terms extending beyond the study of war, recognizing that peace is rooted in social, economic, racial, gender, and environmental justice. For more information about Peace Studies at Lane Community College contact Stan Taylor at 541.463.5820 or taylors@lanec.edu

Please note A total of 90 transferable credits are needed for the AAOT degree. Earning an AAOT does not guarantee admission to Oregon public universities. Some universities may have additional course or GPA requirements. Students who graduated or received a GED in spring of 1997 or thereafter are required to have foreign language for admission to public universities in Oregon. Some students may have met this requirement in high school. Consult with an academic advisor or counselor to determine whether or not you need to take college level foreign language. AAOT graduates admitted to Oregon public universities are guaranteed to have fulfilled all lower

division general education requirements and are ensured junior status for registration purposes.

The following three classes focus on the underlying causes of war and conflict, and on steps toward building peace.

Discipline Studies: Social Science or electives

- PS 211 Peace and Conflict Global
- PS 212 Peace and Conflict National
- PS 213 Peace and Conflict Local

The following courses focus on social, economic, racial, gender and environmental justice as issues that must be addressed to build lasting peace.

Discipline Studies: Arts and Letters requirement or electives

- ENG 222 Literature and Gender
- SP 115 Introduction to Intercultural Communication

Discipline Studies: Social Science requirement or electives

- ANTH 103 Cultural Anthropology
- ECON 250/ES 250 Class, Race, and Gender in the U.S. Economy
- ES 101 Historical Race and Ethnic Issues
- ES 102 Contemporary Race and Ethnic Issues
- HIST 195 History of Vietnam
- PS 275 Legal Processes through Civil Rights and Liberties
- PS 297 Environmental Politics
- REL 243 Nature, Religion and Ecology
- SOC 207 Women and Work
- SOC 213 Race and Ethnicity
- SOC 215 Social Class
- SOC 216 Global Social Movements
- WS 101 Introduction to Women's Studies

Transfer Plan - AAOT Degree Students who also complete the following requirements may earn the AAOT Degree. Consult with your program advisor/counselor for details.

AAOT Arts and Letter requirement	3-4
AAOT Health/Wellness/Fitness requirement (HE255 – AAOT Non-Lab Science, Math, Computer Science	
AAOT Oral Communication requirement.....	4
AAOT Science with Lab requirement.....	12
Global Health and Sustainability recommended)	3-4
MTH105 Intro to Contemporary Mathematics or higher....	4-5
requirement.....	3-4
WR121 Introduction to Academic Writing *	4
WR122 Composition: Argument, Style and Research *	4
AAOT Electives (to bring total transfer credits to 90).....	Varies

Note: Students must complete all degree requirements with a minimum grade of C-.

* Prerequisite required

Pre-Journalism

Associate Of Arts Oregon Transfer Degree Plan For Pre-Journalism Majors Entering The University Of Oregon

This curriculum is designed for the student who intends to complete requirements for an Associate of Arts Oregon Transfer (AAOT) degree and transfer to the University of Oregon in pre-Journalism. Detailed information about the AAOT can be found under the Degrees and Certificates section of this catalog.

The curriculum is comprised of general education requirements and the pre-journalism major requirements (known as “block requirements”) for the University of Oregon. Completion of the AAOT degree will satisfy all the lower division (freshman and sophomore) general education requirements at University of Oregon and all other *four-year public universities* in the state of Oregon. Completion of the pre-major block requirements will

prepare students to take Journalism classes at the University of Oregon that will allow them entrance to the major in their junior year. See notes for more information on the pre-major block requirements.

Students planning to transfer to a school other than the University of Oregon may benefit from pursuing a direct transfer plan in lieu of the AAOT. It is very important that students work closely with Lane's Arts advisors and advisors at their transfer school to tailor this curriculum to meet the specific requirements of the desired transfer institution. Students are encouraged to begin their transfer planning one year prior to their date of transfer.

Please Note A total of 90 transferable credits are needed for the AAOT degree. Earning an AAOT does not guarantee admission to Oregon public universities. Some universities may have additional course or GPA requirements. Students who graduated or received a GED in spring of 1997 or thereafter are required to have foreign language for admission to public universities in Oregon. Some students may have met this requirement in high school. Consult with an academic advisor or counselor to determine whether or not you need to take college level foreign language. AAOT graduates admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes. Since requirements at transfer schools may change after the catalog has been printed, students are encouraged to refer to on-line advising resources for Arts and Related Majors by clicking on the Academic Advising tab within Moodle (academicadvising.lanecc.edu/). Please follow the directions to enroll.

First Year	Fall
WR 121 Introduction to Academic Writing ¹	4
Choice of:.....	4-5
MTH 105 Intro to Contemporary Math ¹	
MTH 111 College Algebra ¹	
AAOT Arts & Letters (ENG prefix)	4
UO Block #2 (see note ²)	4
Total credits	16-17

Winter
WR 122 Composition: Argument, Style & Research.....
AAOT Social Science.....
AAOT Arts & Letters (ENG prefix)
UO Journalism Block #2 (see note ²)
Journalism
Total credits

Spring
AAOT Speech
AAOT Social Science.....
AAOT Arts/Letters (ENG prefix)
AAOT Science (see note ²)
Total credits

Second Year	Fall ³
ECON 200 Principles of Economics: Intro.....	3
AAOT Health	3
AAOT Science with lab (see note ²)	4-5
Any ENG prefix course.....	4
AAOT Elective or Foreign Language ⁴ as needed	3-5
Total credits	17-20

	Winter
ECON 201 Principles of Economics: Micro	3
UO Journalism Block #3 (see note ²)	4
AAOT Science with lab (see note ²)	4-5
J 216 or AAOT Arts & Letters (not ENG prefix)	3
AAOT Elective or Foreign Language ⁴ as needed	3-5
Total credits	17-20

	Spring
ECON 202 Principles of Economics: Macro	3
UO Block #3 (see note ²)	4
AAOT Science with Lab (see note ²)	4-5
AAOT Cultural Literacy requirement ⁵	3-4
Total credits	14-16

Notes:

- Many students do not place directly into college transfer level writing or math. Consult with an academic advisor or counselor for a review of your placement test results and the appropriate sequence of courses to reach writing and math needed for the AAOT degree. Students needing to take preparatory courses will need to plan for additional credits and/or terms at Lane prior to transfer.
- The 56 credit UO pre-Journalism block requirements are listed below:
Credits
Literature block (ENG prefix) 16
(meets AAOT Arts & Letters requirements)
History block (HST prefix) 8
(meets AAOT Social Science requirements)
Economics block (ECON prefix) 8
(meets AAOT Social Science requirements)
Additional block #1..... 8
(choose 2 lab classes from the same prefix
BI, CH, G, GS or PH to meet AAOT Science requirements)
Additional block #2..... 8
(choose 2 classes from the same prefix using the list below)
Additional block #3..... 8
(choose 2 classes from the same prefix using the list below)
Prefix Subjects : ANTH, ASTR, BI, CH, CIS, CS, ECON, ENG,
ENVS, ES, FR, G, GEOG, HST, HUM, MTH, PHIL, PH, PS, PSY,
REL, SOC, SPAN, SP, TA, WS, and WR
- For planning purposes it is best to apply for transfer admission, program admission and financial aid by January 15th of the desired transfer year. Check specific transfer program for application deadlines.
- A total of 90 transferable credits are needed for the AAOT degree. Students who graduated or received a GED in spring of 1997 or thereafter are required to have foreign language for admission to public universities in Oregon. Some students may have met this requirement in high school. Consult with an academic advisor or counselor to determine whether or not you need to take college level foreign language.
- See AAOT Degree course list for courses that satisfy the Cultural Literacy requirement.

Pre-Chiropractic

Offered by the Science Division, 541.463.5446

Transfer Plan includes prerequisites for transfer

This transfer plan is for students who want to earn an Associate of Arts Oregon Transfer (AAOT) degree at Lane Community College and complete prerequisite chiropractic courses for transfer to a chiropractic program elsewhere. A transfer plan is not the same as a state-approved vocational program in which a student earns a degree or certificate with a vocational major issued by the Lane Board of Education. The guide below includes all pre-chiropractic courses that can be taken at a two-year institution for the professional chiropractic program at University of Western States, as well as necessary general education requirements for an AAOT.

Please Note A total of 90 transferable credits are needed for the AAOT degree. Earning an AAOT does not guarantee admission to

Oregon public universities. Some universities may have additional course or GPA requirements. Students who graduated or received a GED in spring of 1997 or thereafter are required to have foreign language for admission to public universities in Oregon. Some students may have met this requirement in high school. Consult with an academic advisor or counselor to determine whether or not you need to take college level foreign language. AAOT graduates admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes.

Transfer institutions require additional coursework for a chiropractic degree, and may change prerequisites from year-to-year. Any student interested in transfer must accept responsibility to work very closely with a Lane academic advisor, and also to be aware of changes in prerequisites for programs at potential transfer institutions.

General education courses transferred within a completed AAOT degree satisfy lower division general education requirements for any of Oregon's public universities and will transfer intact. Courses numbered below 100 generally do not transfer. See a Lane science advisor for assistance in course selection and transfer policies.

Transfer Plan

WR 121 Introduction to Academic Writing ^{*,3,G}	4
Choice of:.....	4
WR 122 Composition: Argument, Style and Research ^{*,3,G}	
WR 227 Technical Writing ^{*,3,G}	
MTH 097 Geometry [*]	4
MTH 111 College Algebra ^{*,G}	5
MTH 112 Trigonometry ^{*,G}	4
AAOT Speech requirement ^G	4
AAOT Health requirement ^{1,G}	3-4
AAOT Arts and Letters requirement ^{1,2,3,G}	9-12
AAOT Social Science requirement ^{1,2,3,G}	6-8
PSY 201 and PSY 202 General Psychology ^G	6
CH 221, 222, 223 General Chemistry ^{*,3,G}	15
CH 241, 242, 243 Organic Chemistry ^{*,3,G}	15
BI 211, BI 212, Z 213 Principles of Biology ^{3,G}	12
PH 201, 202, 203 General Physics ^{*,3,G}	15

Total Credits 106-112

* Prerequisite required

G must be taken for a letter grade and earn a grade of a C or higher

1 See science advisor for course selection

2 One Social Science or Arts and Letters course needs to meet Cultural Diversity Requirement

3 Program prerequisite-see advisor for other choices

Pre-Occupational Therapy

Offered by the Science Division, 541.463.5446

Transfer Plan includes prerequisites for transfer

This transfer plan is for students who want to earn an Associate of Arts Oregon Transfer (AAOT) degree at Lane Community College and complete prerequisite courses for transfer to an occupational therapy program elsewhere. A transfer plan is not the same as a state-approved vocational program in which a student earns a degree or certificate with a vocational major issued by the Lane Board of Education. The guide below includes all pre-occupational therapy courses that can be taken

at a two-year institution for the professional occupational therapy program at Pacific University, as well as necessary general education requirements for an AAOT.

Please Note A total of 90 transferable credits are needed for the AAOT degree. Earning an AAOT does not guarantee admission to Oregon public universities. Some universities may have additional course or GPA requirements. Students who graduated or received a GED in spring of 1997 or thereafter are required to have foreign language for admission to public universities in Oregon. Some students may have met this requirement in high school. Consult with an academic advisor or counselor to determine whether or not you need to take college level foreign language. AAOT graduates admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes.

Transfer institutions require additional coursework for an occupational therapy degree, and may change prerequisites from year-to-year. Any student interested in transfer must accept responsibility to work very closely with a Lane academic advisor, and also to be aware of changes in prerequisites for programs at potential transfer institutions.

General education courses transferred within a completed AAOT degree satisfy lower division general education requirements for any of Oregon's public universities and will transfer intact. Courses numbered below 100 generally do not transfer. See a Lane science advisor for assistance in course selection and transfer policies.

Transfer Plan

WR 121 Introduction to Academic Writing ^{*3,G}	4
WR 122 Composition: Argument, Style and Research ^{*3,G}	4
MTH 097 Geometry [*]	4
MTH 111 College Algebra ^{*G}	5
MTH 112 Trigonometry ^{*G}	4
MTH 243 Introduction to Probability and Statistics ^{*3,G}	4
AAOT Speech requirement ^G	4
AAOT Health requirement ¹	3-4
AAOT Arts and Letters requirement ^{1,2,3,G}	9-12
AAOT Social Science requirement ^{1,2,3,4,G}	3-4
AAOT Science with lab requirement ^{1,3,G}	8
PSY 201 General Psychology ^G	3
PSY 215 Lifespan Developmental Psychology	3
PSY 239 Introduction to Abnormal Psychology ^G	3
HO 100 Medical Terminology ^{3,G}	3
PH 201 General Physics ^{*3,G}	5
Electives ^{1,G}	19
Cooperative Education ^{1,G}	6
Total Credits	94-99

* Prerequisite required

G All Occupational Therapy prerequisites must be taken for a letter grade of C or higher. Other courses must be taken for a letter grade of C- or higher. See science advisor for details.

1 See science advisor for course selection

2 One Social Science or Arts and Letters course needs to meet Cultural Diversity Requirement

3 Program prerequisite-see advisor for other choices

4 Choose from outside PSY - Psychology

Pre-Optometry

Offered by the Science Division, 541.463.5446

Transfer Plan includes prerequisites for transfer

This transfer plan is for students who want to earn an Associate of Arts Oregon Transfer (AAOT) degree at Lane Community College and complete prerequisite courses for transfer to an optometry program elsewhere. A transfer plan is not the same as a state-approved vocational program in which a student earns a degree or certificate with a vocational major issued by the Lane Board of Education. The guide below includes all pre-optometry courses that can be taken at a two-year institution for the professional optometry program at Pacific University, as well as the necessary general education requirements for an AAOT.

Please Note A total of 90 transferable credits are needed for the AAOT degree. Earning an AAOT does not guarantee admission to Oregon public universities. Some universities may have additional course or GPA requirements. Students who graduated or received a GED in spring of 1997 or thereafter are required to have foreign language for admission to public universities in Oregon. Some students may have met this requirement in high school. Consult with an academic advisor or counselor to determine whether or not you need to take college level foreign language. AAOT graduates admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes.

Transfer institutions require additional coursework for an optometry degree, and may change prerequisites from year-to-year. Any student interested in transfer must accept responsibility to work very closely with a Lane science advisor, and also to be aware of changes in programs at potential transfer institutions.

General education courses transferred within a completed AAOT degree satisfy lower division general education requirements for any of Oregon's public universities and will transfer intact. Courses numbered below 100 generally do not transfer. See a Lane science advisor for assistance in course selection and transfer policies.

Transfer Plan

WR 121 Introduction to Academic Writing ^{*3,G}	4
WR 227 Composition: Technical Writing ^{*3,G}	4
MTH 097 Geometry [*]	4
MTH 111 College Algebra ^{*G}	5
MTH 112 Trigonometry ^{*G}	4
MTH 241 or 251 Elementary Calculus 1 or Calculus 1 ^{*3,G}	4-5
MTH 243 Introduction to Probability and Statistics ^{*3,G}	4
AAOT Speech requirement ^G	4
AAOT Health requirement ¹	3-4
AAOT Arts and Letters requirement ^{1,2,3,G}	9-12
AAOT Social Science requirement ^{1,2,3,G}	6-8
PSY 201 General Psychology ^G	3
PSY 202 or PSY 203 General Psychology ^G	3
CH 221, 222, 223 General Chemistry ^{*3,G}	15
CH 241, 242, 243 Organic Chemistry ^{*3,G}	15
BI 211, 212 Principles of Biology ^{*3,G}	8
PH 201, 202, 203 General Physics ^{*3,G}	15

Total Credits 110-117

- * Prerequisite required
- G All Optometry prerequisites must be taken for a letter grade of C or higher. Other courses must be taken for a letter grade of C- or higher. See science advisor for details.
- 1 See science advisor for course selection
- 2 One Social Science or Arts and Letters course needs to meet Cultural Diversity Requirement
- 3 Program prerequisite-see advisor for other choices

Pre-Pharmacy

Offered by the Science Division, 541.463.5446

Transfer Plan includes prerequisites for transferThis transfer plan is for students who want to earn an Associate of Arts Oregon Transfer (AAOT) degree at Lane Community College and complete prerequisite courses for transfer to a pharmacy program elsewhere. A Transfer Plan is not the same as a state-approved vocational program in which a student earns a degree or certificate with a vocational major issued by the Lane Board of Education. The guide below includes all pre-pharmacy courses that can be taken at a two-year institution for the professional pharmacy programs at Oregon State University and Pacific University, as well as necessary general education requirements for an AAOT.

Please Note A total of 90 transferable credits are needed for the AAOT degree. Earning an AAOT does not guarantee admission to Oregon public universities. Some universities may have additional course or GPA requirements. Students who graduated or received a GED in spring of 1997 or thereafter are required to have foreign language for admission to public universities in Oregon. Some students may have met this requirement in high school. Consult with an academic advisor or counselor to determine whether or not you need to take college level foreign language. AAOT graduates admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes.

Transfer institutions require additional coursework for a pharmacy degree, and may change prerequisites from year-to-year. Any student interested in transfer must accept responsibility to work very closely with a Lane academic advisor, and also to be aware of changes in prerequisites for programs at potential transfer institutions.

General education courses transferred within a completed AAOT degree satisfy lower division general education requirements for any of Oregon's public universities and will transfer intact. Courses numbered below 100 generally do not transfer. See a Lane science advisor for assistance in course selection and transfer policies.

Transfer Plan

WR 121 Introduction to Academic Writing	4
WR 122 Composition: Argument, Style and Research ^G	4
MTH 097 Geometry *	4
MTH 111 College Algebra ^{*,G}	5
MTH 112 Trigonometry ^{*,G}	4
MTH 241 or 251 Elementary Calculus 1 or Calculus 1 ^{*,3,G} ..	4-5
MTH 243 Introduction to Probability and Statistics ^{*,3,G}	4
SP 218 Interpersonal Communication ^{3,G}	4
AAOT Health requirement ^{1,G}	3-4

AAOT Arts and Letters requirement ^{1,2,3,G}	9-12
AAOT Social Science requirement ^{1,2,3,G}	3-4
PSY 201 General Psychology ^G	3
ECON 201 or 202 Introduction to Microeconomics or Macroeconomics ^{3,G}	3
CH 221, 222, 223 General Chemistry ^{*,3,G}	15
CH 241, 242, 243 Organic Chemistry ^{*,3,G}	15
BI 211, BI 212, Z 213 Principles of Biology ^{3,G}	12
PH 201, 202, 203 General Physics ^{*,3,4,G}	5-15

Total Credits 104-121

- * Prerequisite required
- G must be taken for a letter grade and earn a grade of a C or higher
- 1 See science advisor for course selection
- 2 One Social Science or Arts and Letters course needs to meet Cultural Diversity Requirement
- 3 Program prerequisite-see advisor for other choices
- 4 Pacific University requires PH 201 only

Pre-Physical Therapy

Offered by the Science Division, 541.463.5446

Transfer Plan includes prerequisites for transfer

This transfer plan is for students who want to earn an Associate of Arts Oregon Transfer (AAOT) degree at Lane Community College and complete prerequisite courses for transfer to a physical therapy program elsewhere. A transfer plan is not the same as a state-approved vocational program in which a student earns a degree or certificate with a vocational major issued by the Lane Board of Education. The guide below includes all pre-physical therapy courses that can be taken at a two-year institution for the professional physical therapy programs at Pacific University, as well as necessary general education requirements for an AAOT.

Please note A total of 90 transferable credits are needed for the AAOT degree. Earning an AAOT does not guarantee admission to Oregon public universities. Some universities may have additional course or GPA requirements. Students who graduated or received a GED in spring of 1997 or thereafter are required to have foreign language for admission to public universities in Oregon. Some students may have met this requirement in high school. Consult with an academic advisor or counselor to determine whether or not you need to take college level foreign language. AAOT graduates admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes.

Transfer institutions require additional coursework for a physical therapy degree, and may change prerequisites from year-to-year. Any student interested in transfer must accept responsibility to work very closely with a Lane academic advisor, and also to be aware of changes in prerequisites for programs at potential transfer institutions.

General education courses transferred within a completed AAOT degree satisfy lower division general education requirements for any of Oregon's public universities and will transfer intact. Courses numbered below 100 generally do not transfer. See a Lane science advisor for assistance in course selection and transfer policies.

Transfer Plan

WR 121 Introduction to Academic Writing ^{*,3,G}	4
WR 122 Composition: Argument, Style and Research ^{3,G}	4
MTH 097 Geometry [*]	4
MTH 111 College Algebra ^{*,G}	5
MTH 112 Trigonometry ^{*,G}	4
MTH 243 Introduction to Probability and Statistics ^{*,3,G}	4
AAOT Speech requirement ^G	4
AAOT Health requirement ^{1,G}	3-4
AAOT Arts and Letters requirement ^{1,2,3,G}	9-12
AAOT Social Science requirement ^{1,2,3,4,G}	3-4
PSY 201 General Psychology ^G	3
PSY 215 Lifespan Developmental Psychology ^{*,3,G}	3
PSY 239 Introduction to Abnormal Psychology ^{3,G}	3
CH 221, 222, 223 General Chemistry ^{*,3,G}	15
BI 211, BI 212, Z 213 Principles of Biology ^{3,G}	12
PH 201, 202, 203 General Physics ^{*,3,G}	15
Total Credits	95-100

* Prerequisite required

G must be taken for a letter grade and earn a grade of a C or higher

1 See science advisor for course selection

2 One Social Science or Arts and Letters course needs to meet Cultural Diversity Requirement

3 Program prerequisite-see advisor for other choices

4 Choose from outside PSY - Psychology

Pre-Physician Assistant

Offered by the Science Division, 541.463.5446

Transfer Plan includes prerequisites for transfer

Associate of Arts Oregon Transfer degree

This transfer plan is for students who want to earn an Associate of Arts Oregon Transfer (AAOT) degree at Lane Community College and complete prerequisite courses for transfer to a physician assistant program elsewhere. A transfer plan is not the same as a state-approved vocational program in which a student earns a degree or certificate with a vocational major issued by the Lane Board of Education. The guide below includes all pre-physician assistant courses that can be taken at a two-year institution for the professional physician assistant programs at Oregon Health Sciences University and Pacific University, as well as necessary general education requirements for an AAOT.

Please Note A total of 90 transferable credits are needed for the AAOT degree. Earning an AAOT does not guarantee admission to Oregon public universities. Some universities may have additional course or GPA requirements. Students who graduated or received a GED in spring of 1997 or thereafter are required to have foreign language for admission to public universities in Oregon. Some students may have met this requirement in high school. Consult with an academic advisor or counselor to determine whether or not you need to take college level foreign language. AAOT graduates admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes.

Transfer institutions require additional coursework for a physician assistant degree, and may change prerequisites from year-to-year. Any student interested in transfer must accept responsibility to work very closely with a Lane academic advisor,

and also to be aware of changes in prerequisites for programs at potential transfer institutions.

General education courses transferred within a completed AAOT degree satisfy lower division general education requirements for any of Oregon's public universities and will transfer intact. See a Lane science advisor for assistance in course selection and transfer policies.

Transfer Plan

WR 121 Introduction to Academic Writing ^{*,3,G}	4
WR 122 Composition: Argument, Style and Research ^{*,3,G}	4
MTH 111 College Algebra ^{*,G}	5
MTH 243 Introduction to Probability and Statistics ^{*,3,G}	4
AAOT Speech requirement ^G	4
AAOT Health requirement ¹	3-4
AAOT Arts and Letters requirement ^{1,2,G}	9-12
AAOT Social Science requirement ^{1,2,G}	9-12
PSY 201 General Psychology ^G	3
CH 221, 222, 223 General Chemistry ^{*,3,G}	15
CH 241 Organic Chemistry ^{*,5,G}	5
BI 211, BI 212, Z 213 Principles of Biology ^{4,G}	12
Electives ^{1,3,G}	13
Total Credits	90-97

* Prerequisite required

G All Physician Assistant prerequisites must be taken for a letter grade of C or higher. Other courses must be taken for a letter grade of C- or higher. See science advisor for details

1 See science advisor for course selection

2 One Social Science or Arts and Letters course needs to meet Cultural Diversity Requirement

3 Program prerequisite-see advisor for other choices

4 OHSU prerequisite only

5 Pacific University prerequisite only

Pre-Veterinary Medicine

Offered by the Science Division, 541.463.5446

Transfer Plan includes prerequisites for transfer

Associate of Arts Oregon Transfer degree

This transfer plan is for students who want to earn an Associate of Arts Oregon Transfer (AAOT) degree at Lane Community College and complete prerequisite courses for transfer to a veterinary medicine program elsewhere. A transfer plan is not the same as a state-approved vocational program in which a student earns a degree or certificate with a vocational major issued by the Lane Board of Education. The guide below includes all pre-veterinary courses that can be taken at a two-year institution for the professional veterinary medicine programs at Oregon State University, as well as necessary general education requirements for an AAOT.

Please note A total of 90 transferable credits are needed for the AAOT degree. Earning an AAOT does not guarantee admission to Oregon public universities. Some universities may have additional course or GPA requirements. Students who graduated or received a GED in spring of 1997 or thereafter are required to have foreign language for admission to public universities in Oregon. Some students may have met this requirement in high

school. Consult with an academic advisor or counselor to determine whether or not you need to take college level foreign language. AAOT graduates admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes.

Transfer institutions require additional coursework for a veterinary medicine degree, and may change prerequisites from year-to-year. Any student interested in transfer must accept responsibility to work very closely with a Lane academic advisor, and also to be aware of changes in prerequisites for programs at potential transfer institutions.

General education courses transferred within a completed AAOT degree satisfy lower division general education requirements for any of Oregon's public universities and will transfer intact. Courses numbered below 100 generally do not transfer. See a Lane science advisor for assistance in course selection and transfer policies.

Transfer Plan

AAOT Arts and Letters requirement ^{1,2,3,G}	9-12
AAOT Health requirement ^{1,G}	3-4
AAOT Social Science requirement ^{1,2,3,G}	12-15
BI 211, BI 212, Z 213 Principles of Biology ^{3,G}	12
CH 221, 222, 223 General Chemistry ^{*,3,G}	15
CH 241, 242, 243 Organic Chemistry ^{*,3,G}	15
MTH 097 Geometry [*]	4
MTH 111 College Algebra ^{*,G}	5
MTH 112 Trigonometry ^{*,G}	4
MTH 241 or 251 Elementary or Differential Calculus ^{*,3,G}	4-5
MTH 243 Introduction to Probability and Statistics ^{*,3,G}	4
PH 201, 202, General Physics ^{*,3,G}	10
SP 111 Public Speaking ^{1,G}	4
WR 121 Introduction to Academic Writing ^{*,3,G}	4
WR 227 Technical Writing ^{*,3,G}	4
Total Credits 109-117	

* Prerequisite required

G must be taken for a letter grade and earn a grade of a C- or higher

1 See science advisor for course selection

2 One Social Science or Arts and Letters course needs to meet Cultural Diversity Requirement

3 Program prerequisite-see advisor for other choices

Psychology Transfer Plan

Associate of Arts Oregon Transfer (AAOT) degree

(for University of Oregon only)

This outline is valid for transfer to the University of Oregon only, and is current at the time this catalog was printed. It is subject to change, so be sure to contact your academic advisor or program counselor for any updates that may have occurred after this catalog went to print.

For the Cultural Literacy requirement of the AAOT, see the AAOT program guide for courses that meet this requirement.

Please Note A total of 90 transferable credits are needed for the AAOT degree. Earning an AAOT does not guarantee admission to Oregon public universities. Some universities may have additional course or GPA requirements. Students who graduated or received a GED in spring of 1997 or thereafter are required to have foreign language for admission to public universities in

Oregon. Some students may have met this requirement in high school. Consult with an academic advisor or counselor to determine whether or not you need to take college level foreign language. AAOT graduates admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes.

For course recommendations for psychology majors planning to transfer to other universities, contact your academic advisor or program counselor. For the latest information please visit: academicadvising.lanec.edu/mod/book/view.php?id=650&chapterid=1671

First Year	Fall
WR 121 Introduction to Academic Writing	4
AAOT Health/Wellness/Fitness	3-4
AAOT Oral Communication	4
AAOT Arts/Letters ¹	3-4
Total Credits	14-16

	Winter
WR 122 Composition: Argument, Style and Research	4
AAOT Arts/Letters ³	3-4
Elective ¹	3-4
MTH 111 College Algebra	5
Total Credits	15-17

	Spring
AAOT Arts/Letters ¹	3-4
Elective ¹	3-4
AAOT Non-Lab Science/Math/Computer Science	3-4
AAOT Social Science ³ (not PSY)	3-4
Total Credits	12-16

Second Year	Fall
PSY 201 General Psychology	3
AAOT Lab science ²	4
Elective ¹	3-4
Elective ¹	3-4
Total Credits	13-15

	Winter
PSY 202 General Psychology.....	3
AAOT Lab science ²	4
Elective ¹	3-4
Elective ¹	3-4
Total Credits	13-15

	Spring
PSY 203 General Psychology.....	3
AAOT Lab Science ²	4
Elective ¹	3-4
Elective ¹	3
Total Credits	13-14

Notes

¹ You will need enough elective credits to bring your degree total to 90 transfer credits. Consider PSY 280 (co-operative education) to fulfill some electives. Please consult with your academic advisor or program counselor for other suggested electives.

² Lab sciences specified by the University of Oregon for psychology majors are 12 credits of Biology, Chemistry, or Physics. Courses need not be in sequence, but must be taken from the same area (e.g., 12 credits/one year of biology OR chemistry OR physics).

³ One Arts and Letters or Social Science course must satisfy the Cultural Literacy Requirement for the AAOT degree. See description of AAOT degree for a list of courses that satisfy this requirement.

Speech and Communication Studies

Offered by Language, Literature, and Communication Division, 541.463.5419

Transfer Plan

Lane Community College's four core learning outcomes emphasize the critical nature of communication to one's education and success in the workplace. To achieve competence in communication, students need more than a one-course requirement in a Speech and Communication Studies class. This suggested course of study also demonstrates to prospective and current employers their enhanced speech and communication skills.

By selecting one of the following tracks students can prepare themselves for careers in law, public relations, communication consulting, business administration, teaching, speechwriting, speech/debate direction, broadcast, counseling, mediation, labor relations, public opinion research, human resources, advertising, educational administration, lobbying, and marketing, to name a few fields.

Please Note A total of 90 transferable credits are needed for the AAOT degree. Earning an AAOT does not guarantee admission to Oregon public universities. Some universities may have additional course or GPA requirements. Students who graduated or received a GED in spring of 1997 or thereafter are required to have foreign language for admission to public universities in Oregon. Some students may have met this requirement in high school. Consult with an academic advisor or counselor to determine whether or not you need to take college level foreign language. AAOT graduates admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes.

Courses below are appropriate electives for students interested in optimizing their background in Speech and Communication Studies.

This transfer plan is available in two tracks:

1. Academic track—for students interested in pursuing a bachelor's degree or a minor in Speech and Communication Studies.

2. Occupational track—for students completing a two-year degree program who are interested in maximizing their proficiency in speech and communication as an enhancement to occupational performance and flexibility.

Cooperative Education (Co-op) Students in either the academic or occupational track may elect to complete a one-term internship related to the field of Speech and Communication Studies. This work is completed under the joint supervision of the Cooperative Education program at Lane and a Speech and Communication Studies faculty member. Letters of recommendation from the supervising employer and credits earned in practicum can give students a competitive edge when applying for employment. Internships may focus on public relations, advertising, political canvassing, environmental or health education, marketing, or other fields.

Important note Oregon four-year schools that provide a Communication major vary in their requirements. When selecting classes for the academic track, students must work closely with a Lane academic advisor as well as an academic advisor at the transfer school.

In addition to the recommended Speech courses listed in the tracks below, these General Education courses are needed to complete the AAOT degree:

WR 121 Introduction to Academic Writing *	4
Choice of.....	4
WR 122 Composition: Argument, Style, and Research *	
WR 227 Technical Report Writing *	
Choice of	4-5
MTH 105 Intro. to Contemporary Mathematics *	
MTH 111 College Algebra * (or any higher Math course)	
AAOT Health/Wellness/Fitness requirement.....	3
AAOT Science with lab requirement.....	12
AAOT Arts and Letters requirement (not Speech) ¹	3-4
AAOT non-lab Science, math, computer science requirement.....	3-4
AAOT Social Science requirement ¹	12-16
AAOT Electives	18-25

* Prerequisite required

¹ One Arts and Letters or Social Science course must meet the AAOT Cultural Literacy requirement

Communication Studies Academic Track

The transfer plan recommends either the Foundational Skills Requirements for the AAOT (SP100, 111, 112, 130, 218), ASOT (SP100, 105, 111, 112, 115, 130, 218, 219, 220, 262), or OTM (SP100, 111, 112) along with four elective courses in Speech and Communication Studies.

To complete the suggested transfer plan, select **four courses** from the remainder of the Speech and Communication Studies curriculum. All of the following are four credits. Two of these courses may also be applied to the AAOT or ASOT Introduction to Disciplines Arts & Letters Requirement, which specifies that a student must choose 12 credits from at least *two* disciplines.

SP 100 Basic Communication
 SP 105 Listening and Critical Thinking
 SP 111 Fundamentals of Public Speaking
 SP 112 Persuasive Speech
 SP 115 Introduction to Intercultural Communication *
 SP 130 Business and Professional Speech
 SP 218 Interpersonal Communication
 SP 219 Small Group Discussion
 SP 220 Communication, Gender and Culture *
 SP 221/222/223 Forensics (1-2 credits)
 SP 262 Voice and Articulation

Communication Studies Occupational Track

The plan recommends three skills-oriented courses that include the following:

SP 105 Listening and Critical Thinking
 SP 111 Fundamentals of Public Speaking **or**
 SP 130 Business and Professional Speech
 SP 219 Small Group Discussion

* Starred courses fulfill the AAOT Cultural Literacy requirement.

Teacher Education Preparation

Offered by Cooperative Education Department,
541.463.5203

Transfer Plan

Elementary Teacher Preparation

This information is a guide for students interested in pursuing a career in elementary education.

Nineteen Oregon schools offer teacher education preparation. Admission is selective and based on coursework, experience with children, tests scores, and other application material. Every school has a specific set of recommended and required curriculum that students should follow to increase their chances of being admitted. It is critical that students work closely with a Lane education advisor in selecting the transfer school and designing their educational plan.

A broad liberal arts curriculum including coursework in literature, art, music, child development, history, geography, mathematics (including geometry and algebra), biology and physical science is required of many education programs. In addition, experience working in a classroom setting under the supervision of a certified teacher is beneficial to students considering a teaching career.

Cooperative Education (Co-op) offers Lane students the opportunity to gain classroom experience at the elementary or secondary level. Letters of recommendation from the supervising teacher, your Lane instructors in courses in education, and credits earned through Co-op give students a competitive advantage when applying for admission to four-year education programs and to graduate programs.

Students unsure of whether they want to become teachers may participate in the Foundations of Education seminar while also working in a classroom to help decide if teaching is a good career choice for them.

For information about seminar classes and gaining experience in a classroom, contact: Merrill Watrous, Education Co-op Coordinator, Center 420H, 541.463.5423, watrousm@lanecc.edu

The following list is a sample of classes that many elementary education programs recommend. It may be a good starting point for students who have not yet identified a specific transfer institution. Completion of these suggested classes can be applied toward the Associate of Arts Oregon Transfer (AAOT) degree.

Please Note A total of 90 transferable credits are needed for the AAOT degree. Earning an AAOT does not guarantee admission to Oregon public universities. Some universities may have additional course or GPA requirements. Students who graduated or received a GED in spring of 1997 or thereafter are required to have foreign language for admission to public universities in Oregon. Some students may have met this requirement in high school. Consult with an academic advisor or counselor to determine whether or not you need to take college level foreign language. AAOT graduates admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes.

Consult with Lane's education advisors for course planning to meet your specific educational goals. For the most current and specific information about the many different education and special education programs in Oregon, including transferability of Lane credits, please visit this web site: lanecc.edu/course/view.php?id=24587

Suggested Classes for Education majors who plan to complete the AAOT Degree:

Foundational requirements

WR 121 Introduction to Academic Writing

Choice of:

WR 122 Composition: Argument, Style, and Research ^{*,1} or

WR 227 Technical Writing ^{*,1}

MTH 211 Fundamentals of Elementary Mathematics 1 ^{*,1}

HE 275 Lifetime Health and Fitness ¹

SP 111 Fundamentals of Public Speaking ¹

Arts and Letters

ENG 100 Children's Literature ¹

ENG 106 Introduction to Literature: Poetry ¹

ART 204 or 205 or 206 History of Western Art ¹

Social Science

HST 201 or 202 or 203 History of the United States¹ (two courses)

ANTH 103 Cultural Anthropology ^{1,2}

PSY 201 General Psychology ¹

Science

BI 101 or 102 or 103 General Biology ¹ (two courses) ³

CH 104 Introduction to Chemistry 1 or GS 104 or GS 106 Physical Science¹

MTH 212 Fundamentals of Elementary Mathematics 2 ¹

Recommended Electives for AAOT Degree

CG 211 Dreikursian Principles of Child Guidance ¹

ED 130 Comprehensive Classroom Management

ED 131 Instructional Strategies

ED 200, 201 Foundations of Education

ED 258 Multicultural Education

ED 280 Cooperative Education

MTH 213 Fundamentals of Elementary Mathematics 3 ¹

PHIL 201 Ethics

PS 201 or PS 202 U.S. Government and Politics ¹

SPAN 101, 102, 103 Spanish, First Year

AAOT Science with Lab approved course ¹

Additional suggested courses for Education majors

ENG 104, 105, 106 Introduction to Literature

ENVS 181 Terrestrial Environment

ENVS 182 Atmospheric Environment and Population

ENVS 183 Aquatic Environment

ENVS 184 Global Climate Change

G 101 Earth's Dynamic Interior

G 102 Earth's Dynamic Surface

G 103 Evolving Earth

GEOG 142 Introduction to Human Geography

GS 104, 105, 106 Physical Science

HDFS 226 Child Development

HDFS 227 Children Under Stress

HDFS 229 Middle Childhood Ages 6-12

HDFS 250 Developmental Kindergarten

PH 101 or 102 or 103 Fundamentals of Physics

Introductory Art and/or Music classes (see AAOT degree for approved courses)

PSY 235 Human Development

Middle/High School Teacher Preparation

For middle/high school teaching (secondary education), students should major in the subject they plan to teach. Examples of subjects commonly taught are History, Geography, English,

Mathematics, Biology and general or specific Science. For more information about middle/high school teaching contact Counseling and Advising and ask to meet with the advisor for your specific major.

Prerequisite required

¹ For specific courses required for each of the teacher education preparation programs in Oregon, consult with Lane's education counselor or academic advisors, or visit this website: classes.lanec.edu/course/view.php?id=24587

² ANTH 103 also satisfies the AAOT Cultural Literacy requirement.

³ Other biology courses may be acceptable at some of the teacher education preparation programs. See Lane education academic advisors or counselors for detailed information.

Theater Transfer

Offered by Music, Dance and Theatre Arts, 541.463.5209

Associate of Arts Oregon Transfer Degree Plan for Theater Majors

This curriculum is designed for the student who intends to complete requirements for an Associate of Arts Oregon Transfer (AAOT) degree and transfer to a four-year university with a major in Theater. Detailed information about the AAOT can be found under the Degrees and Certificates section of this catalog.

The curriculum is comprised of general education requirements, major requirements and electives. Completion of the AAOT degree will satisfy all the lower division (freshman and sophomore) general education requirements at any four-year *public university in the state of Oregon*. Completion of the Theater courses listed below will typically satisfy lower division Theater requirements for most schools. Some Theater programs may require additional coursework. Students looking to transfer to private colleges or out-of-state schools may benefit from pursuing a direct transfer plan in lieu of the AAOT.

Please note A total of 90 transferable credits are needed for the AAOT degree. Earning an AAOT does not guarantee admission to Oregon public universities. Some universities may have additional course or GPA requirements. Students who graduated or received a GED in spring of 1997 or thereafter are required to have foreign language for admission to public universities in Oregon. Some students may have met this requirement in high school. Consult with an academic advisor or counselor to determine whether or not you need to take college level foreign language. AAOT graduates admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes.

It is very important that students work closely with Lane's Arts advisors and advisors at their transfer school to tailor this curriculum to meet the specific requirements of the desired transfer institution. Some transfer schools require a separate application to the Theater major that also includes an audition. Students are encouraged to begin their transfer planning one year prior to their date of transfer. Since requirements at transfer schools may change after the catalog has been printed, students are encouraged to refer to on-line advising resources for Arts and Related

Majors by clicking on the Academic Advising tab within Moodle (academicadvising.lanec.edu/). Please follow the directions to enroll.

First Year	Fall
WR 121 Introduction to Academic Writing ¹	4
Choice of:	4-5
MTH 105 ¹ Intro to Contemporary Math	
MTH 111 ¹ College Algebra	
TA 141 Acting 1	3
Theater Production, Theater Writing or Elective	3
AAOT Physical Education	1
Total Credits	15-16

	Winter
WR 122 Composition: Argument, Style and Research	4
AAOT Social Science	3
TA 142 Acting 2	3
Theater Production, Theater Writing or Elective	3
AAOT Physical Education	1
Total Credits	14

	Spring
AAOT Speech	4
AAOT Social Science	3
TA 143 Acting 3	3
AAOT Science/Math/Computer Science	3-4
AAOT Physical Education	1
Total Credits	14-15

Second Year	Fall ²
TA 241 Intermediate Acting	3
Theater Rehearsal and Performance or Elective	3
AAOT Science with lab	4-5
AAOT Social Science	3
AAOT Elective or Foreign Language ³ as needed	3-5
Total Credits	16-19

	Winter
TA 242 Intermediate Acting	3
Theater Rehearsal and Performance or Elective	3
AAOT Science with lab	4-5
AAOT Social Science	3
AAOT Elective or Foreign Language ³ as needed	3-5
Total Credits	16-19

	Spring
TA 243 Intermediate Acting	3
Theater Rehearsal and Performance or Elective	3
AAOT Science with lab	4-5
AAOT Arts & Letters (not TA)	3
AAOT Cultural Literacy ⁴	3
Total Credits	16-17

¹ Many students do not place directly into college transfer level writing or math. Consult with an academic advisor or counselor for a review of your placement test results and the appropriate sequence of courses to reach writing and math needed for the AAOT degree. Students needing to take preparatory courses will need to plan for additional credits and/or terms at Lane prior to transfer.

² For planning purposes it is best to apply for transfer admission, program admission and financial aid by January 15th of the desired transfer year. Check specific transfer program for application deadlines.

³ A total of 90 transferable credits are needed for the AAOT degree. Students who graduated or received a GED in spring of 1997 or thereafter are required to have foreign language for admission to public universities in Oregon. Some students may have met this requirement in high school. Consult with an academic advisor or counselor to determine whether or not you need to take college level foreign language.

⁴ One Social Science, Arts & Letters, or Science course must satisfy the AAOT Cultural Literacy requirement. See AAOT degree for courses that satisfy this requirement.

Women's Studies

Offered by Multiple Departments

Transfer Plan

Does our understanding of the world change if we explicitly place women's experience and perspective at the center and look outward? Women's Studies answers this question with a resounding, "Yes!" It is an interdisciplinary field that explores how gender relations structure our lives. Through feminist scholarship and a focus on women, Women's Studies challenges and transforms existing thought and practices across academic boundaries. Women's Studies courses at Lane address the manner in which gender—entangled with issues of race and class—remains a critical lens of analysis in the artistic, literary, religious, political, economic, and interpersonal aspects of society.

There are hundreds of women's studies programs in colleges and universities across the country offering undergraduate minors and majors as well as graduate degrees and graduate certificates including a few programs that offer Ph.D.'s. Because Women's Studies at Lane is an interdisciplinary program, students who take women's studies courses are prepared to enter a variety of fields and address the accompanying gender issues that they will invariably face. Any career objective can benefit from courses taken in women's studies as the field inherently enhances critical thinking skills through cross-disciplinary analyses.

This is a transfer plan for students interested in women's studies and wishing to complete an AAOT degree. However, those not choosing to pursue a degree progression may find this a useful listing as well. The current Women's Studies offerings at Lane fulfill all course requirements in the Arts/Letters and the Social Science categories of the AAOT degree. A transfer plan is not the same as a state-approved vocational program in which a student earns a degree or certificate with a vocational major issued by the Lane Board of Education nor is it an associate of arts degree.

Please Note A total of 90 transferable credits are needed for the AAOT degree. Earning an AAOT does not guarantee admission to Oregon public universities. Some universities may have additional course or GPA requirements. Students who graduated or received a GED in spring of 1997 or thereafter are required to have foreign language for admission to public universities in Oregon. Some students may have met this requirement in high school. Consult with an academic advisor or counselor to determine whether or not you need to take college level foreign language. AAOT graduates admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes.

For those interested in going on to obtain a women's studies degree, minor or certificate, the women's studies courses at Lane are transferable. For example, the Women's and Gender Studies program at the University of Oregon allows up to eight credits to transfer for a major or minor in women's studies. See Patsy

Raney, Women's Studies Instructor, 541.463.5877 or email raneyp@lanecc.edu for further information.

First Year		Fall
WS 101 Introduction to Women's Studies.....		4
ENG 222 Literature and Gender or ENG 260 Introduction to Women Writers.....		4
WR 121 Composition: Introduction to Academic Writing *		4
AAOT degree elective ¹		3
Total Credits		15
		Winter
HST 266 U.S. Women's History (elective).....		4
SP 220 Communication, Gender, and Culture.....		4
WR 122 Composition: Argument, Style, and Research *		4
AAOT degree elective ¹		3
Total Credits		15
		Spring
SOC 108A Selected Topics in Women's Studies, Women's Bodies Women's Selves (elective).....		3
FA 264 Women Make Movies		4
AAOT degree Health/Wellness requirement ²		3
AAOT degree (non-lab) Science requirement ³		3
AAOT degree elective ¹		3
Total Credits		16
Second Year		Fall
ENG 222 Literature and Gender or ENG 260 Intro to Women Writers		4
MTH 105 Intro to Contemporary Mathematics *		4
AAOT Science (with lab) requirement ³		4
AAOT degree elective ¹		3
Total Credits		15
		Winter
SOC 207 Women and Work		3
AAOT Oral Communication requirement ⁴		4
AAOT Science (with lab) requirement ³		4
AAOT degree elective ¹		3
Total Credits		14
		Spring
ES 250/ECON 250 Class, Race, and Gender in the U.S. Economy.....		4
SOC 218 Sociology of Gender (elective).....		3
AAOT Science (with lab) requirement ³		4
AAOT degree elective.....		4
Total Credits		15

* Prerequisite required

1 See AAOT degree requirements for approved electives

2 See AAOT degree requirements for approved Health/Wellness courses

3 See AAOT degree requirements for approved Science courses

4 See AAOT degree requirements for approved Oral
Communication/Speech courses

Accounting

Also see Computers: Software Applications

For information, contact the Business and Computer Information Technology Division, Bldg. 19/Rm. 137, 541.463.5221.

BA 211 Financial Accounting..... 4 credits

Prerequisites: BA 101 and BT 165. Students will gain an understanding of the basic terms, the accounting model, and content of financial statements and then focus on understanding and interpreting the information they contain. May be offered online.

BA 213 Managerial Accounting..... 4 credits

Prerequisite: BA 211 and MTH 060 or higher. Introduction to tools and techniques for gathering and analyzing accounting information to make management decisions. Topics include cost-volume-profit analysis, manufacturing costs, special decision analysis, budgeting, and responsibility accounting. May be offered online.

BA 280AC Co-op Ed: Accounting 3-12 credits

Completion of BT 195 is highly recommended. In this internship course students will gain accounting-related work experience in area businesses and organizations. Students will integrate theory and practice, develop skills and expand career knowledge while earning credit toward a degree. Meet with Business Co-op Coordinator the term before starting your internship if possible.

BT 165 Introduction to the Accounting Cycle..... 4 credits

Introduces fundamental principles of double entry accrual accounting for a sole proprietorship. Students will analyze and record transactions and adjustments, account for payroll transactions, and prepare financial statements for service and merchandising firms. May be offered online.

BT 170 Payroll Records & Accounting..... 4 credits

Prerequisite: BT 123 (formerly BT 114), and BT 165. Introduces federal and state regulations affecting payroll. Provides practice in all payroll operations, including accounting entries, and the preparation of payroll tax returns that are required of business. Course will provide a manual practice set and a computerized practice set. May be offered online.

BT 171 Payroll Laws and Regulations 4 credits

This is an advanced course on complex payroll functions and regulations. Issues such as how the payroll function impacts the accounting, benefits, and human resources department are discussed, as well as more complicated legal issues including benefits taxation, third-party sick pay reporting, and involuntary deductions. Using case studies, students will develop a best practices plan based on examining organizational structures and models, processes, compliance issues, internal controls, methods of service delivery, corporate culture and staffing, and technology. Students will learn how to keep abreast of changes in federal and state payroll legislation and complete year-end payroll tax functions. May be offered online.

BT 221 Budgeting for Managers 4 credits

Prerequisite: BT 165 or BA 211. Recommend BT 123 MS EXCEL for Business (formerly BT 114). This course is designed to introduce the purpose and value of budgets, budget development, and budget implementation. Course topics include: the steps of creating a budget, the parts of a budget, gathering needed information for budgets, creating a product budget, planning and budgeting a project, presenting the budget, spending and tracking the budget, use of an HR budget, a small business budget, budgeting and human behavior, and mastering the overall budgeting process. May be offered online. Note: BT 221 was formerly numbered BA 217. A student who has taken this class under the previous number may not take it again under this new number and receive duplicate credit.

BT 272 Tax concepts & Preparation..... 4 credits

Prerequisite: BA 101 and BT 165. Introduces individual and business federal taxation. Students will study tax concepts, planning, rules, procedures, and the implication of taxes on financial decisions. Students will become familiar with the preparation of basic tax forms and schedules. May be offered online. Note: BT 272 was formerly numbered BT 172. A student who has taken this class under the previous number may not take it again under this new number and receive duplicate credit.

BT 286 Professional Bookkeeping 4 credits

Prerequisites: BA 211, BT 165 and BT 272. This course is designed

to prepare students for one of two national certifications. (AIPB or NACBP) The course consists of five primary areas of focus and a substantial practice set. The areas of focus and examination include the correcting of accounting errors, adjusting entries, payroll, depreciation and inventory. Students are expected to have experience and knowledge of these accounting areas and can use the course to refresh and supplement existing knowledge in preparation for the exam. The course will include some lecture, review of problems, and test taking strategies. Homework will supplement the meeting schedule. May be offered online. Note: BT 286 was formerly BT 295. A student who has taken this class under the previous number may not take it again under this new number and receive duplicate credit.

BT 296 Applied Financial Accounting..... 5 credits

Prerequisite: MTH 065 or higher, BA 211, BT 163 (formerly BT 113) or BT 175, BT 165, BT 170, BT 223 (formerly BT 217), BT 276 (formerly BT 250), & BT 286 (formerly BT 295). Provides experience applying financial accounting principles and understanding basic business systems, with a focus on improving problem-solving skills needed for accounting work. Students prepare actual documents, accounting records, and federal and state payroll tax reports, as well as professional quality working papers to document their analysis of the accounting records. The course requires integration of skills needed in an accounting office-knowledge of GAAP, computer software applications for business, communication skills, and teamwork. May be offered online. Note: BT 296 was formerly numbered BT 263. A student who has taken this class under the previous number may not take it again under the new number and receive duplicate credit.

Acting—See Theatre Arts

Administrative Support

For information, contact the Business and Computer Information Technology Division, Bldg. 19/Rm. 137, 541.463.5221.

BA 280AA Co-op Ed: Administrative Office

Professional 3-12 credits

Completion of BT 195 is highly recommended. In this internship course students will gain administrative support work experience in area businesses and organizations. Students will integrate theory and practice, develop skills and expand career knowledge while earning credit toward a degree. Meet with Business Co-op Coordinator the term before starting your internship if possible.

BT 020 10-Key Calculator..... 1 credits

This course provides students the opportunity for intensive practice on the basic operations of the electronic calculator, solving basic business application problems, and developing speed and accuracy. May be offered online.

BT 108 Business Proofreading and Editing..... 4 credits

Review of language skills necessary to succeed in a business career. Practice proofreading and editing business documents. As part of a team and as an individual, the learner will analyze and apply software and reference tools to proofread, edit, and format business documents for mailing. May be offered online. Note: BT 108 was formerly numbered BT 180. A student who has taken this class under the previous number may not take it again under this new number and receive duplicate credit.

BT 144 Administrative Procedures 4 credits

Prerequisite: Pass a Language Skills and Proofreading test in the Testing office or BT 108 (formerly BT 180), BT 112 (formerly BT 146), BT 120 and WR 121. Recommend the ability to accurately type at least 35 words per minute. Visit lanec.edu/business/testing for Business Department keyboarding guidelines or contact the instructor for details. This first year course introduces students to a wide variety of office procedures, practices, and skills needed to be efficient and effective in the changing office environment. Students will draw upon related learning in previous courses as they participate in team and individual office skills projects. New career development skills and knowledge will be added through learning activities and classroom practice and discussion about soft skills, professionalism, and customer service, and through preparation of job search documents. Students will practice formatting and arranging informal reports, correspondence, and other business documentation and will continue the development of keyboarding skills. May be offered online.

BT 230 Sustainable Paperless Office Practices

using Adobe Acrobat 4 credits
Prerequisites: BT 120. Recommend the ability to accurately type approximately 30 words per minute. Visit lanecc.edu/business/testing for Business Department keyboarding guidelines or contact the instructor for details. This course will teach the student how to create virtually any document in a PDF format, preserving the exact look and content of the original, and how to unify a wide variety of documents such as spreadsheets, presentation, email, rich media, and more into a single, cohesive PDF Portfolio. Students will be able to create, enhance, and review PDF documents and create fillable forms. Students will learn how to distribute PDF documents reliably and securely by email, the web, intranets, file systems, CDs, and web services. Other topics will include electronic records keeping, ethical and legal matters around electronic data, electronic signatures, and security. It will teach the student to use a high-volume scanner to scan existing documents into an electronic file management system. May be offered online.

BT 271 Administrative Professional Practicum 4 credits
Prerequisites: BT 228. Recommend the ability to accurately type at least 45 words per minute. Visit lanecc.edu/business/testing for Business Department keyboarding guidelines or contact the instructor for details. Students participate in dynamic business simulations that provide experience in working as team members in a professional environment. Includes professional practice in using integrated software skills, applying office procedures, communicating orally and in writing, analyzing information, making decisions, prioritizing, and using time management skills.

Agriculture Equipment/Mechanics—See Diesel and Heavy Equipment

Air Conditioning—See Automotive, Diesel

Anatomy/Physiology/Microbiology

For information, contact the Science Division, Bldg. 16/Rm. 156, 541.463.5446.

BI 231 Human Anatomy and Physiology 1 4 credits
Prerequisite: Grade of 'C-' or better in BI 112 and CH 112. Foundational first course in anatomy/physiology. Topics include human body organization, histology and the integumentary, skeletal, articular, and muscular body systems; nervous system fundamentals and autonomic nervous system. Common clinical applications associated with these topics are presented. May be offered online.

BI 232 Human Anatomy and Physiology 2 4 credits
Prerequisite: Grade of 'C-' or better in BI 231. Topics include anatomy and physiology of central and peripheral nervous systems, special senses, hematology, cardiovascular, lymphatic and immune systems. Common clinical applications associated with these topics are presented. May be offered online.

BI 233 Human Anatomy and Physiology 3 4 credits
Prerequisite: Grade of 'C-' or better in BI 232. Topics include respiratory, digestive, urinary, endocrine, and reproductive systems. Also included are concepts of genetics, inheritance patterns and disorders. Common clinical applications associated with the topics above are presented. May be offered online.

BI 234 Introductory Microbiology 4 credits
Prerequisite: Grade of 'C-' or better in BI 233 or instructor consent. A medically oriented survey of pathogens that includes cell biology, host-microbe interactions, body defenses, microbial control, and pathogenesis, prevention and treatment of infectious diseases. Labs emphasize aseptic technique and methods of culturing, staining, isolation and identification.

Anthropology

For information, contact the Social Science Division, Center Bldg./Rm. 403, 541.463.5427.

ANTH 101 Physical Anthropology 4 credits
An introduction to the study of human evolution, with the goal of understanding humans as part of the natural world and as organisms shaped by their evolutionary past. The course covers the basic processes of evolution, the early human fossil and archaeological record, primate behavior and human genetic variability. May be offered online.

ANTH 102 World Archaeology 4 credits
This course traces the transition of human societies from a predominantly hunting and gathering way of life to a settled farming, and ultimately urban, way of life. The course focuses on the rise of social complexity in ancient civilizations such as the Near East, Egypt, India, China, South America, MesoAmerica, and North America. May be offered online.

ANTH 102_H World Archaeology 4 credits
This is an honors class open to any student prepared to complete honors-level coursework. Honors classes delve deeper into course topics and require a high level of student motivation; the pace may be faster than non-honors courses. WR 121-readiness (score of at least 96 on the sentence-skills placement test) recommended. See lanecc.edu/honors for more information. This course traces the transition of human societies from a predominantly hunting and gathering way of life to a settled farming, and ultimately urban, way of life. The course focuses on the rise of social complexity in ancient civilizations such as the Near East, Egypt, India, China, South America, MesoAmerica, and North America.

ANTH 103 Cultural Anthropology 4 credits
A comparative cross-cultural explanation of how cultural learning shapes human behavior. Aspects of culture to be examined include patterns of subsistence social structures, marriage and family, political processes, social control, religious beliefs and practices, and worldview and values. May be offered online.

ANTH 227 Prehistory of Mexico 3 credits
First term of a three-term sequence of Anthropology courses which deal with the culture of Americans of Mexican descent. This term, the focus is on the archaeology and cultural anthropology of Mesoamerica. Olmec, Zapotec, Toltec, Mayan, and Aztec cultures are surveyed. This course draws upon a number of different resources: readings, videos, student presentations, and artwork, to obtain as accurate a knowledge and understanding of these cultures as is presently possible.

ANTH 228 Cultures of Mexico 3 credits
Second term of three-term sequence of Anthropology courses which deal with culture of Americans of Mexican descent. This term, the focus is on indigenous peoples and cultures of contemporary Mexico. Special emphasis given to contemporary Mayan, Nahuatl, and Zapotec cultures as well as impact of European civilization on these cultures. Course design as described for ANTH227.

ANTH 229 Chicano Culture 3 credits
This is the third term of a three-term sequence of Anthropology courses which deal with the culture of Americans of Mexican descent. In this term, the focus of the course is on the social and cultural characteristics that define Chicanos as a culturally unique group within American society. Course design as described for ANTH227.

ANTH 231 American Indian Studies 3 credits
First term of a three-term sequence of Anthropology courses dealing with the native cultures of North America, this one focusing on the people and cultures indigenous to the Northeastern and Southeastern states of America. Ojibwa, Iroquois, Creek, and Natchez cultures are emphasized. All three courses draw on a number of different resources: readings, videos, student presentations, works of art, to obtain an understanding of the history and cultural heritage of contemporary native peoples of America in the north and southeastern states.

ANTH 232 American Indian Studies 3 credits
Second term of a three-term sequence of Anthropology courses dealing with native cultures of North America, focusing on the people and cultures indigenous to the Central and Southwestern states of America. Kiowa, Mandan, Navaho, and Zuni cultures are emphasized. Course design as described for ANTH 231 and may be taken out of sequence.

ANTH 233 American Indian Studies 3 credits
Third term of a three-term sequence of Anthropology courses dealing with native cultures of North America. This course focuses on the people and cultures indigenous to America west of the Rockies: California, Pacific Northwest, Plateau, and Great Basin areas. Kwakiutl, Nez Perce, Shoshone, and Pomo cultures are emphasized. Course design as described for ANTH231. May be taken out of sequence.

ANTH 280 Co-op Ed: Anthropology 2-12 credits
This course provides students anthropology-related work experience

in community organizations. Students will have the opportunity to integrate theory and practice gained in the classroom with practical experience in the professional world. In this course students may develop skills, explore career options, and network with professionals and employers while earning credit toward a degree.

Apprenticeship

For information, contact the Advanced Technology Division, Bldg. 15/Rm. 201, 541.463.5496.

APR 101 Trade Skills Fundamentals 4 credits

This course provides an introduction into the apprenticeship industry and the necessary skills required for selection into a specific trade career. Students will explore current trends in Apprenticeship and basic requirements to enter individual programs. Students will become familiar with licensing and certification in a chosen trade. General topics include: industry opportunities and basic concepts in basic safety, trade vocabulary, trade calculations, hand and power tool care and use, blueprint reading, rigging, and materials and handling, in addition to basic communication and employability skills.

APR 101A Trade Skills Fundamentals 4 credits

Designed for Oregon state-recognized apprentices employed in a specific trade. The curriculum is competency-based and modular in format. This course provides the necessary skills required for a variety of trade careers. Students will become familiar with licensing and certification in a chosen trade. General topics include: employability skills and an introduction to construction and maintenance skills used in various crafts. Basic concepts in safety, construction math, hand and power tools, construction drawings, basic rigging, and materials handling are examined in this course.

APR 105 Residential Wiring 4 credits

This course is designed to familiarize the student with work tasks in the electrical construction industry. In this introductory course, the student will learn basic electrical concepts and build basic circuits using physical components of residential electrical systems. The student will study and be introduced to electrical trade tools, equipment and materials.

APR 106 Plumbing Trade Introduction 2 credits

This course is designed to familiarize the student with basic plumbing practices and completion of minor repairs. In this beginning course, basic plumbing concepts and exposure to tools, safety practices, materials, codes, and plumbing opportunities will be explored. This course does not require any previous knowledge or skill in plumbing. For those seeking a career in plumbing, successful class completion may earn points that are recognized by plumbing Joint Apprenticeship and Training Committees in the state of Oregon.

APR 115 Carpentry Skill Fundamentals 3 credits

Designed for Oregon state-recognized apprentices employed in the carpentry trade. The curriculum is competency-based and modular in format. This course introduces students to fundamental concepts and skills required of trades people. Participants will receive training in employability and communication skills, and an orientation to the carpentry trade. This course includes introduction to hand and power tool use, safety, building materials, and blueprint reading.

APR 116 Carpentry Framing Fundamentals 3 credits

Designed for Oregon state-recognized apprentices employed in the carpentry trade. The curriculum is competency-based and modular in format. This course introduces students to math concepts and fundamental construction math concepts utilized by professional carpenters. Floor, wall and ceiling framing systems are presented as well.

APR 117 Carpentry Framing and Introduction to Concrete .3 credits

Designed for Oregon state-recognized apprentices employed in the carpentry trade. The curriculum is competency-based and modular in format. This course introduces students to framing roofs, windows and exterior doors, as well as an introduction to concrete.

APR 118 Carpentry Framing and Finishing 3 credits

Designed for Oregon state-recognized apprentices employed in the carpentry trade. The curriculum is competency-based and modular in format. This course introduces students to framing with steel studs, commercial door installation, and explains how to install and finish drywall.

APR 119 Carpentry Commercial Plans and Exterior Finish ..3 credits

Designed for Oregon state-recognized apprentices employed in the carpentry trade. The curriculum is competency-based and modular in format. This course introduces students to common materials used in residential and light commercial roofing. Application methods, commercial plans, insulation and vapor barrier materials and installation will also be covered, as well as exterior finish materials and application procedures

APR 120 Carpentry Interior Finish 3 credits

Designed for Oregon state-recognized apprentices employed in the carpentry trade. The curriculum is competency-based and modular in format. This course introduces students to the materials, layout, and installation procedures for many types of suspended ceilings. Students will also learn the selection and installation of different trim types used in finish work, layout and installation of basic stairs, as well as methods of proper cabinet installation.

APR 130 Electrical Principles 5 credits

Designed for Oregon state recognized apprentices employed in a trade or industry-related occupation. This course is the first term of the first year of general journeyman inside wire electrician program. Course content will include safety/electrical, electrical theory, Ohm's law, residential wiring, and introduction to the National Electrical Code.

APR 130A Electrical Principles 4 credits

Designed for Oregon state recognized apprentices employed in a trade or industry-related occupation. This course is the first term of the first year of general journeyman inside wire electrician program. Course content will include safety/electrical, electrical theory, Ohm's law, residential wiring, and introduction to the National Electrical Code.

APR 131 Electrical Principles/Residential Wiring 5 credits

Designed for Oregon state-recognized apprentices employed in a trade or industry-related occupation. This course is the second term of the first year of general journeyman inside wire electrician program. Course content will cover basic AC theory, series/parallel circuits, mathematical formulas, conduit bending, use of test equipment, and applicable references to the National Electrical code.

APR 131A Electrical Principles/Residential Wiring 4 credits

Designed for Oregon state recognized apprentices employed in a trade or industry-related occupation. This course is the second term of the first year of general journeyman inside wire electrician program. Course content will cover basic AC theory, series/parallel circuits, mathematical formulas, conduit bending, use of test equipment, and applicable references to the National Electrical code.

APR 132 Electrical Residential Wiring Lab 3 credits

Designed for Oregon state recognized apprentices employed in a trade or industry-related occupation. This course is the third term of the first year of general journeyman inside wire electrician program. This class is designed to cover hands-on demonstration and practicals of basic residential one- and two-family dwellings wiring techniques to include receptacles, services, lighting, wiring, conduit bending, structural wiring, and introduction to residential data communication systems.

APR 133 Electrical Generators, Transformers, and Motors 1..... 5 credits

Designed for Oregon state recognized apprentices employed in a trade or industry-related occupation. This course is the first term of the second year of general journeyman inside wire electrician program which includes technical knowledge of the skills required of an Inside Wire Electrician. General topics include safety/electrical, advanced electrical theory, electrical math, AC theory, motors, generators, and transformer theory, and 3-phase power, and commercial installations and calculations. All course content will include references to applicable NEC Articles.

APR 133A Electrical Generators, Transformers, and Motors 1..... 4 credits

Designed for Oregon state recognized apprentices employed in a trade or industry-related occupation. This course is the first term of the second year of general journeyman inside wire electrician program which includes technical knowledge of the skills required of an Inside Wire Electrician. General topics include safety/electrical, advanced electrical theory, electrical math, AC theory, motors, generators, and transformer theory, and 3-phase power, and commercial

installations and calculations. All course content will include references to applicable NEC Articles.

APR 134 Electrical Generators, Transformers and Motors 2..... 5 credits
Designed for Oregon state recognized apprentices employed in a trade or industry-related occupation. This course is the second term of the second year of general journeyman inside wire electrician program. General topics include safety/electrical, hazardous locations, health care facilities, industrial and commercial wiring, and references to applicable NEC Articles.

APR 134A Electrical Generators, Transformers and Motors 2..... 4 credits
Designed for Oregon state recognized apprentices employed in a trade or industry-related occupation. This course is the second term of the second year of general journeyman inside wire electrician program. General topics include safety/electrical, hazardous locations, health care facilities, industrial and commercial wiring, and references to applicable NEC Articles.

APR 135 Electrical, Generators, Transformers, and Motors Lab 3 credits
Designed for Oregon state recognized apprentices employed in a trade or industry-related occupation. This course is the third term of the second year of general journeyman inside wire electrician program. Course will include hands-on experience in basic wiring of transformers and motors to include identification of motor component leads. Course activities build on those learned in prior courses and enable students to build their skills before being introduced to process control and automation and motor controls.

APR 140 Electrical Systems Installation Methods 4 credits
Designed for Oregon state-recognized apprentices employed in a trade or industry-related occupation. This course explores construction materials and methods used in the installation of limited electrical systems along with the NEC codes that regulate installation. Students will learn a knowledge base consisting of the basic theory, vocabulary and safety practices common to limited electrical installations.

APR 141 Limited Voltage Electrical Circuits 4 credits
Designed for Oregon state-recognized apprentices employed in a trade or industry-related occupation. This course explores the basic laws of electrical theory and the safety practices employed in the limited electrical field. Power quality, trade repairs and installations, and blueprint reading will be reviewed along with the NEC codes that regulate the trade. Students learn a knowledge base consisting of the basic theory, vocabulary and safety practices common to limited energy installations.

APR 142 Testing Equipment and Specialized Applications 4 credits
Designed for Oregon state-recognized apprentices employed in a trade or industry-related occupation. This course focuses on switching devices, wire and cable terminations, and advanced testing equipment used in electronic and information technology disciplines. Emphasis is placed on developing troubleshooting skills and interpreting the National Electrical Code as it applies to installations and maintenance of low voltage systems. Students will gain knowledge of the basic theory, vocabulary and safety practices used in hook ups, testing, computer applications and specialized test equipment common to the Limited Energy Technician trades.

APR 143 Limited Voltage Cabling 4 credits
Designed for Oregon state-recognized apprentices employed in a trade or industry-related occupation. This course explores cable selection buses, network systems and fiber optic communications. An emphasis is placed on connections as used in various video and control systems. Students will gain knowledge of the basic theory, vocabulary and safety practices common to communication and control systems.

APR 144 System Planning and Maintenance..... 4 credits
Designed for Oregon state-recognized apprentices employed in a trade or industry related occupation. This course explores, wireless communications as well as site survey and project planning. An emphasis is placed on the operations and principles involved in troubleshooting and the skills necessary to perform as a successful crew leader. Students will learn basic theory, vocabulary and safety practices common to maintenance and repair, wireless communications and project planning

APR 150 The Millwright and Shop Safety..... 5 credits
Designed for Oregon state-recognized apprentices employed in the millwright industry. This course provides an overview of workplace practices and how to succeed on the job. Course content will include: communication and leadership skills; employee attitudes and safety awareness; personal safety procedures; workplace safety; tools for the job; basic rigging practices; and the wellness of the Millwright.

APR 151 Millwright Machine Theory and Trade Calculations 5 credits
Designed for Oregon state-recognized apprentices employed in the millwright trade. Students will learn trade calculations as they pertain to the millwright industry. This course will provide students with hands-on experience using Mic's, calipers and various precision measuring equipment. Students will gain knowledge in the use of metal lathes, milling equipment, boring, keyway cutting, and other facets of machine work.

APR 152 Millwright: Power Transmissions and Boilers-Steam 5 credits
Designed for Oregon state-recognized apprentices employed in the millwright industry. Course will provide students with an understanding of mechanical power train functions and what makes a mill operational such as: drives, clutches, brakes, and couplers (their functions, applications, and advantages/disadvantages). Students will learn all steam functions and the precautions necessary to be aware of during installations and repairs; the differences in fire tube and water tube systems; and all associated traps, valves, pumps, and reliefs. Discussions will include how they function and what can be serviced by Millwrights and what the requirements are for a steam specialist.

APR 160 Plumbing Skill Fundamentals 4 credits
Designed for Oregon state-registered apprentices employed in the plumbing trade. This course provides an introduction to the necessary skills required for the plumbing trade. Students will learn an overview of the plumbing trade and become familiar with employer expectations. General topics include: basic concepts in safety in the workplace, trade vocabulary, trade math-basic offsets, common tools and materials, plumbing drawings, and introductory overview of the Uniform Plumbing Code (UPC) with Oregon Amendments; administration, definitions and general regulations.

APR 161 Plumbing Materials & Fixtures 4 credits
Designed for Oregon state-registered apprentices employed in the plumbing trade. Introduces student to different types of pipe and fittings used in plumbing applications and reviews applicable safety and code requirements. Students will learn piping system components and the various connection and installation options. Course includes the proper applications of code-approved fixtures and faucets in plumbing installations. Math and science principles in completion of plumbing tasks will be included along with an introduction to tables in the Uniform Plumbing Code.

APR 162 Plumbing Basic Waste Water Systems..... 2 credits
Designed for Oregon state-registered apprentices employed in the plumbing trade. Students will be introduced to the DWV systems, the characteristics of water, how to select proper water pipe size, and explain the principle of backflow prevention. Hot water heaters will be discussed along with hands-on troubleshooting of electric and gas water heaters. Uniform Plumbing Code compliance will also be discussed with reference to specific articles.

APR 163 Plumbing Calculations & Print Reading..... 4 credits
Designed for Oregon state-registered apprentices employed in the plumbing trade. This course reviews methods for finding angles using the Pythagorean Theorem. Students will interpret and use civil, architectural, structural, mechanical plumbing and electrical drawings when installing plumbing systems. Techniques to create isometric drawings, material takeoffs and approved submittal data using will be included. Methods are introduced for attaching and running DWV and water supply piping in relation to structural elements and code requirements.

APR 164 Plumbing Basic Installation 1..... 4 credits
Designed for Oregon state-registered apprentices employed in the plumbing trade. This course includes techniques for installation and testing of water supply piping and basic plumbing fixtures, valves, and faucets. An introduction to the principles of electricity common to plumbing-related electrical applications and review of proper installation and testing techniques and federal guidelines that apply

to water heaters will also be discussed. Code requirements will be included for each section.

APR 165 Plumbing Basic Installation 2.....2 credits
Designed for Oregon state-recognized apprentices employed in the plumbing trade. This course will include review of proper installation and testing techniques that apply to water heaters. Identification, troubleshooting and repair of water heaters, fixtures, valves, and faucets will also be included along with federal guidelines. Code requirements will be included for each section.

APR 170 Introduction to Sheet Metal Apprenticeship.....4 credits
Designed for Oregon state-recognized apprentices employed in the sheet metal trade. The course content will include introduction to the sheet metal trade, trade terminology, safe working habits, and basic tools and equipment for forming and installing sheet metal air ducting. Students will obtain a basic understanding of duct layout principles.

APR 171 Sheet Metal Basic Layout.....4 credits
Designed for state-recognized apprentices employed in the sheet metal trade. Course is an introduction to shop equipment and safety; and shop hand tools required for the course. Students will gain knowledge in sheet metal working drawings and blueprints. General topics include: basic layout, techniques, and modification of duct work and fittings.

APR 172 Sheet Metal/HVAC/R Blueprint Reading.....3 credits
Designed for Oregon state-recognized apprentices employed in the HVAC/R or sheet metal trades. The course content includes introduction to specifications, submittals, blueprint reading, drafting blueprints, scaling existing buildings and drafting architectural components and mechanical systems.

APR 201 Carpentry Basic Rigging and Practices.....3 credits
Designed for Oregon state-recognized apprentices employed in the carpentry trade. The curriculum is competency-based and modular in format. This course introduces students to the basic equipment and hardware used in rigging. An overview of personnel lifting, lift planning and crane load charts will also be introduced along with handling and placing of concrete and the preparing of the student for working in and around excavations.

APR 202 Carpentry Concrete Practices.....3 credits
Designed for Oregon state-recognized apprentices employed in the carpentry trade. The curriculum is competency-based and modular in format. This course introduces students to different types of reinforcing materials, including cutting, bending and splicing, concrete joint sealants, and form removal procedures. In addition, students will learn procedures and techniques for both deep and shallow foundations, as well as those required for slab-on-grade concrete work.

APR 203 Carpentry Forms and Tilt-up Panels.....3 credits
Designed for Oregon state-recognized apprentices employed in the carpentry trade. The curriculum is competency-based and modular in format. This course introduces students to the applications and construction methods for various types of forming and form hardware systems utilized in both vertical and horizontal concrete formwork. Students will also learn the methods and materials utilized in the construction of tilt-up wall panels, including forming, rebar, and embedments, as well as architectural and decorative finishes.

APR 204 Carpentry Advanced Layout and Building Systems.....3 credits
Designed for Oregon state-recognized apprentices employed in the carpentry trade. The curriculum is competency-based and modular in format. This course introduces students to the equipment, layout and methods to perform distance measurement and leveling. Students will also learn the structures, materials and procedures for installing commercial roofing, as well as the varieties of, and installation procedures for commercial wall systems.

APR 205 Carpentry Advanced Planning and Management..3 credits
Designed for Oregon state-recognized apprentices employed in the carpentry trade. The curriculum is competency-based and modular in format. This course introduces students to welding equipment, procedures and safety, specialized interior and exterior finish materials, and the construction planning process. Management topics are also discussed, specifically, scheduling, estimating, and supervisory skills.

APR 206 Carpentry Equipment and Site Layout.....3 credits
Designed for Oregon state-recognized apprentices employed in the carpentry trade. The curriculum is competency-based and modular in format. This course introduces students to various pieces of light construction equipment commonly used at construction sites. Students will also learn the principles, equipment, and methods used to perform site layout tasks that require making angular measurements and provide extensive coverage of the materials and techniques used in finishing wooden staircases.

APR 210 HVAC Systems 1.....4 credits
This is the first course of a three term sequence in HVAC theory and application. This first term identifies basic systems common to this industry with emphasis on specialized control systems, including HVAC, boiler, clock and instrumentation. In addition, concepts in geothermal technologies will be explored. This class is designed for Oregon state-recognized apprentices working in the HVAC/R trade.

APR 211 HVAC Systems 2.....4 credits
This is the second course of a three term sequence in HVAC theory and application. Course focuses on the design of HVAC residential and commercial systems. Emphasis will be placed on the 'sizing' of HVAC systems for specific applications. In addition, soldering and brazing will be covered, along with techniques of fusing copper, brass, and plastic. This class is designed for Oregon state-recognized apprentices employed in the HVAC/R trade.

APR 212 HVAC Systems 3.....4 credits
This is the third course of a three term sequence in HVAC theory and application. This course covers operational characteristics, service, and maintenance of gas, water, oil, air, vacuum pumps, and compressors. Students will learn how to troubleshoot mechanical problems, pneumatic controls and control valve components and perform heat pump installation. This class is designed for Oregon state-recognized apprentices working in the HVAC/R trade.

APR 220 Electrical Apprenticeship Code and Exam Preparation.....2-3 credits
Designed for Oregon state-recognized apprentices employed in a trade or industry related occupation. This course is designed to instruct students in techniques for interpreting and understanding the National Electrical Code (NEC). Students will participate in practice exams to illustrate the development and layout of the NEC. APR 220 is presented in 2 or 3 credit blocks preparing students for the electrical licensing examination administered by the State of Oregon Building Codes Division.

APR 225 Electrical Motor Controls.....5 credits
Designed for Oregon state-recognized apprentices employed in a trade or industry-related occupation. This is the first term of the third year of the general journeyman inside wire electrician Apprenticeship related training. This course will provide students with an introduction into motor controls, contactor, aux contactors, relays, relay logic, and basic human/machine interface.

APR 225A Electrical Motor Controls.....4 credits
Designed for Oregon state-recognized apprentices employed in a trade or industry-related occupation. This is the first term of the third year of the general journeyman inside wire electrician Apprenticeship related training. This course will provide students with an introduction into motor controls, contactor, aux contactors, relays, relay logic, and basic human/machine interface.

APR 226 Electrical Grounding/Bonding and Blueprint Reading.....5 credits
Designed for Oregon state-recognized apprentices employed in a trade or industry-related occupation. This course is the second term of the third year of general journeyman inside wire electrician Apprenticeship related training. General topics include safety/electrical safety, electrical theory, electrical math, grounding and bonding fundamentals, blueprint reading and sketching, and basic electrical design.

APR 226A Electrical Grounding/Bonding and Blueprint Reading.....4 credits
Designed for Oregon state-recognized apprentices employed in a trade or industry-related occupation. This course is the second term of the third year of general journeyman inside wire electrician Apprenticeship related training. General topics include safety/electrical safety, electrical theory, electrical math, grounding and bonding fundamentals, blueprint reading and sketching, and basic electrical design.

APR 227 Electrical System Troubleshooting 3 credits
Designed for Oregon state-recognized apprentices employed in a trade or industry-related occupation. Course will include hands-on training to introduce students to concepts of electrical systems troubleshooting. Students will identify faults using digital multi-meters and troubleshooting concepts.

APR 228 Apprenticeship Blueprint Reading 3 credits
Designed for Oregon state-recognized apprentices employed in a trade or industry-related occupation. The student will learn to interpret drawings used in the electrical trades. This class emphasizes the fundamentals of blueprint reading and includes electrical symbology, views, symbols, and notations for blueprints. Students will learn an overview of various topics including: civil, architectural, electrical, mechanical-as they apply to practical drawings.

APR 240 Alarm Systems 4 credits
Designed for Oregon state-recognized apprentices employed in a trade or industry-related occupation. This course explores the theory and safety practices employed in fire alarm and intrusion detection systems along with the NEC codes that regulate their use and installation. Students learn basic theory, vocabulary and safety practices common to alarm systems.

APR 241 Audio and Signaling Systems 4 credits
Designed for Oregon state-recognized apprentices employed in a trade or industry-related occupation. This course explores the theory and safety practices employed in audio, nurse call, CCTV and Broadband systems along with the NEC codes that regulate their use and installation. Students will gain knowledge consisting of the basic theory, vocabulary and safety practices common to audio and nurse call systems.

APR 242 Limited Voltage System Integration 4 credits
Designed for Oregon state-recognized apprentices employed in a trade or industry-related occupation. This course explores the theory and safety practices employed in access control systems and media management systems along with methods of system integration and user training. Students will learn a knowledge base consisting of the basic theory, vocabulary and safety practices common to control and media management systems, and systems integration.

APR 250 Millwright: Industrial Print Reading, Schematics, and Estimating 5 credits
Designed for Oregon state-recognized apprentices employed in the millwright industry. Course will include a review of orthographic projection, isometric, and schematic drawings used to show piping, hydraulic, and pneumatic systems, industrial automation, and conveyor system. Discussion and lab work will include an overview of several types of prints, their symbols and abbreviations, the components that make up a print and the various lines used within them. Students will practice take-off's and bid proposals by using various sets of industrial prints to provide cost estimations.

APR 251 Millwright: Pneumatics and Lubrications 5 credits
Designed for Oregon state-recognized apprentices employed in the millwright industry. This course is a comprehensive view of pneumatics where power is derived from the use of a gas, usually air. Topics will include pneumatic applications that require quick response, low and moderate precision, lower power and light to moderate load capacity requirements and the similarities and differences that pneumatics share with hydraulics. An overview of the special requirements of lubes and lubrication systems will be examined along with the various shapes and construction of bearings; their applications and specifications.

APR 252 Hydraulics for Millwrights 5 credits
Designed for Oregon state-recognized apprentices employed in the millwright industry. Students will gain an understanding of the functions of today's hydraulic systems and components, components specification for certain applications, and theory and formulas for verifying these results. Students will perform hands-on review and troubleshooting of components, such as fluids, valves, pumps and motors.

APR 253 Millwright Piping Systems 5 credits
Designed for Oregon state-recognized apprentices employed in the millwright industry. This course is an overview of piping systems and various types of pipe that contribute to each type of system. Students will learn construction piping systems along with ancillary components and how they differ. The course will also cover

schematics for piping systems and methods of clamping, hanging and supporting them. Tube bending and how to make it fit and look good will also be discussed.

APR 260 Plumbing Water Supply Systems 4 credits
Designed for Oregon state registered apprentices employed the plumbing trade. Course provides applied math concepts that include geometry, instruction on how to size water piping in all applications and treatment of potable water for private and public water systems. Sizing waste and vent piping, installing water heaters, diagnosing gas and electric water heaters will also be explored in this third year course. General topics include: safety in the workplace, trade math-basic offsets, plumbing tools, code definitions, and hands-on troubleshooting with plumbing. This course will also cover an overview of the Uniform Plumbing Code (UPC) with Oregon Amendments; administration, definitions and general regulations.

APR 261 Plumbing Piping Sizing and Systems 4 credits
Designed for Oregon state-registered apprentices employed in the plumbing trade. This course introduces the principles and hazards of backflow prevention, reviews different types of vents that can be installed in a drain, waste and vent system, sewage pumps, sump pumps, corrosive waste, and safety issues. In addition, this course covers sizing drain, waste, vent (DWV), and indirect waste piping.

APR 262 Plumbing Advanced Waste Systems 2 credits
Designed for Oregon state-registered apprentices employed in the plumbing trade. This course will cover sizing and installation of gas piping with additional hands on instruction. Sizing of storm drainage, green plumbing, rain water harvesting, and gray water harvesting will be reviewed. The course will also cover compressed air line installation, sizing and troubleshooting.

APR 263 Plumbing Code and Test Preparation 2-3 credits
Designed for Oregon state-recognized apprentices employed in the plumbing trade. This course is a comprehensive review of the Uniform Plumbing Code and theory of plumbing to prepare students for the Oregon Building Codes Journey level Plumbing exam.

APR 270 Architectural Sheet Metal 4 credits
Designed for Oregon state-recognized apprentices employed in the sheet metal trade. Students will study architectural sheet metal in the context of today's industry. The course will include discovery of various types of materials, profiles of roofing panels, water conductors, various types of roof flashings, related trades that are integral with this trade. The philosophy of layout in the field and the application of actual installations, safety equipment and practices applicable to this trade are also discussed.

APR 271 Sheet Metal Building Codes and Installation 4 credits
Designed for Oregon state-recognized apprentices employed in the sheet metal trade. This course is an overview of the mechanical codes as related to the HVAC industry in commercial and residential applications. In addition, installation manuals will be explored as to proper installation and usage of HVAC equipment.

APR 272 Sheet Metal Duct Design 4 credits
Designed for Oregon state-recognized apprentices employed in the sheet metal trade. The course content will include introduction to duct design, different styles of duct design, and multi-level duct system design. Other topics included in this course are: Heat loss, heat gain calculations, and instruction of use of duct calculators.

APR 273 General Sheet Metal Fabrication 4 credits
Designed for Oregon state-recognized apprentices employed in the sheet metal trade. This course is the study of the sheet metal trade as it is applied to general-needs metal work. The work studied is that outside of the traditional HVAC and architectural scope as studied in previous terms with a broader base of skills to be learned, such as custom decorative and artistic finished products.

APR 274 Sheet Metal Shop Fabrication 4 credits
Designed for Oregon state-recognized apprentices employed in the sheet metal trade. This course will provide students with an understanding of project planning techniques, principles of efficient shop layout; and knowledge of parallel line, radial line, and triangulation pattern development.

APR 275 Sheet Metal Project Supervision 4 credits
This course is an introduction to construction management skills as they apply to project supervision. Course content will include human relations and interpersonal skills, safety, problem solving

and negotiation techniques, construction documents, estimating and planning, and scheduling and quality control.

Architecture—See Drafting

Art History

For information, contact the Art and Applied Design Department, Bldg. 11/Rm. 101, 541.463.5409.

ART 111 Introduction to Visual Arts.....3 credits
Introduction to the spectrum of art from Paleolithic cave paintings to contemporary works through a combination of slide lectures, discussions, gallery/museums/public art visits, and student projects. This course expands your artistic, cultural, and historical references, as well as informs and enhances your own creative endeavors.

ART 113 History of Photography 1: 1700-1910.....3 credits
Explores photography from its origins in 18th century experiments to developments up to the beginning of the 20th century. Course modules examine the development of specific types of photography and how each type influenced worldviews. Photographs are examined in both cultural and critical terms, allowing students to think critically about photographs as well as their place in society. The course may be taught via distance learning. It requires the student to develop information literacy skills, as well as to improve basic research and writing skills.

ART 200 Graphic Design History.....3 credits
A team-taught interdisciplinary approach to graphic design history and its relationship to traditional art. Students examine the chronology and development of graphic design within a social context, through an exploration of styles, movements, and individual careers. Emphasis is on mid-19th century design to the present. Open to all students and required for graphic design majors.

ART 202 Survey of Western Art.....3 credits
An introduction and examination of works of art that have come to define the Western visual tradition from the 5th century B.C.E. Ancient Greece and Rome to the 20th century Modern Era. May be offered online.

ART 203 Survey of American Indian Art and Architecture: North and Central America.....4 credits
A survey of the artistic traditions of the native cultures from the Arctic to South-Central America. Works and sites are used to explore the various cultures of pre-Columbian America and the continuing traditions of ancestral peoples. Cultures explored will include the Mayan, Aztec, Inuit, and major nations of prehistoric and modern Canada and the United States.

ART 204 History of Western Art.....3 credits
Historical survey of the visual arts from prehistory to the fall of the Roman Empire. Examines the role of art within emerging cultures and civilizations, the relationship of art to social, political and philosophical contexts, and connections of past art and culture to the present.

ART 205 History of Western Art.....3 credits
Historical survey of the visual arts from the early Christian era through the High Renaissance in Europe. Examines the relationship of art to religion within a social, historical, political and philosophical context, and explores how these connections relate to the present.

ART 206 History of Western Art.....3 credits
Historical survey of the visual arts from the 16th to the late 19th century, with an emphasis on the Western world. Examines the role of art in the emergence of modern societies and nations, and how political and philosophical contexts are revealed in art, and explores how these connections relate to the present.

ART 207 Arts of India.....3 credits
A survey of the art and architecture of south-central Asia from the Indus Valley Civilization to the Colonial Period. Works and monuments are used to explore the traditions and contexts of Indian art and history, with a particular look at the art of Buddhist, Hindu, and the Mughal cultures.

ART 208 Arts of China.....3 credits
A survey of the art and architecture of China from the neolithic era to the 18th century. Works and monuments are used to explore the traditions and contexts of Chinese and East Asian culture throughout its history. Major topics include Chinese archaeology, Imperial

Chinese culture, religious and philosophical traditions such as Daoism and Confucianism, the impact of Buddhism, Chinese architectural forms, and ink painting and landscape traditions.

ART 209 Arts of Japan.....3 credits
A survey of the art and architecture of the Japanese islands from the ancient Jomon culture to the 19th century. Works and monuments are used to explore the traditions and contexts of Japanese culture as it developed throughout its history. Major topics include ancient pottery, the emergence of the Japanese state and imperial culture, the impact of Buddhism, Japanese architectural forms, the shogunates and warrior culture, and the interchanges between Japan and other cultures. May be offered online.

ART 211 Early Modern Art: 1850-1910.....3 credits
Historical survey of the development of early "modern" art from the mid-19th century to the beginning of the 20th century. Examines major styles, monuments and artists within their cultural context, including Impression, Post Impression and Cubism. Explores the impact of these artistic developments on later art and society.

ART 212 Twentieth-Century Art.....3 credits
Historical survey of 20th-century art. Examines key artist, styles and movements within a social, philosophical and political context. Course emphasizes developments during first half of the century, but which inform the visual arts today. Includes presentations by practicing artists to provide connections to art in our current time.

ART 213 History of Photography 2: 1910-1950.....3 credits
An exploration of the origins of photography from 1910 to 1950. Course modules explore the development of specific types of photography, and how they influenced the worldviews. Photographs are examined in cultural and critical terms, allowing students to think critically about photographs as well as their place in a society. The course may be taught via distance learning, and requires the student to develop information literacy skills, as well as to improve basic research and writing skills.

ART 214 Arts of the United States.....3 credits
A historic study of the artistic traditions of the United States from the Colonial period to the early modern era. Works are used to investigate the cultural traditions of the country as they reflect its growth and development. Major topics will include Colonial portraiture, landscape and place in 19th century art, nationalism and historical moments, the West as a cultural idea, the impact of industrialism and urban culture, and early developments in modernism. May be offered online.

ART 217 Islamic Art.....3 credits
A survey of the art and architecture of Islamic cultures from its beginnings to the modern era. Works and monuments are used to explore the traditions and contexts of Islamic culture throughout the world. Major topics include the development of Islam and its artistic forms, regional variations of Islamic art, the intermingling of Islamic and non-Islamic cultures, and Islamic decorative traditions.

Art, Studio

For information, contact the Art and Applied Design Department, Bldg. 11/Rm. 101, 541.463.5409.

ART 115 Basic Design: Fundamentals.....3 credits
Beginning course in two-dimensional design for art and non-art majors. Emphasis is on fundamental visual elements, concepts, and theory that are basic to drawing, painting, graphic design and other media. Strongly recommended for first year art majors, taken prior to ART116 and concurrently with ART111 and ART131.

ART 115_H Basic Design: Fundamentals.....3 credits
This is an honors class open to any student prepared to complete honors-level coursework. Honors classes delve deeper into course topics and require a high level of student motivation; the pace may be faster than non-honors courses. WR 121-readiness (score of at least 96 on the sentence-skills placement test) recommended. See lanec.edu/honors for more information. Beginning course in two-dimensional design for art and non-art majors. Emphasis on fundamental visual elements, concepts and theory basic to drawing, painting, graphic design and other media. Strongly recommended for first year art majors, taken prior to ART116 and concurrently with ART111 and ART131.

ART 116 Basic Design: Color 3 credits
Beginning course on color for art and non-art majors. Emphasis is on fundamental visual concepts, theory, and application of color in two-dimensional and three-dimensional artworks including painting, graphic design, sculpture, fiber arts, and printmaking. Strongly recommended students first take ART 115.

ART 117 Basic Design: 3-Dimensional 3 credits
Beginning course on the fundamental principles of three-dimensional design for art and non-art majors. Studio projects explore basic elements such as mass, physical texture, space, delineation of space, and planes in space. A foundation course for students interested in ceramics, sculpture, architecture, and other three-dimensional design fields.

ART 118 Artist Books and Pop-up 4 credits
Students learn to construct a variety of basic folded and stitched book structures, as well as pop-up techniques. Classes focus on design process, conceptual development and typographic layout. Students also learn the history of the book form throughout the world, movable books, artist's books and fine press books.

ART 131 Introduction to Drawing 3 credits
Beginning course for art and non-art majors. Emphasis on concepts of drawing and developing skills in observation to describe three-dimensional objects on two-dimensional surfaces. This course or equivalent ability level is a prerequisite for many 200-level studio courses. Recommend art majors take concurrently with ART 115. Repeatable.

ART 134 Field Drawing 4 credits
Introduces students to drawing and visual note-taking techniques used for representing natural systems. Most classes will meet at one of the many diverse natural systems in the southern Willamette Valley. Class time consists of a tour and lecture about that day's site, and field drawing with one-on-one discussion and critique with the instructor. All levels of drawing ability are welcome in the course. This course is suitable for students in Art, drafting, engineering, the natural sciences, ecology, and landscape design, as well as naturalists and birders.

ART 231 Drawing: Intermediate 3 credits
Art 131 or instructor permission by portfolio. Develops basic drawing skills of observation, selection, representation, perception, and hand-eye-mind coordination, with an emphasis on composition and understanding visual form. Examines visual concepts and theory within historical and cultural contexts. This course is recommended before taking any 200 level painting or printmaking course. Repeatable.

ART 232 Drawing: Perspective 3 credits
Prerequisite: ART 131. Explores principles of perspective drawing and visual problem solving using various media and subjects. It includes the study of interior-exterior space using isometric, one-point, two-point, and three-point perspective systems, elliptical graduation, aerial perspective, and atmospheric perspective. Studies will be done in various media. This course is helpful training for prospective students in Graphic Design, Multimedia and Architecture. Repeatable.

ART 234 Drawing: Figure 3 credits
Prerequisite: ART 131. Explores complex form relationships in value and space through drawing the human figure. It develops understanding of basic anatomical structure, proportion, and foreshortening. Students develop skills in compositional techniques and individual expression, and also examine the portrayal of the figure through historical context. Repeatable.

ART 245 Drawing for Media 4 credits
Teaches drawing techniques and practices valuable to a career in media from concept to finished product, the ability to develop and communicate ideas visually and essential skill for media professionals. Students work with materials and learn methods used in concept development, design, and production. Drawing will be integrated into the visualization process through the production of concept sketches, thumbnails, and storyboards.

ART 247 Site Specific Sculpture 3 credits
An introduction to the historic and contemporary trend toward site-specific sculpture making, including low impact green sculpture, temporary work, large-scale public work, urban planning, and installations. Students work through the entire process of creating a

site-specific artwork from formulating a concept, planning, budgeting and timeline, construction logistics, installation, and presentation. Repeatable.

ART 248 Stone Sculpture 3 credits
For the beginning student who desires to learn the art of stone carving. Historical and contemporary stone sculpture is studied as a basis for understanding the medium. Students experience the entire process of creating a stone sculpture: choosing the stone, developing a design, making simple hand-carving tools, mastering the use of power carving tools, finishing and display of the completed work. Regular discussions and critiques of class work is used to further understand technical and formal considerations in the work. Repeatable.

ART 250 Ceramics: Hand Building 3 credits
Introduces the materials, methods, and techniques of pottery design and construction. Emphasis on basic hand building skills, simple glaze application, and an understanding of fundamental pottery processes. It also includes the development of basic hand-eye-mind coordination for good form making, an introduction of historical, cultural, and modern trends and ideology. Students should plan on at least one term of this course and/or Ceramics: Wheel Throwing ART 251 before advancing to Ceramics: Intermediate ART 253. Repeatable.

ART 251 Ceramics: Wheel Throwing 3 credits
An introductory ceramics course designed for the student with no previous pottery training. Emphasis is on basic pottery wheel skills, simple glaze application, and an understanding of the fundamental pottery processes. Also the development of basic hand-eye-mind coordination for good form making, and an introductory exploration of historical, cultural, and modern trends and ideology. Student should plan on at least one term of this course and/or Ceramics: Hand Building ART 250 before advancing to Ceramics: Intermediate ART 253. Repeatable.

ART 253 Ceramics: Intermediate 3 credits
Prerequisite: ART 250 and ART 251. Enhancement of ceramic wheel-throwing and hand building skills. An introduction to complex thrown and handbuilt forms with attention to good visual resolution, as well as the understanding of glaze formulation, testing, and kiln firing. Students will enhance their pottery decoration techniques, and conduct an in-depth exploration of historical, cultural, and modern trends and ideology in ceramics. Repeatable.

ART 266 Off-Loom Fibers 3 credits
Traditional and contemporary applications in fiber arts. Provides the opportunity to study non-woven textile processes. The content emphasizes a different focus from term to term, including natural and synthetic dyeing; two-and three-dimensional fiber construction; felt-making, papermaking, and fabric printing; resist techniques of surface design; and chemical and mechanical techniques to manipulate cloth.

ART 270 Printmaking, Intaglio 3 credits
A beginning level course in Intaglio Printmaking, including etching, aquatint, drypoints, and engravings. Students explore the techniques involved in intaglio and design and create original edition prints. A variety of metal etching techniques are introduced, as well as the aesthetics and history of printmaking. Repeatable

ART 271 Printmaking, Relief 3 credits
A beginning level course in relief printing, including woodcut or linoleum cut. Students explore techniques involved in relief printmaking and design and create original edition prints. Single block, multiple block, and reduction block techniques are introduced, as well as the aesthetics and history of printmaking. Repeatable.

ART 272 Printmaking, Monotype and Collograph 3 credits
A beginning level course in monotype and collage plate printmaking. Students explore techniques involved in creating original prints. A variety of monotype and collage plate techniques are introduced as well as the aesthetics and history of printmaking. Repeatable.

ART 273 Intermediate Intaglio Print 3 credits
Prerequisite: ART 270 A course on multiple plate and other color intaglio techniques. Explores traditional as well as contemporary issues in intaglio printmaking. The objective of this course is to give students wanting to continue with intaglio printmaking a structured, in-depth, form of study. Repeatable.

ART 274 Intermediate Relief Printmaking.....3 credits
Prerequisite: ART 271. A course in intermediate level printing techniques. It explores traditional as well as contemporary issues in Relief printmaking. The class is an in-depth study for students wanting to continue with Relief printmaking. Repeatable.

ART 275 Silkscreen.....3 credits
A focus on traditional and experimental techniques using water-based inks, and emphasizes both skill development and personal image making. Students explore established and contemporary issues in screen-printing. The objective of this course is to provide students with a strong foundation in this medium. Repeatable.

ART 276 Sculpture: Introduction 3 credits
A beginning course for students without prior training in sculpture. Explores fundamentals of sculptural processes and their aesthetic and theoretical considerations. Emphasizes development of hand-eye-mind coordination skills, understanding space and form, and the techniques of tool usage. Students complete a project in each basic process. Repeatable.

ART 277 Sculpture: Welding.....3 credits
An intermediate-level sculpture class emphasizing the process of metal welding fabrication. This course focuses on the techniques of oxy-acetylene welding, shielded metal arc welding, and gas metal arc welding, as well as the aesthetics of fabricated metal sculpture. Repeatable.

ART 278 Sculpture: Wood.....3 credits
A beginning-level course designed to strengthen and develop the student's initial capability in sculpture. Specific emphasis is on exploring wood construction and carving techniques, and their application in making sculpture. Recommended prerequisite: ART 276 or ART 117. Repeatable.

ART 279 Figure Exploration.....3 credits
An intermediate-level course in the study of the human form and portraiture. Emphasis is on theory and concepts of shape, form, value, and composition in a variety of media. There are opportunities for studies in bas-relief sculpture, printmaking, and painting. Repeatable.

ART 280A Co-op Ed: Art and Applied Design 3-12 credits
This course offers career-related work experience in community businesses and organizations. The student may have the opportunity to integrate theory and practice gleaned in the classroom with practical experience in the professional world. Please contact art cooperative education coordinator before attempting to register.

ART 281 Painting: Introduction.....3 credits
Prerequisite: ART 131, ART 115, and ART 116. A beginning level course in using oil or acrylic media. Emphasis is on basic technical skills of painting, physical properties and manipulation of materials, painting concepts, and the art historical context. Students gain an understanding of composition and color necessary for intermediate-level painting courses. Repeatable.

ART 284 Painting: Intermediate 3 credits
Prerequisite: ART 281 and ART 131. An intermediate-level course in oil painting. It further expands the student's knowledge of composition and technique. A series of structured exercises are introduced to develop personal expression. Subject matter may emphasize figure or landscape. See 'notes' for course emphasis. Repeatable.

ART 285 Advanced Silkscreen.....3 credits
Prerequisite: ART 275. Advanced and contemporary screen-printing techniques and theory. The curriculum builds on basic skills by focusing on the continued and enhanced development of traditional and progressive techniques. Students will study application of water-based inks and fabric dyes, emphasizing the development of both skill and personal image making. This course also introduces applied computer and modern technology in screen-printing. The objective of this course is to provide students with the opportunity to develop and enhance a comprehensive foundation in the medium. Repeatable.

ART 291 Sculpture: Metal Casting.....5 credits
Designed for students with prior sculpture training who desire to learn the method and theory of the lost-wax foundry casting process. Students will gain the experience of using wax as the direct sculptural medium, preparing the sculpture for casting, and the foundry processes of burnout, melting, and pouring. Repeatable.

ART 293 Sculpture: Figure.....3 credits
Intensive study of the human figure in three dimensions using live

models. Emphasis on the study and theory of anatomy, proportion, and gesture. Projects are developed from modeled clay over wire armatures and may be completed in fired terra cotta. Repeatable.

ART 294 Watercolor: Introduction 3 credits
Prerequisite: Art 131 recommended. A beginning course for students without training in the watercolor medium. Introduces basic technical skills of painting, the physical properties and manipulation of the materials, visual theory of composition, and color theory. Repeatable.

ART 295 Watercolor: Intermediate 3 credits
An intermediate level course in the technique and use of transparent watercolor. Students further develop technical skills, personal expression, and understanding of visual theory. Subject matter may emphasize figure or landscapes. See 'notes' for course emphasis. Repeatable.

Astronomy—See Physics

Audio—See Media Arts

Auto Collision and Refinishing

For information, contact the Advanced Technology Division, Bldg. 15/Rm. 201, 541.463.5380.

AB 132 Beginning Auto Paint.....1-12 credits
Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Theories and principles used in the auto paint industry. Included: fundamentals of surface preparation, spray guns and their use, sanding materials, undercoats, basic application of color coats, and masking.

AB 133 Beginning Auto Collision.....1-12 credits
Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Theories and principles used in the collision repair industry. Fundamentals of automobile construction; basic auto sheet metal work; minor auto body repair; body alignment; welding equipment and its uses; and basic panel replacement and adjustments.

AB 134 Paint and Collision 1-6 credits
Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Theories and principles used in the auto paint and collision industry. Technical information and shop projects to apply and understand auto collision and paint shop work and safety procedures; hand tools; power tools; compressed air supply equipment; restoring corrosion protection; auto collision and paint nomenclature; abbreviations used by technicians and estimators; and estimating auto body and refinishing costs. Major students should enroll in 6 credits per term for three terms. AB 134 consists of a total of 18 credits (330 hours).

AB 260 Intermediate Auto Painting.....1-12 credits
Prerequisite: AB 132 Theories and principles used in the auto paint industry. Technical information and shop projects to apply and understand surface preparation, undercoats, intermediate application of color coats, intermediate masking, and refinishing equipment.

AB 261 Intermediate Auto Collision 1-12 credits
Prerequisite: AB 133 Theories and principles used in the collision repair industry. Technical information and shop projects to apply and understand fundamentals of automobile construction; intermediate auto sheet metal work; minor auto body repair; intermediate body alignment; welding equipment and its uses; intermediate panel replacement and adjustments; and miscellaneous body shop repairs.

AB 262 Advanced Auto Paint 1-12 credits
Prerequisite: AB 132 And AB 260 Theories and principles used in the auto paint industry. Technical information and shop projects to apply and understand application of two-part urethane primers and epoxies; refinishing materials; advanced application of color coats; advanced masking; choosing and matching paint; painting plastic parts and finishing touches; and custom painting.

AB 263 Advanced Auto Collision 1-12 credits
Prerequisite: AB 133 And AB 261 Theories and principles used in the collision repair industry. Technical information and shop projects to apply and understand diagnosis of major collision damage; advanced panel replacement and adjustments; advanced body alignment; analyzing mechanical components; and repairing auto plastics.

AB 280 Co-op Ed: Auto Body and Fender 3-12 credits

This course provides students with auto body-related learning in community businesses. Students will have the opportunity to integrate theory and practice gained in the classroom with practical experience in the professional world. Students will develop skills, explore career options and network with professionals and employers while earning credit toward a degree.

Automotive

For information, contact the Advanced Technology Division, Bldg. 15/Rm. 201, 541.463.5380.

AM 143 Brakes 1-8 credits

Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Braking systems found on passenger cars and light trucks. Design, function, diagnostic and repair procedures, including theory and laboratory experience in brake system fundamentals, brake safety, master cylinders, power-assist units, hydraulic lines and valves, disc brakes, drum brakes, antilock braking systems, parking brakes, and brake electrical and electronic components.

AM 145 Engine Repair 1-12 credits

Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Engines found in passenger cars and light trucks. Design, function, diagnostic and repair procedures for cylinder heads, engine blocks and internal parts, lubrication and cooling systems, gaskets and seals, and measurement and machining procedures commonly performed in repair shops.

AM 147 Suspension and Steering 1-6 credits

Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Design, function, diagnosis, repair and replacement of steering and suspension components used in passenger cars and light trucks including wheel balancing, front-end alignment, and shock absorber service.

AM 149 Manual Drive Trains and Axles 1-6 credits

Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Manual transmissions and transaxles and other drive train components. Included are design, function, diagnosis, service and overhaul procedures for manual transmissions, differentials, clutches, drive shafts and axles. Also covered are four wheel drive and all wheel drive components.

AM 242 Automatic Transmissions/ Transaxles 1-12 credits

Prerequisite: AM 147 AND AM 149. Automatic transmissions and transaxles used in passenger cars and light trucks. Design, function, diagnosis, service and overhaul procedures, principles of hydraulics as applied to automatic transmissions, planetary gear theory and principles, torque converter design and function, and basic electronic controls.

AM 243 Electrical and Electronic Systems 1-12 credits

Prerequisite: Minimum reading score of 68 OR RD 0080 OR Prior College. Automotive electrical and electronic systems. Theories and principles used to operate, diagnose, test, and repair systems. Included: basic theories; electric components; wiring and circuit diagrams; automotive batteries; DC motors and the starting systems; charging systems; ignition systems; lighting circuits; conventional analog instrumentation, indicator lights, and wiring devices; electrical accessories; introduction to body computer systems; advance lighting circuits and electronic instrumentation; and chassis electronic control systems.

AM 244 Engine Performance 1-12 credits

Prerequisite: AM 145 And AM 243. Automotive engine systems. Theories and principles used to operate, diagnose, test, and repair systems. Included: engine design and operation; engine cooling and lubrication systems; intake and exhaust systems; introduction to engine tune-up; computers and input sensors; ignition systems; conventional and computer controlled carburetors; electronic fuel injection systems; vehicle emission control systems; scope and gas analysis; and turbo chargers and super chargers.

AM 245 Introduction To Hybrid Electric Vehicles 4 credits

Prerequisite: AM 242 and AM 243 and AM 244 and AM 246 or 2 years work history in industry. This class will provide a comprehensive system overview of Hybrid Electric Vehicles HEV's. This course is designed to help students gain an understanding of the basic operating principles, maintenance and servicing of HEV's.

AM 246 Heating and Air Conditioning 1-4 credits

Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Automotive heating and air conditioning systems. Theories and principles used to operate, diagnose, test, and repair systems. Included: temperature and pressure fundamentals; the refrigeration system; system components; compressors and clutches; system servicing, testing, and diagnosing; case and duct systems; retrofit CFC-12 to HFC-134a; system controls; and engine cooling and comfort heating systems.

AM 280 Co-op Ed: Automotive 3-12 credits

This course provides automotive-related work experience in community businesses and organizations. The student will have the opportunity to integrate theory and practice gained in the classroom with practical experience in the professional world. In this course a student may develop skills, explore career options and network with professionals and employers while earning credit toward a degree.

RTEC 100 Basic Career Technical Skills 2-6 credits

This course explores the basic skills for entering technical careers such as mechanics, manufacturing, aviation, electronics, etc. The course includes; safety, math, tools, basic electricity, basic hydraulics, employability skills, rigging, blue prints, and communication. Students may not receive credit for both RTECH 100 and APPR 101.

Aviation Maintenance

Also see Flight

For information, contact the Advanced Technology Division, Bldg. 15/Rm. 201, 541.463.5380.

AV 192 General 101 1-6 credits

Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Basic physics, aircraft drawings, mechanic privileges and limitations, and materials and processes. Technical information and laboratory projects to apply and understand theories, principles, and concepts.

AV 193 General 102 1-6 credits

Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Maintenance publications, maintenance forms and records, ground operation and servicing, fluid lines and fittings, cleaning and corrosion control, and airframe and engine inspection. Technical information and laboratory projects to apply and understand theories, principles, and concepts.

AV 194 General 103 1-6 credits

Prerequisite: RD 080 or minimum reading score of 68 or Prior College. Basic electricity. Technical information and laboratory projects to apply and understand theories, principles, and concepts.

AV 195 General 104 1-6 credits

Prerequisite: AV 194. Aircraft and engine electrical systems and components. Technical information and laboratory projects to apply and understand theories, principles, and concepts.

AV 196 General 105 1-6 credits

Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Aircraft and engine fuel systems, aircraft and engine fire protection systems, aircraft and engine instrument systems, and weight and balance. Technical information and laboratory projects to apply and understand theories, principles, and concepts.

AV 279 Airframe 1-6 credits

Prerequisite: MTH 076 Airframe structures, systems, and components. Technical information and laboratory projects to apply and understand theories, principles, and concepts. AV 279 consists of a total of 24 credits, 576 lecture/lab hours. AV 279 is scheduled in 6 credit sections. Credits are issued on the basis of satisfactory completion of subtopics within each section.

AV 280 Co-op Ed: Aviation Maintenance 3-12 credits

This course offers aviation maintenance learning experiences that integrate theory and practice providing opportunities to develop skills, explore career options and network with professionals and employers. Students earn college credit, which may apply toward a degree.

AV 281 Powerplant 1-6 credits

Prerequisite: MTH 076 Powerplant maintenance, systems, and components. Technical information and laboratory projects to apply and understand theories, principles, and concepts. AV 281 consists of 24

credits, 576 lecture/lab hours. AV 281 is scheduled in 6 credits sections. Credits are issued on the basis of satisfactory completion of subtopics within each section.

AV 282 Airframe Return to Service..... 1-6 credits
Prerequisite: AV 192, AV 193, AV 194, AV 195, AV 196, MTH 076, And MTH 086 Airframe structures, systems, and components. Technical information and practical application of theories, principles, and concepts.

AV 283 Powerplant Return to Service..... 1-6 credits
Prerequisite: AV 192, AV 193, AV 194, AV 195, AV 196, MTH 076, And MTH 086 Powerplant systems and components. Technical information and practical application of theories, principles, and concepts.

AV 289 Helicopter Maintenance..... 1-3 credits
Technical information and hands-on experience with the following topics: rotary-wing principles of flight, main rotor systems and blades, main transmission, tail rotor system, component sheet and logbook, rotor wing systems, inspections, operational checks, and helicopter components. Students enrolled in Flight Technology with helicopter emphasis may substitute this course for Aircraft Structures and Systems FT 115.

Biology

For information, contact the Science Division, Bldg. 16/Rm. 156, 541.463.5446.

BI 101 General Biology..... 4 credits
BI 101 topics: atoms, molecules, cellular processes, genetics, protein synthesis, photosynthesis, respiration. All BI 101 courses are equivalent for AAOT; only one can be used to fulfill the transfer requirement for non-science majors. Additional BI 101 courses may be used as electives.

BI 101E General Biology-Ocean Life Foundations..... 4 credits
Students learn basic processes of organisms at the cellular and organism level. Emphasis on how marine organisms demonstrate processes and systems that involve photosynthesis, cell division, genetics, and cell structure. Includes physical ocean properties and their influence on ocean life.

BI 101F General Biology-Survey of Biology..... 4 credits
Survey course providing an overview of the molecular and cellular basis of life. Activities: lab, computer activities, lecture, group projects, and discussion. Includes current issues such as genetic testing, cloning, and cancer.

BI 101I General Biology-Botanical Beginnings..... 4 credits
Students learn cellular and organism biology of plants. Topics: characteristics that distinguish plants from other organisms, plant anatomy, cell structures, chemistry, photosynthesis, respiration, cell division, roles plants play in our lives. Skills: microscopy, extensive lab observations and drawing plant anatomy.

BI 101J General Biology-Unseen Life on Earth..... 4 credits
An introduction to the cellular biology of the smallest organisms on earth. Microbes are crucial to human health, food supplies and the survival of all life forms. Students explore the diversity and contributions of microbes such as bacteria, fungi, and viruses. Online course with lab activities conducted at home. May be offered online.

BI 101K General Biology: Introduction to Genetics..... 4 credits
This course introduces students to the rapidly evolving and increasingly relevant world of genetics. Topics: cell structure and division, DNA structure, protein synthesis, modern genetic technologies and societal applications and implications. Labs include microscope work, problem solving. May be offered online.

BI 102 General Biology..... 4 credits
BI 102 topics: homeostasis, feedback loops, and body systems. All BI 102 courses are equivalent for AAOT; only one can be used to fulfill the transfer requirement for non-science majors. Additional BI 102 courses may be used as electives.

BI 102B General Biology-Jungle Biology..... 4 credits
Students learn physiological systems of plants and animals and their adaptations to tropical environments individually and symbiotically. Students investigate indigenous people's use of tropical rainforests and evaluate factors influencing human use of these forests.

BI 102C General Biology-Marine Biology..... 4 credits
Students learn classification, anatomy, physiology, homeostasis and

diversity of marine organisms from plankton to sharks. Experiments and field trips explore how various marine organisms use body system adaptations to survive in oceanic habitats along the Oregon coast. Weekend field trips.

BI 102D General Biology-Survey of Biology..... 4 credits
Survey course providing an overview of structure and function of tissues, organs, and organ systems. Activities: lab, computer activities, lecture, group projects, and discussion. Includes current issues such as diabetes, epidemics.

BI 102E General Biology-Animal Biology..... 4 credits
Students learn the physiology and function of vertebrates: fish, amphibians, reptiles, birds, mammals. Topics: evolution of unique adaptations, comparative anatomy. Activities: lab, lecture, discussion, computer/Web use. Relevant issues: endangered species, habitat loss, pollution, conservation.

BI 102G General Biology: Genetics and Society..... 4 credits
Students learn human body systems with an emphasis on genetic inheritance patterns, genetic conditions and the systems they affect. Course integrates current issues in genetics and their impact on ethics and values; labs feature problem solving, critical thinking. May be offered online.

BI 102H General Biology-Forest Biology..... 4 credits
Students learn the structural and physiological adaptations of Northwest forest inhabitants. Emphasis on nutrition, growth, reproduction, and their place in the forest ecosystems. Community service projects and field trips may be required.

BI 102I General Biology-Human Biology..... 4 credits
Students learn human body systems, including circulatory, respiratory, urinary, reproductive, nervous, muscular, skeletal, lymphatic, digestive, and endocrine systems. May be offered online.

BI 102J General Biology: Ethnobotany..... 4 credits
Students learn structures and functions of both plants and human organ systems and interactions between the two with emphasis on how Northwest Indians use plants, now and in the past. Considers American Indian world views, influence of European-origin settlers, and sustainable plant use. Required field trips.

BI 103 General Biology..... 4 credits
BI 103 topics: ecology, evolution and the classification and natural history of organisms. All BI 103 courses are equivalent for AAOT; only one can be used to fulfill the transfer requirement for non-science majors. Additional BI 103 courses may be used as electives.

BI 103A General Biology-Birds of Oregon..... 4 credits
Students learn classification, evolution, ecology, and adaptations with emphasis on Oregon birds and their behaviors. Bird identification is practiced on field trips. Current issues: endangered species, climate change and effects of humans on bird populations.

BI 103B General Biology-Field Biology..... 4 credits
Students learn the interaction of organisms in various ecosystems. Topics: evolution, ecology, plant-animal relationships, natural history. Current issues: endangered species, climate change, and conservation. Activities: field trips, labs, lecture, discussion, computer/Web use.

BI 103D General Biology: Sea Birds and Mammals..... 4 credits
Students learn unique anatomical and physiological adaptations of marine birds and mammals to understand evolutionary processes and ecological interactions. Students identify and classify marine birds and mammals, and examine human's role in the sustainability of these magnificent creatures. Includes field trips.

BI 103E General Biology: Survey of Biology..... 4 credits
Survey course providing an overview of animal and plant diversity, evolution, and ecology. Activities: field trips, lab, lecture, discussion, and group projects. Includes current issues such as human impacts on the natural world.

BI 103F General Biology-Wildflowers of Oregon..... 4 credits
Students investigate plant diversity, ecological and evolutionary processes, and conservation efforts with emphasis on learning flower characteristics for plant identification. Students practice describing habitats and identifying plants on local field trips to different ecosystems.

BI 103G General Biology: Global Ecology..... 4 credits
Students learn how different cultures relate to ecological and

environmental changes using Oregon as a case study. Emphasis on how the values of American Indians relate to ecological regions and natural environments in Oregon. Activities: field trips, lab, lecture, discussion, and group projects.

BI 103H General Biology-Mushrooms 4 credits
Through field, classroom, and laboratory work students identify and develop an understanding of mushroom evolution, structure, function and place in the ecology of the areas we study. Required Saturday or Sunday trips to the Cascades and Central Oregon Coast.

BI 103J General Biology: Forest Ecology 4 credits
Students learn ecological and evolutionary processes and interrelationships in our local forest ecosystems. Students practice identification of major trees, shrubs and wildlife through extensive field work. Explores importance of forests to humans. Required field trips.

BI 103K General Bio-Animal Behavior 4 credits
Students learn evolution and ecology through study of animal behavior with emphasis on the development, evolution, physiology and ecology of behaviors like foraging, migration, communication, mating strategies, parental care, and sociality. Activities: discussions, labs, and field trips.

BI 103L General Biology: Evolution & Diversity 4 credits
Students learn evolutionary theory, speciation, molecular inheritance, adaptive radiation, Earth history, and origin of life. Explores diversity of life forms and advances in medical and agricultural sciences. Activities: lecture, lab, discussion, and group projects. May be offered online.

BI 103M General Biology: Biodiversity&Sustainability 4 credits
Students use biological principles of evolution, taxonomy and ecology to learn the principles of sustainability, with reference to social and economic issues. This course is unique in placing humans within the taxonomic realm of living organisms affected by environmental issues.

BI 112 Cell Biology for Health Occupations 3 credits
Corequisite: CH 112 Introduction to human cell structure, function, respiration and division. Includes genetic concepts of DNA replication, protein synthesis, genes and inheritance. Laboratory skills: use of microscopes, identification of cell structures. With CH 112, prerequisite for Anatomy and Physiology BI 231.

BI 211 Principles of Biology 4 credits
Prerequisite: MTH 095 with grade of 'C-' or better or place into MTH 111 or higher on math placement test. College-level writing strongly encouraged. Designed for Life Science major transfer students. Topics: cell structures and evolution, membranes, biochemical pathways, bioinformatics, and molecular genetics. Skills: microscopy, modeling, scientific paper analysis, experimental design.

BI 212 Principles of Biology 4 credits
Prerequisites: BI 211 with grade of 'C-' or better or BI 101F or BI 112 with grade of 'A-' or better or instructor consent. College-level writing strongly encouraged. Designed for Life Science major transfer students. Topics: comparative anatomy and physiology, multicellular evolution, and diversity of Plants and Animals. Skills: experimental design, data management, descriptive statistics and cladogram construction.

BI 280 Co-op Ed: Biology 1-12 credits
This internship course offers a work experience that integrates theory and practice in the field of biology. It provides opportunities to develop skills, explore career options and network with professionals and employers while earning academic credit.

BOT 213 Principles of Botany 4 credits
Prerequisite: Grade of 'C-' or better in BI 211 and BI 212 or instructor consent. Designed for Life Science majors. Topics: evolutionary trends of flowering plants, diagnostic characteristics of plant families, species distribution and community ecology interactions. Skills: explain phylogenetic relationship between plant groups, describe plant associations and species interaction in a variety of ecosystems, proficient use of botanical keys; ecological research that includes data documentation and analysis.

GS 101 General Science (Nature of the Northwest) 4 credits
Introduction to the geology, plants and animals in Central Oregon and along the Pacific coast. Students identify rocks, flora and fauna and look at the biodiversity between habitats on required field trips. Includes environmental issues and a scientific inquiry project.

Z 213 Principles of Zoology 4 credits
Prerequisite: Grade of 'C-' or better in BI 211 and BI 212 or instructor consent. College-level writing strongly encouraged. Designed for Life Science major transfer students. Topics: comparative vertebrate anatomy, vertebrate evolution, cladistics, and ecology. Skills: dissection, digital vertebrate atlases, cladogram construction, and mathematical models in biology.

Botany—See Biology

Broadcasting—See Media Arts

Business

Also see Accounting, Administrative Assistant, Computers

For information, contact the Business and Computer Information Technology Division, Bldg. 19/Rm. 137, 541.463.5221.

BA 101 Introduction to Business 4 credits
This is a survey course covering basic concepts and language of business, including the American economic system, business ethics and social responsibility, international business, the role of technology and the internet; organizational structures including the role of groups and teams and organizational culture; forms of business ownership including entrepreneurship and franchising; and the functional areas of business including management, marketing, accounting and finance, human resource management; and the legal environment. Students will participate in a team project to conduct a case study analysis of a local business and present their findings in a report. May be offered online.

BA 206 Management Fundamentals 3 credits
Prerequisites: BA 101. This course is a survey of management and what makes a successful manager. Content includes planning, decision making, organizing, leadership, motivation, communication, control, and a thorough overview of the field of management. The course covers the opportunities and challenges posed by a multi-cultural work force and the responsibilities of management in handling and motivating employees in the current business environment. Students should gain skills that can be immediately utilized to effectively work with and manage people. May be offered online. NOTE: This course may be an acceptable substitution for BT 245 Office Management which is no longer offered. Please see the Business Academic Advisor for options.

BA 214 Business Communications 4 credits
Prerequisites: Pass a Language Skills and Proofreading test in the Testing office or BT 108 (formerly BT 180), and WR 121. Introduction to communication theory and all forms of communication. Introduction to appropriate formatting of business documents. Emphasis in writing direct, indirect, and persuasive letters, and research and production of a formal report using word processing software. Emphasis is on grammar, formatting, tone, effectiveness, and overall mailability. Students will give business-related presentations that inform, recommend, and train. Students will be introduced to business presentation software and will use the software when giving presentations. May be offered online.

BA 215 Accounting: Language of Business Decisions 4 credits
Prerequisite: BA 101 or instructor. Accounting: Language of Business Decisions is a survey of financial and managerial accounting topics. The course is designed for non-business majors (business minors) who may find themselves in entrepreneurial or executive leadership roles within an organization. Topics include overview of the accounting cycle; accounting principles; creation, review and interpretation of financial statements; using financial data for business decisions; cost behaviors; cost-volume profit analysis; and differential analysis. Because of the overlap between BA 211 and BA 215 only one of these courses will be counted toward a degree or certificate. May be offered online.

BA 223 Marketing 4 credits
Prerequisites: BA 101. As an initial study of the principles of marketing in our socio-economic system, this course stresses the important role marketing plays not only in businesses but also in our everyday lives. Emphasis is placed on analysis of marketing strategies necessary to develop and market as well as provide ways of handling product and service development, distribution, promotion, and pricing. Additional emphasis is placed on how managers should make marketing decisions which best create customer value. The course is

designed for both business majors and non-majors. May be offered online.

BA 224 Human Resource Management 3 credits
Prerequisites: BA 101. This course is an introduction to Human Resource Management. The course is designed to explore the functions, roles, and value of Human Resources. Discussion topics include human resource planning, recruitment and selection; employee laws; performance appraisal systems; employee training and career development; pay systems; employee benefits, safety, and health; and labor unions. May be offered online. NOTE: This course may be an acceptable substitution for BT 245 Office Management which is no longer offered. Please see the Business Academic Advisor for options.

BA 226 Business Law 4 credits
This class provides an overview of US business law, describes how each of the areas covered impact business, and examines various cases that relate to each area. It also covers the US Constitution, its origination, its role in determining law today, how it impacts business and how changes are made. This course will also cover a review of current legal topics that are impacting business today and the differences between Federal laws and some State of Oregon Laws and which ones take precedence. May be offered online.

BA 238 Sales 3 credits
Prerequisite: BA 101 A beginning class in the basic techniques of selling. Course content includes: prospecting, pre-approach, presentation, demonstration, objections and closing. Selling as a career is thoroughly expored. Some emphasis will be placed on selling in the retail environment. The course is specifically designed to look at the marketing and psychology of relationship selling.

BA 249 Retailing 4 credits
Prerequisites: BA 223. Retailing examines types of retail stores, merchandising, operations, store location and layout, internal organization, buying, customer relations, inventory control, and retail communications in the evolving global, high tech, retail to e-tail business environment. Students will focus on real-world examples and work on a broad spectrum of issues through Internet, team, and classroom activities. May be offered online.

BA 250 Small Business Management 4 credits
Prerequisites: BT 123 (formerly BT 114), BA 223, BT 221 (formerly BA217). This course is a survey class exploring the many factors involved in successfully starting and running a small business. The range of subjects include start up concerns, entity selection, funding sources, choosing a location, marketing, advertising, insurance, pricing, legal aspects, compliance requirements, budgeting, and business plans. May be offered online.

BA 251 Supervisory Management 3 credits
This course focuses on the role and responsibilities of the first-line supervisor or manager including analyzing business, dealing with change, staffing and scheduling, leadership, decision-making, and motivational skills, and managing teams. Covers the principles and practices of the supervisory role in management including the interpersonal and administrative skills, soft skills, and the technical and personal challenges. This course embraces a case-study approach focusing on the supervisory role and the skills needed to be effective. May be offered online.

BA 261 Consumer Behavior 4 credits
Consumer behavior is one of the most exciting areas in the study of marketing. Everyday, all around us, the use of various media to inform, persuade, and influence our purchase decisions competes with other stimuli for our attention—and our hard earned money! In studying consumer behavior, you will learn how marketers identify and exploit these sources of influence—from learning about the way we process information and think how our relationships with others, even our dreams and aspirations, help shape our product choices and purchase decisions. May be offered online.

BA 278 Leadership & Team Dynamics 4 credits
This course focuses on developing the leadership potential and ability of emerging and future student leaders. The course also enhances students' understanding of teams and thus increases their effectiveness as team members. Participants will explore personal leadership philosophies, ethical issues related to leadership, strategies for identifying and articulating visions, and ways to empower effective teams. Students will gain a theory-based understanding

of leadership topics and will work on practical leadership applications such as goal setting, evaluation and decision-making. Recommended for second year students. May be offered online.

BA 280 Co-op Ed: Business Management 3-12 credits
In this internship course students will gain work experience in area businesses related to supervision, management, and business operations. Students will integrate theory and practice, develop skills, and expand career knowledge while earning credit toward a degree. Meet with Business Co-op Coordinator the term before starting your internship if possible.

BA 280RM Co-op Ed: Retail Management 3-12 credits
Completion of BT 195 is highly recommended. In this internship course students will gain work experience in area retail businesses. Students will integrate theory and practice, develop skills and expand career knowledge while earning credit toward a degree. Meet with Business Co-op Coordinator the term before starting your internship if possible.

BA 280SM Co-op Ed: Sales and Marketing 3-12 credits
In this internship course students will gain sales and marketing-related work experience in area businesses. Students will integrate theory and practice, develop skills and expand career knowledge while earning credit toward a degree. Meet with Business Co-op Coordinator the term before starting your internship if possible.

BA 281 Personal Finance 4 credits
This course is a comprehensive introduction to personal finance. Class emphasis is on personal budgets, real estate ownership, intelligent use of consumer credit, credit institutions, insurance, personal investing, stocks, bonds, retirement planning, and mutual funds. The course is designed to provide an understanding of personal topics and the analytical tools necessary to optimize personal decision making in the subject area. May be offered online.

BT 112 Team Building Skills 3 credits
This course examines the basics of building teams in the global business environment. Topics include: the team building process, workplace culture, online and interpersonal team communications, problem-solving and group decision-making, personality differences within teams, and motivation. Students will focus on team roles, creating effective teams, managing team conflict, managing stress, and developing team diversity. May be offered online. Note: BT 112 was formerly numbered BT 146. A student who has taken this class under the previous number may not take it again under this new number and receive duplicate credit.

BT 195 Professional Service and Development 2 credits
Prerequisite: BA 101, BT 112 (formerly BT 146), BT 120, and BT 123 (formerly BT 114). This first year capstone course is an opportunity for students to explore the role of business concepts and skills in the social economy. Students will gain insights into the application of common business skills and experience in organizations. Each student will participate in an administrative service learning experience for up to 15 hours during the term and share their experience with peers through reflective presentations and papers. Students will also attend a series of seminars and workshops. Students will prepare a resume and attend informational interviews in the process of securing a service learning location. May be offered online. Note: BT 195 was formerly numbered BA 195. A student who has taken this class under the previous number may not take it again under this new number and receive duplicate credit.

BT 206 Co-op Ed: Business Seminar 2 credits
Prerequisite: BA 101, BT 112, BT 120, BT 123. Students will increase their understanding of industry expectations as well as develop job search tools and skills. Course is designed to help students present themselves to employers in a competent and professional manner and to move initially into their cooperative education internships and then into their professional careers.

BT 221 Budgeting for Managers 4 credits
Prerequisite: BT 165 or BA 211, or instructor consent. Recommend BT 123 MS EXCEL for Business (formerly BT 114). This course is designed to introduce the purpose and value of budgets, budget development, and budget implementation. Course topics include: the steps of creating a budget, the parts of a budget, gathering needed information for budgets, creating a product budget, planning and budgeting a project, presenting the budget, spending and tracking the budget, use of an HR budget, a small business budget,

budgeting and human behavior, and mastering the overall budgeting process. May be offered online.

BT 253 Internet Marketing..... 4 credits
This course is a good introduction for assisting marketers and marketing students in recognizing the value of Internet marketing resources and to demonstrate how to integrate these electronic tools into each stage of the marketing process. Online technology has greatly enhanced the process of Internet marketing and has facilitated electronic commerce. This course will show how the Internet allows marketers to conduct research on prospects needs and wants. It will show which tools can be used to collect data about customers and illustrates how Internet marketing resources bring into sharper focus the profiles and behaviors of targeted market segments. The course will show how to incorporate the Internet into the marketing mix, and how to determine if the Internet is a cost effective method. May be offered online.

CAD, CADD—See Drafting

CAM—See Manufacturing

CNC—See Manufacturing

Career Development

For information, contact the Counseling Department, Bldg. 1/103, 541.463.5299.

CG 105 Money for College..... 2 credits
Prerequisite: WR 115. Corequisite: WR 105. This course is part of the 'Show Me the Money' learning community, providing a systematic approach to researching and applying for scholarships. You will identify your skills, accomplishments, experiences, and goals, then learn strategies to communicate them effectively on scholarship applications.

CG 140 Career and Life Planning 1-3 credits
This course focuses on self assessment and career exploration, as well as career research, decision making and goal setting, using a variety of activities and resources. You will gain insight into your interests, skills, values and personal style, and then explore possible majors and career fields.

CG 180 Co-op Ed: Extended Career Exploration 3 credits
Prerequisite: CG 140 or instructor permission. This course is for students who have narrowed their interests to a few careers and want to receive credit for investigating them further and working toward a decision. Course activities include internet research, reading, talking to people currently working in jobs of interest, to participating in actual work settings. Access to a computer and internet is essential.

CSK 101 Career Skills Training..... 1-6 credits
Prerequisite: Instructor approval required. Co-requisite: Only available to students who have been referred by a Workers Compensation, State Vocational Rehabilitation, or a Veterans Administration counselor. This lab course follows a set curriculum in introductory workforce skills under the guidance of a cooperating employer in the students' chosen field.

Chemistry

For information, contact the Science Division, Bldg. 16/Rm. 156, 541.463.5446.

CH 104 Introductory Chemistry 1 5 credits
Prerequisite: MTH 052 or above with grade of 'C-' or better or pass placement test. The first term of the standard General, Organic and Biological Chemistry sequence. Designed for students needing a laboratory based introduction to chemistry. Includes measurement, atomic structure, states of matter, bonding, reactions, stoichiometry, gases, solutions, equilibrium, and acid/base chemistry. Lecture and laboratory. May be offered online.

CH 112 Chemistry for Health Occupations 3 credits
Prerequisite: MTH 052 or above with grade of 'C-' or better or pass placement test. Corequisite: BI 112. Introduction to atoms, states of matter, bonding, energy, acid/base and buffer chemistry, organic and biological chemistry including lipids, carbohydrates, nucleic acids, proteins, and metabolic pathways. Lecture/recitation and laboratory. With BI 112, the prerequisite for Anatomy and Physiology BI 231.

CH 114 Introduction to Forensic Chemistry..... 4 credits
An introduction to chemistry in a forensic context. Topics may

include measurement, density, soil chemistry, chromatography, the chemistry of fire, DNA, and organic and inorganic data collection and analysis. Relationships between scientific disciplines are explored. Lecture and laboratory.

CH 150 Preparatory Chemistry..... 3 credits
Designed to prepare students with minimal chemistry experience to take CH221. Topics include measurement, significant figures, dimensional analysis, density, nomenclature, atoms, stoichiometry and solutions; includes problem solving methods and calculations. May be offered online. Lecture/Recitation.

CH 221 General Chemistry 1 5 credits
Prerequisite: MTH 095 or above with grade of 'C-' or better or pass placement test. First course of the traditional general chemistry sequence designed for science, engineering and health science majors. Introduces measurement, atoms, stoichiometry, gases, thermochemistry and electronic structure and periodicity. Lecture and laboratory; lab emphasizes green chemistry.

CH 221S Chemistry Problem Solving..... 1 credits
Corequisite: CH 221. Intended to improve success in CH 221. Covers study skills and problem solving strategies and gives additional structured practice with CH 221 lecture and lab topics. For students with little or no previous experience in chemistry as well as those wanting additional practice. Lecture/recitation.

CH 222 General Chemistry 2 5 credits
Prerequisite: Grade of 'C-' or better in CH 221 Topics include bonding, condensed phases, solutions, kinetics and concepts of equilibrium. Lecture and laboratory; lab emphasizes green chemistry and real world applications.

CH 223 General Chemistry 3 5 credits
Prerequisite: Grade of 'C-' or better in CH 222 Topics include applications of equilibrium, acid/base chemistry, redox/electrochemistry, thermodynamics, nuclear chemistry and introductory organic chemistry. Lecture and laboratory

CH 241 Organic Chemistry 5 credits
Prerequisite: Grade of 'C-' or better in CH 222 First course of organic chemistry sequence for science and health science majors, with a green chemistry emphasis. Introduces organic functional groups, emphasizing hydrocarbons, with bonding theory, nomenclature, and reaction mechanisms. Lecture and laboratory.

CH 242 Organic Chemistry 5 credits
Prerequisite: Grade of 'C-' or better in CH 241 Organic chemistry for science and health science majors, with a green chemistry emphasis. Topics include alcohols, ethers, aromatics, conjugated systems, aldehydes, and ketones. Lecture and laboratory.

CH 243 Organic Chemistry 5 credits
Prerequisite: Grade of 'C-' or better in CH 242 Organic chemistry for science and health science majors, with a green chemistry emphasis. Topics include carbonyl systems, nitrogen containing organic compounds, conjugated/aromatic systems, and organic compounds of biochemical significance. Lecture and laboratory.

CH 280 Co-op Ed: Physics-Chemistry 1-12 credits
This internship course offers a work experience that integrates theory and practice in the fields of Physics or Chemistry. It provides opportunities to develop skills, explore career options and network with professionals and employers while earning academic credit.

GS 105 Physical Science 4 credits
Prerequisite: MTH 052 or above with grade of 'C-' or better or pass placement test. GS105 is a basic introduction to chemistry for non-science majors, including the periodic table of the elements, chemical formulas, simple reactions, gas laws, energy, and simple organic structures. Includes laboratory practice.

Child Development—See Early Childhood Education

College Preparation—See Study Skills and College Prep

College Success

For Information, contact the Counseling Department, Bldg. 1/Rm. 103, 541.463.5299.

CG 100 College Success..... 1-3 credits
This course emphasizes practice and active learning of skills and

strategies that help create greater academic, professional and personal success. College Success strategies empower students to make wise choices that lead to improved experiences and outcomes in college and beyond. May be offered online or as a telecourse.

CG 100A College Success 1 credits
This course is the first block of the three credit CG100 College success course. Students will study the following topics: Welcome to College, The First Step, Ideas are Tools, Finding the Time, Looking Ahead, You've Got a Great Memory and Muscle Reading. May be offered online or as a telecourse.

CG 100B College Success 1 credits
Prerequisite: CG 100A. This course is the second block of the three credit CG100 College Success course. Students will study the following topics: Reading Challenges, Taking Notes, Challenges Worth Noting, Preparing for the Test, This is Not a Test, Thinking Creatively and Thinking Critically. May be offered online or as a telecourse.

CG 100C College Success 1 credits
Prerequisite: CG 100A and CG 100B. This course is the third block of the three credit CG100 College Success course. Students will study the following topics: Math and Science: A 3-D Solution; Research: Solving a Mystery; Writing well-The First Draft; and Writing Well-The Final Presentation. May be offered online or as a telecourse.

Communication—See Speech Communication

Computer Hardware Repair—See Electronics

Computers: Introduction/Information Systems/Computer Science

For information about classes with course numbers that begin with:

BT, CIS or CS—Contact the Business and Computer Information Technology Division, Bldg. 19/Rm. 137, (541) 463-5826.

SKD—Contact Academic Learning Skills, Center Bldg./Rm. 218, 541.463.5439.

BT 252 Web Tools: Photoshop & Dreamweaver 4 credits
Learning the basics of the Web tools Photoshop and Dreamweaver to facilitate the retail/wholesale aspects of Internet business. Photoshop and Dreamweaver software required, or access to the computer programs to complete assignments. May be offered online.

CIS 100 Computing Careers Exploration 2 credits
This course introduces the field of computer technology through the introduction of fundamental technical skills and concepts. Students will understand how hardware, software and networks are organized to create computer information systems; how these systems are used by organizations; and the roles of information technology professionals in creating and maintaining these systems. This course provides an orientation for students who are considering programs of study and careers in the computing field. Students will learn about the degree and certification programs available, the knowledge and skills needed for entry level positions, the computer industry job market, current trends in the computer industry, and professional development and ethical issues that confront information professionals.

CIS 101 Computer Fundamentals 3 credits
A hands-on introduction to personal computers and application software. Students will learn basic computer terminology, the role of computers in society, and the use of word processing, spreadsheet, presentation, and Internet software, including e-mail. May be offered online.

CIS 102 Problem Solving with Computers 4 credits
CIS 102 introduces students to methods and tools for solving problems in an information systems environment. Students practice finding solutions using known problem-solving methods, and learn how to use spreadsheet and drawing software as problem-solving tools. The course is designed as an introductory course for several CIT Department degree programs. May be offered online.

CIS 125G Software Tools 1: Game Development 4 credits
Prerequisite: Basic computer literacy. This course is an introduction to the field of game development. It includes a survey of computer game categories and platforms, an overview of the game design and development process, and an introduction to tools used for graphics development and game development. Students in this course will create several elementary computer games.

CIS 125VW Introduction to Virtual Worlds 4 credits
This course is an introduction to virtual worlds, such as Second Life or OpenSim. It includes a survey of different worlds, defining and customizing an avatar, and creating and animating objects in virtual worlds. Students will explore virtual world environment and work in teams building projects for those environments.

CIS 125W Software Tools 1: Web 3 credits
This course provides a hands-on introduction to Web 2.0 technologies, including blogs, forums, wikis, podcasting and videocasting. Students learn the principles and technologies behind Web2.0, and also learn about online Web 2.0 strategies that companies use. Web 2.0 is user participation centric and its online communities have become important to business and e-commerce. Students will complete project work in Web2.0 technologies that are important in online business, social networking and computer-based collaboration. May be offered online.

CIS 135G Software Tools 2: Game Development 4 credits
Prerequisite: CIS 125G and an introductory programming course. This course builds upon the material covered in CIS 125G. Topics covered include physics simulation, user controls, graphical methods, animation issues, and script writing for game building tools. Students will work with an industry standard game development engine and will design and create several games.

CIS 140 Operating Systems: Managing Windows 4 credits
Introduction to Windows and operating system components. This course provides hands-on experience using and configuring Windows, sharing folders and assigning permissions. In addition, file and disk management, file compression, and backup software are covered. May be offered online.

CIS 140B Operating Environments: Macintosh 1 credits
Introduction to use of the Apple Macintosh computer. Provides a study of the Macintosh operating system from the end-users point-of-view. Provides experience with system commands and options, file and folder (subdirectory) management, how to run application programs, the use of common utility programs and tools, and how to make effective use of the operating environment on the computer.

CIS 140S Operating Environments: Windows 1 credits
An introduction to using the Windows 7 operating system from the end-user's point-of-view. This course provides experience with system commands and options, file and folder (subdirectory) management, running application programs, using common utility programs and tools, and effectively using the Windows 7 operating environment.

CIS 140U Introduction to Unix/Linux 4 credits
This course introduces the student to the Unix/Linux operating system. It provides experience using the graphical user interface as well as the command line to run applications, do file management, and to do basic system administration. Students will learn the fundamental Unix/Linux command set, editors, scripting, and will install the operating system and be introduced to file system security.

CIS 178 Introduction to the Internet 4 credits
Prerequisite: Previous Windows-based computer experience or instructor consent is required. This course is an introduction to the inner-workings of the Internet. The course provides a background to the nature and history of the Internet and shows students what happens when we do everyday things like accessing a web page, sending email, searching the web, or purchasing online. Prerequisite: Previous Windows-based computer experience is required, or instructor consent. May be offered online.

CIS 195 Web Authoring 1 3 credits
Prerequisite: Basic computer literacy. This class provides basic internet concepts, XHTML syntax and coding, an introduction to Cascading Style Sheets (CSS) code and layout techniques, basic web media and interactivity using dynamic methods (DHTML), and information on web page promotion. This is a hands-on class in which students use lab time to work through textbook examples and then complete end-of-chapter case studies for homework. May be offered online. Note: CIS 195 was formerly numbered CS195 and formerly named CIS 125H-Software Tools 1: XHTML. A student who has taken this class under the previous name or number may not take it again under the new name and receive duplicate credit.

CIS 225 Computer End-User Support 4 credits
Prerequisite: CIS 102, CIS 125D, and CS 179, or instructor consent.

Course prepares students to support end-users in a variety of organizational settings. Topics include the end-user support function in an organization, techniques to develop and deliver training modules, and strategies to provide ongoing technical support to end-users. Emphasis is on solving problems with users, needs analysis, troubleshooting, and interaction with users. Taught in a workbench lab environment.

CIS 227N Systems Support: Network and Operating Systems 4 credits

Prerequisite: CIS 140 or instructor consent. The course focuses on the support of MS Windows. Topics discussed include installation, TCP/IP, system policies, the Windows Registry, monitoring the computer, performance tuning, troubleshooting network boot up and resolving printer problems. The course has a hands-on emphasis using Windows Administrative tools to manage the workstation.

CIS 244 Systems Analysis 4 credits

Prerequisite: CIS 125D or instructor consent. This course provides students with an introduction to the concepts, skills and tools used in Systems Analysis. A systems analyst participates in the process of understanding and creating a detailed specification of the functionality that must be provided by an information system. Students will develop systems analysis skills by completing a small group case project.

CIS 245 Project Management 4 credits

Prerequisites: Basic computer literacy and software application skills. This course covers essential skills needed to manage small-scale projects. The course features the phases of the project life cycle including definition, planning, implementation, monitoring, and termination. The emphasis is on the tools, practical methods and strategies that technology professionals use to manage successful projects and teams.

CIS 247 Information Analysis and Visualization 4 credits

Prerequisite: MTH 065 or higher and CIS 245 or CIS 125D or instructor consent. CIS 247 introduces the field of information analysis: how information is designed, organized, analyzed, visualized, used and misused. The course emphasizes the use of software tools to work with data to communicate information effectively through descriptive statistics and narratives, graphical visualization and map applications. The course assumes the student will have basic computer literacy concepts and experience using the Windows operating system and applications software.

CS 120 Concepts of Computing:

Information Processing 4 credits

This course is a general survey of computer fundamentals and principles designed to familiarize students with a wide range of topics including basic computer hardware, software, and operating systems; word processing, spreadsheets and database applications; networks, security, and internet communications; and the impact of computers on individuals and society. May be offered online.

CS 133JS Beg. Programming: JavaScript 4 credits

Prerequisite: CIS 102 or MTH 060 or higher and CIS 195 Web Authoring I (formerly CS 195 and CIS 125H) or instructor consent. This course provides students with the concepts and skills required to create dynamic, interactive Web pages using client side JavaScript. May be offered online.

CS 133N Beginning Programming: C# 4 credits

Prerequisites: CIS 102 or previous programming experience with instructor consent. This is the first in a sequence of 2 courses that teaches students to develop desktop applications in the .NET environment. The course introduces students to fundamental programming concepts as well as the syntax of the C# programming language and the Visual Studio 2008 development environment.

CS 133P Beginning Programming: Python 4 credits

This course introduces fundamental programming concepts and the Python language.

CS 160 Orientation to Computer Science 4 credits

Prerequisite: MTH 095, or MTH 111, or MTH 241, or placement test into MTH 111. This course explores the discipline and profession of computer science. It provides an overview of computer hardware architecture, the study of algorithms, software design and development, data representation and organization, ethics and the history of computing and its influences on society. The student is exposed

to both low-level and high-level programming languages. May be offered online.

CS 161C+ Computer Science 1 4 credits

Prerequisites: CS 161J (formerly CS 161) or CIS 102 or CS 160 or MTH 111 or higher or instructor consent. This course is an introduction to the principles of software design, development and testing. It includes basic syntax and semantics of a higher-level language, problem solving, algorithm and program design, data types, and program control structures. Development tools and object-oriented programming concepts are introduced. Programming assignments will involve developing simple games.

CS 161J Computer Science 1 4 credits

Prerequisite: CS 102 or CS 160 or CS161C+ (formerly CS 133G) or MTH 111 or higher or instructor consent. This course is an introduction to the principles of software design, development and testing. It includes basic syntax and semantics of a higher-level language, problem solving, algorithm and program design, data types, and program control structures. Development tools and object-oriented programming concepts are introduced.

CS 162C+ Computer Science 2 4 credits

Prerequisite: CS 161C+ (formerly CS133G) or instructor consent. This course is a continuation of Beginning C++ programming for Games. Topics covered include more advanced Object-Oriented programming concepts, searching and sorting, linear data structures, stream and file I/O, recursion, exception handling, and graphical user interface programming. Students will develop games working with an industry standard game engine or graphics library.

CS 162J Computer Science 2 4 credits

Prerequisite: CS 161J formerly CS 161 or instructor consent. This course is a continuation of Computer Science 1. Topics covered include more advanced Object-Oriented programming concepts, searching and sorting, linear data structures, stream and file I/O, recursion, exception handling, and graphical user interface programming.

CS 179 Introduction to Computer Networks 4 credits

Prerequisite: Basic computer literacy. An introduction to computer networks with emphasis on theory and concepts. Provides a general overview of the networking field as a basis for continued study. Topics include network protocols and topologies, local area network architectures, the client-server model and internetworking devices. Provides experience using a local area network. May be offered online.

CS 188 Wireless Networking 4 credits

Prerequisite: CS 179 or instructor consent. This course introduces the student to wireless computer networking. It provides practical experience in installing, managing, and troubleshooting wireless local area networks (WLANs). Wireless security threats and methods for avoiding breaches of security are covered. When the student finishes the course, he/she will have a solid understanding of wireless networking concepts and will have the basic skills needed for installing such a network and making it secure. The course has a hands-on focus.

CS 206A Coop Ed: Computer Networks Seminar 1 1 credits

Students will increase their understanding of industry expectations as well as develop job search tools and skills. Students will learn and practice presenting themselves to employers in a competent and professional manner in preparation for a cooperative education internship.

CS 206B Coop Ed: Computer Networks Seminar 2 1 credits

Prerequisite: CS 206A. This course is a continuation of CS 206A and further develops students' understanding of industry expectations as well as job search tools and skills. The emphasis is to provide additional skills that will help students find employment upon earning their degree.

CS 233N Intermediate Programming C# 4 credits

Prerequisites: CS 133N (formerly CS133C#). This is the second in a sequence of 2 courses that teaches students to develop desktop applications in the .NET environment. The course introduces intermediate level programming concepts and skills and C# syntax language and allows students to develop object oriented, data driven applications.

CS 234G Advanced C++ Programming for Games..... 4 credits
Prerequisite: CS162C+ (formerly CS 233G) or instructor consent. This is the final course in the C++ programming sequence. It builds on the other two courses by teaching concepts in systems design and integrated project development. Students will learn the tools that are required for larger projects and how to design for quality and performance. Students will work in groups with an industry standard game engine or graphics library and will design and code a challenging project.

CS 235G SW Tools 3: Game Development 4 credits
Prerequisite: CIS 135G and CS 234G. This is the final course in the Game Development Sequence. Students will focus on designing and developing a non-trivial project in a team environment. This course will merge programming skills with the use of a game development engine. Topics covered will include graphics, sound, animation, object oriented programming, user interface, and software engineering.

CS 240U Advanced Unix/Linux: Server Management..... 4 credits
Prerequisite: CIS 140U and CS 179, or instructor consent. The course covers network administration of Unix/Linux. Topics include: operating system installation, configuration, troubleshooting, user and group account management, network printing, application installation and sharing, network server configuration (for example: DHCP, DNS, NFS, Apache, and Web 2.0), and interoperability with other network operating systems. The course has a hands-on focus.

CS 240W Advanced Windows: Server Management..... 4 credits
Prerequisite: CIS 227N or instructor consent. This course introduces concepts of Windows Server and network administration. Topics include server installation, Active Directory, network printing, user account and group management, web services, network troubleshooting, group policy objects, and permission assignment. This course has a hands-on focus.

CS 253 Computation for Computer Graphics..... 4 credits
Prerequisite: MTH 111 or higher and CS 161C+ (formerly CS 233G). This course introduces students to the computational methods used for displaying and rendering graphical images in computer simulations and games. The course will combine a discussion of each method with programming exercises demonstrating how to apply it. Students will both create programs and work with graphical display engines in their exercises.

CS 260 Data Structures 1..... 4 credits
Prerequisite: CS162C+ (formerly CS 233G) or CS 162J (formerly CS162) and MTH 111 or higher or instructor consent. This course is intended primarily for students seriously interested in computer science. Students will demonstrate the usage of using advanced data structures, including linked-lists and tree structures using pointers, and advanced structure programming methods through a variety of programming projects.

CS 271 Computer Architecture and Assembly Language..... 4 credits
Prerequisite: CS161J (formerly CS161) or CS161C+ (formerly CS133G) or CS133N (formerly CS133C#), or instructor consent. An introductory course in computer architecture and programming in assembly language. Topics include computer organization, microprocessor design, logic gates and boolean algebra, data representations and manipulation, arithmetic operations, branching instructions, data editing, and input/output. Lab work provides experience working with an assembly language performing arithmetic, input/output, and table look-ups.

CS 275 Database Systems and Modeling 4 credits
Prerequisites: CIS 125D and CIS 244 or instructor consent. This is an introduction to production-scale, relational database environments. Included in the course are discussion and application of database models, entity relationship design, normalization, and an introduction to SQL query development using an Oracle database environment.

CS 276 Database SQL Programming..... 4 credits
Prerequisite: CS 275. Focuses on design, development, and implementation of SQL programming in an enterprise database environment. Covers creating and maintaining database objects and writing complex interactive and embedded SQL statements for data retrieval and manipulation.

CS 280CN Co-op Ed: Computer Network Operations 3-12 credits
This internship course offers a work experience that integrates theory and practice in the field of computer networking. It provides opportunities to develop skills, explore career options and network with professionals and employers while earning academic credit toward the degree.

CS 280DP Co-op Ed: Data Processing..... 1-12 credits
This internship course offers a work experience that integrates theory and practice in the field of data processing. It provides opportunities to develop skills, explore career options and network with professionals and employers while earning academic credit toward the degree.

CS 280GD Co-op Ed: Simulation & Game Development. 3-12 credits
This internship course offers a work experience that integrates theory and practice in the field of simulation and game development. It provides opportunities to develop skills, explore career options and network with professionals and employers while earning academic credit toward the degree.

CS 280H Coop Ed: Health Informatics..... 3-12 credits
This internship course offers a work experience that integrates theory and practice in the field of health informatics. It provides opportunities to develop skills, explore career options and network with professionals and employers while earning academic credit toward the degree.

CS 280PR Co-op Ed: Programming..... 3-12 credits
This internship course offers a work experience that integrates theory and practice in the field of computer programming. It provides opportunities to develop skills, explore career options and network with professionals and employers while earning academic credit toward the degree.

CS 280US Co-op Ed: Computer User Support..... 3-12 credits
This internship course offers a work experience that integrates theory and practice in the field of computer user support. It provides opportunities to develop skills, explore career options and network with professionals and employers while earning academic credit toward the degree.

CS 284 Network Security Fundamentals..... 4 credits
Prerequisite: CS 240W (formerly CS 279W), or instructor consent. This course covers fundamental computer and network security concepts from the security plus certification material. It emphasizes securing the operating system, applications, media, network devices, web pages, e-mail, and other network services. In addition, types of attacks, digital certificates, keys, and designing and implementing security policies and procedures are discussed. This course has a hands-on focus.

CS 285 Operating System Hardening..... 4 credits
Prerequisite: CS 240U and CS 284, or instructor consent. This course gives the students a real world understanding of the vulnerabilities that exist in today's operating systems and gives practical, hands-on experience resolving and/or mitigating the vulnerabilities. We will use real systems (like Windows Server and Linux), the latest security resolution guidance, industry accepted tools to apply the resolutions, and industry accepted tools to measure the effectiveness of the resolutions. When the student finishes this course, they will have a solid understanding of actual threats to computer systems and the resolutions to mitigate those threats and vulnerabilities. This course has a hands-on focus.

CS 286 Firewalls and VPNs 4 credits
Prerequisite: CS 284 and CS 289, or instructor consent. This course gives the students a real world understanding of how firewalls and VPNs can be used to enhance the protection of internal networks. It gives hands-on experience installing, configuring and managing firewalls and VPNs. Commercial firewalls, VPNs, security configuration guidance tools, and tools to monitor the effectiveness of the solutions will be used. You will examine best practices for protecting DNS services, HTTP, and SMTP. You will explore proven strategies for defending your networks against unauthorized access, denial-of-service, the weaknesses of firewall architectures, security processes, address translation, content filtering, spoofing, and other advanced issues. This course has a hands-on focus.

CS 288 Network Monitoring and Management 4 credits
Prerequisite: CS 240U, CS240W (formerly CS 279W) and CS 289 or instructor consent. This course covers computer network monitoring

and management for network administrators. Topics include analyzing network traffic, monitoring servers and internetworking devices, and troubleshooting network problems. Skills and tools for keeping a network performing at acceptable levels will be discussed.

CS 289 Cisco Router and Switch Administration..... 4 credits
Prerequisite: CS240W (formerly CS 279W) or CIS 140U and CS 179 or instructor consent. This course primarily covers configuring and managing Cisco routers and switches. It deals with modern networking processes and protocols used by internetworking devices such as hubs, bridges, routers, and switches with particular emphasis on routers. Wide area networking technologies are also covered. Students will learn to configure and manage routers and switches through hands-on lab work and learn to use protocol analysis software.

CS 295N Web Development 1: ASP.NET 4 credits
Prerequisite: CS 133JS and CS 233N (formerly CS233C#), or instructor consent. This is the first in a sequence of 2 courses that teaches student who have a working knowledge of C# and Visual Studio to develop web based applications in the .NET environment. This course introduces students to server side web programming concepts as well as the ASP.NET framework.

CS 295P Web Development 1: PHP 4 credits
Prerequisite: CS 133JS or instructor consent. This course provides students who have working knowledge of XHTML and client-side JavaScript with an introduction to server-side web programming using PHP. Students will begin to develop the concepts and skills necessary to develop dynamic, data driven web sites. May be offered online. Note: CS 295P was formerly named CS 195-Web Development 1. A student who has taken this class under previous names may not take it again under this new name and receive duplicate credit.

CS 296N Web Development 2: ASP.NET 4 credits
Prerequisite: CS295N (formerly CS 295A) or instructor consent. This is the second in a sequence of 2 courses that teaches student who have a working knowledge of C# and Visual Studio to develop web based applications in the .NET environment.

CS 296P Web Development 2: PHP 4 credits
Prerequisite: CS 295P or CS 295 or instructor consent. This is the second course in the (server-side) Web Development sequence. It provides students who have working knowledge of server-side web programming with the concepts and skills necessary to develop dynamic, data driven, object oriented web-based applications. Note: CS 296P was formerly named CS 295-Web Development 2 and CS 296-Web Development 2. A student who has taken this class under previous names may not take it again under this new name and receive duplicate credit.

CS 297G Simulation & Game Development Capstone..... 4 credits
Prerequisite: CS 235G. This is the final course in the Simulation and Game Development Program. This course ties together the topics covered in the first and second year courses of the computer simulation and game development program. It emphasizes the application of this knowledge in a project oriented environment. Students will work in teams creating a working, non-trivial simulation or game built on an industry standard engine programming in C++ and using industry standard tools.

CS 297P Programming Capstone..... 5 credits
Prerequisite: CS 296N (formerly CS 296A), CIS 244, and CS275 or instructor consent. This course is an advanced course in programming methods with an emphasis on development of database related applications for the web. The course ties together topics covered in the first and second year of the programming curriculum. It emphasizes practical application and working knowledge and is project oriented. One modern and representative web server/web development technology will be used for implementation.

HI 101 Introduction to Health Care and Public 4 credits
This course surveys health care and public health organization and the delivery of health services in the U.S. Included in the survey are relevant organizations and their interrelationships, professional roles, legal and regulatory issues, payment systems, public health policies and the importance of health reform initiatives.

HI 107 Working with Health IT Systems 4 credits
Students will learn to work with simulated Electronic Health Record (EHR) systems or real EHR systems with simulated data. As they play

the role of practitioners using these systems, they will learn what is happening „Under the hood.“ Within this environment, they will experience threats to security and appreciate the need for standards, high levels of usability, and sources of errors.

HI 111 Selecting, Implementing, and Customizing Electronic Health Records Systems..... 4 credits
Pre-requisite: HI 107 or instructor consent. Through this course the student will learn basic methods for assessing, selecting, and implementing an Electronic Health Record system that satisfies ONC/CMS meaningful use criteria in a health care setting. Students will also work in a simulated EHR environment and develop skills at customizing an EHR to meet the information needs and practices of various users in clinical settings.

HI 208 Installation and Maintenance of Health IT 4 credits
Prerequisite: HI 107 or HI 111 or instructor consent. Instruction in installation and maintenance of health IT systems, including testing prior to implementation, introduction to principles underlying system configuration, and hands-on experiences working with EHRs in computer labs.

HI 209 Networking and Health Information Exchange..... 3 credits
Prerequisite: CS179 or instructor consent. In-depth analysis of data mobility including the hardware infrastructure (wires, wireless, and devices supporting them), the ISO stack, standards, Internet protocols, federations and grids, the NHIN and other nationwide approaches.

HI 214 Comparative Electronic Health Records Systems..... 3 credits
Prerequisite: HI 111 or instructor consent. A comparative analysis of the most popular Electronic Health Record (EHR) systems highlighting the features of each as they would relate to practical deployment in specific health care settings.

SKD 030 Using Computers to Write 1 1-3 credits
Prerequisite: Keyboard familiarity. This course introduces students to word processing on the PC as well as basic grammar concepts. Concurrently, students will improve and enhance their academic writing skills using the word processor as a tool. Adaptive technology may be used for students with physical or learning disabilities. For a description of this ALS class in Spanish, see <http://lanec.edu/als/classesenspanol.htm>.

Computers: Keyboarding

For information about classes with course numbers that begin with:

BT—Contact the Business and Computer Information Technology Division, Bldg. 19/Rm. 137, 541.463.5221.

SKD—Contact Academic Learning Skills, Center Bldg./Rm. 218, 541.463.5439.

BT 010 Computer Keyboarding 1-3 credits
Prerequisite: Basic computer knowledge. Introduction to the computer keyboard with mastery of the alphabetic, punctuation, and numeric keys by way of the touch system. Basic formatting of personal business letters, academic reports, and title pages. May be offered online. Basic introduction on using web-based keyboarding software.

BT 015 Keyboard Skillbuilding 1 1-3 credits
Prerequisite: Typing with 25-30 wpm on a three-minute timing and basic computer knowledge. Development of speed and accuracy utilizing a diagnostic approach to individual skill assessment and prescribed drill work. May be offered online.

BT 016 Keyboard Skillbuilding 2 1-3 credits
Prerequisite: Typing with 30-35 wpm on a three-minute timing and basic computer knowledge. Development of speed and accuracy utilizing a diagnostic approach to individual skill assessment and prescribed drill work. May be offered online.

BT 017 Keyboard Skillbuilding 3 1-3 credits
Prerequisite: Typing with 35+ wpm on a three-minute timing and basic computer knowledge. Development of speed and accuracy utilizing a diagnostic approach to individual skill assessment and prescribed drill work. May be offered online.

SKD 025 Keyboarding for Personal Use 3 credits
This course teaches keyboarding basics in order to develop appropriate speed and accuracy to meet personal academic goals. Adaptive technology may be used for students with physical or learning disabilities. This course is intended as a one-term introduction to

keyboarding. For a description of this ALS class in Spanish, see <http://lanecc.edu/als/classesenspanol.htm>.

Computers: Software Application

For information about classes with course numbers that begin with:

BT—Contact the Business and Computer Information Technology Division, Bldg. 19/Rm. 137, 541.463.5221.

CIS or CS—Contact the Business and Computer Information Technology Division, Bldg. 19/Rm. 137, 541.463.5826.

BT 120 MS WORD for Business..... 3 credits

Prerequisite: Recommend familiarity with Windows operating system and the ability to accurately type 30 words per minute. Visit lanecc.edu/business/testing for Business Department keyboarding guidelines or contact the instructor for details. As an introduction to the entry-level business word processing objectives of MS Word, this course emphasizes information and training on working with the Windows operating environment; creating, editing, formatting, paginating, and printing documents; applying document refinements; using styles and templates; working with graphics; and managing documents. Application of a variety of documents includes letters with envelopes/labels, memos, reports, tables, and newsletter-style columns with headers and footers. May be offered online.

BT 122 MS POWERPOINT for Business..... 3 credits

BT122 MS POWERPOINT for Business Course Description: Prerequisite: Recommend familiarity with Windows operating system and the ability to accurately type 30 words per minute. Visit lanecc.edu/business/testing for Business Department keyboarding guidelines or contact the instructor for details. Using current PowerPoint software, students create, modify, customize and preview slide show presentations. Students manage documents and work with text, visual elements, and program features that enhance slide shows. Design principles are applied to create professional looking presentations. May be offered online. Note: BT 122 was formerly numbered BT 118. A student who has taken this class under the previous number may not take it again under this new number and receive duplicate credit.

BT 123 MS EXCEL for Business..... 4 credits

Prerequisite: CS 120 and MTH 065 or higher or equivalent math placement test. Recommend the ability to accurately type 30 words per minute and key 130-132 strokes per minute on an electronic calculator (or numeric keypad). Visit lanecc.edu/business/testing for Business Department keyboarding guidelines or contact the instructor for details. This course introduces students to the use of Microsoft Excel to analyze questions found in a typical business setting. Students will create accurate, professional-looking spreadsheets and graphs. May be offered online. Note: BT 123 was formerly numbered BT 114. A student who has taken this class under the previous number may not take it again under this new number and receive duplicate credit.

BT 124 MS ACCESS for Business..... 3 credits

Prerequisite: BT 123 (formerly BT 114) and MTH 060 or higher or equivalent math placement test. Recommend familiarity with Windows operating system and the ability to accurately type 30 words per minute and key 130-132 strokes per minute on an electronic calculator (or numeric keypad). Visit lanecc.edu/business/testing for Business Department keyboarding guidelines or contact the instructor for details. This hands-on application-oriented database course is designed to provide students with the basic functions and business applications of Microsoft Access. This course gives students the skills required to extract the data they need (queries), build efficient front-ends for that data (forms), and publish the results in an attractive and easy-to-read format (reports). May be offered online. Note: BT 124 was formerly numbered BT 115. A student who has taken this class under the previous number may not take it again under this new number and receive duplicate credit.

BT 150 Business Web Pages..... 3 credits

Introduction to creating and maintaining business web pages, including business web concepts, use of HTML5, CSS3, and incorporating business graphics into a business web page. Focus will be on project completion for a local business, not-for-profit agency, or a web project for the school. May be offered online. Note: BT 150 was formerly numbered BT 129. A student who has taken this class under the previous number may not take it again under this new number to receive duplicate credit.

BT 163 QuickBooks 4 credits

Prerequisites: BT123 (formerly BT 114) and BT165. This course introduces students to the use of QuickBooks for small business accounting. Attention is given to the application of the entire accounting cycle from the creation of a company file, to and including, the end-of-period closing for both service providers and merchandisers with an emphasis on planning and analysis. Students will also be introduced to report systems, manufacturing issues, payroll, client management, job tracking and other features of QuickBooks. Students will convert a manual practice set used in BT 165 to QuickBooks. The course will emphasize being both competent and efficient with QuickBooks. May be offered online. NOTE: BT 163 was formerly numbered BT 113. A student who has taken this class under a previous number may not take it again under this new number and receive duplicate credit.

BT 220 MS WORD for Business-Expert 3 credits

Prerequisite: BT 120. Recommend the ability to accurately type at least 35 words per minute. Visit lanecc.edu/business/testing for Business Department keyboarding guidelines or contact the instructor for details. As an extension of MS WORD for Business, the expert course focuses on the application of advanced word processing and formatting features in the development of professional business documents. Topics include using workgroup collaboration and file sharing features; applying program features for lengthy business documents; and learning methods for visually enhancing business documents. May be offered online.

BT 223 MS EXCEL for Business-Expert 3 credits

Prerequisites: BT 123 (formerly BT 114) and MTH 060 or higher, or instructor consent. Recommend the ability to type 30 words per minute. Visit lanecc.edu/business/testing for Business Department keyboarding guidelines or contact the instructor for details. Advanced Excel functions for business problem solving. Focus on creation of effective business spreadsheets to assist managers in decision making. May be offered online. Note: BT 223 was formerly numbered BT 217. A student who has taken this class under the previous number may not take it again under this new number and receive duplicate credit.

BT 228 Integrated Office Applications..... 4 credits

Course Description: Prerequisites: BT 123 (formerly BT 114), BT 144, BT 220. Recommend the ability to accurately type at least 40 words per minute. Visit lanecc.edu/business/testing for Business Department keyboarding guidelines or contact the instructor for details. In this advanced software applications course, students will review, apply, and expand software skills learned in earlier courses. New skills will be added through practice with other MS Office applications and current Web technologies. Projects are designed to use the suite of MS Office applications to complete production tasks. Students are expected to have a strong background in MS Word and MS Excel and familiarity with PowerPoint and Access. Students will analyze data and produce professionally formatted business documents through application of integration principles. In completing simulation tasks and projects, students will plan, prioritize, and organize work; use initiative to make decisions about appropriate document appearance and format; and use and continue to develop professional human relations and communications skills working in teams. Students will continue the development of keyboarding skills through weekly practice and timings. May be offered online.

CIS 125D Software Tools 1: Databases 4 credits

This course provides students with the concepts and skills required to use relational databases in the solution of non-trivial problems. Students will be introduced to fundamental relational database concepts, vocabulary and functionality. Through hands-on exercises, students will demonstrate the implementation of those concepts in a representative relational database package. Students will review computer related problem solving skills and will apply those skills by designing, implementing, testing, debugging and documenting relational database solutions to case problems. Students require basic computer literacy skills for this course. May be offered online.

Construction

For information, contact the Advanced Technology Division, Bldg. 15/Rm. 201, 541.463.5380.

CST 110 Blueprint Reading 1..... 3 credits

Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior

College. Provides skills in understanding blueprints. Emphasizes fundamentals of blueprint reading, including development of skills in understanding basic lines, views, dimensions, symbols, and notations.

CST 111 Construction Orientation and Environment.....2 credits
Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Introduction to the construction industry. Economic and environmental influences affecting the construction industry. Material will be presented covering the work in the construction field and professional opportunities open to construction graduates.

CST 116 Construction Estimating.....4 credits
Prerequisite: CST 110 Study of techniques used to estimate construction materials and costs for residential and small commercial structures.

CST 118 Building Construction.....1-5 credits
Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Project work required to plan, design, and construct building structures. A variety of elements and topics related to the materials and methods used in the construction of buildings, including planning the site, foundation, framing, and interior and exterior finishing. This course through project work provides an orientation to electrical, mechanical, and plumbing systems. CST 118 consists of a total of 15 credits (264 hours). Majors should enroll in 5 credits per term for three terms to satisfactorily complete CST 118.

CST 119 Building Construction Surveying.....3 credits
A beginning course in surveying concepts and techniques with application to building construction. Fundamentals of surveying methods and the use and care of surveying equipment as related to surveying tasks involved in building construction. Emphasis is placed on field practice. CONSTRUCTION MAJORS ONLY.

CST 122 Construction Codes.....2 credits
Various codes specifying the standards of construction and the installation of electrical and plumbing fixtures. Building codes and the function of government agencies (state and local) charged with the administration and inspection of building construction will also be discussed.

CST 201 Sustainable Building Practices.....3 credits
Overview of sustainable construction practices currently applied in the industry. Following the "Leadership in Energy and Environmental Design" (LEED) standards, students will explore site and land use, water, materials, energy, atmosphere, and indoor environmental quality.

CST 211 Blueprint Reading 2.....3 credits
Prerequisite: CST 110 Advanced study related to the needs of the individual in the understanding and interpretation of blueprints for special features of design, fabrication, construction, and assembly.

CST 280 Co-op Ed: Construction.....3-12 credits
This course provides students with construction-related learning in professional construction businesses and organizations and integrates theory and practice gained in the classroom. Students develop skills, explore career options and network with professionals and employers while earning college credit toward a degree.

LAT 131 Introduction to Landscape Construction.....3 credits
This course introduces common landscape construction techniques. Students will study fundamental concepts of soils, basic plant needs, irrigation, paving, and plant installation, and will apply their understanding in actual construction projects.

LAT 141 Principles of Nursery Operations.....2 credits
Introduces all phases of nursery operations. Subjects covered will include: propagation techniques, container culture, field stock culture, and retail garden operations.

LAT 155 Landscape Plants 1.....4 credits
Identification, characteristics, appropriate uses, and cultural requirements of plants used in landscaping in the Pacific Northwest. Students will become familiar with typical Pacific Northwest plant communities and basic ecological relationships; will learn to identify native and ornamental plants; and will learn how to select the right plant for the right place. Fall term course focuses on deciduous trees and shrubs.

LAT 156 Landscape Plants 2.....4 credits
Identification, characteristics, appropriate uses, and cultural

requirements of plants used in landscaping in the Pacific Northwest. Students will become familiar with typical Pacific Northwest plant communities and basic ecological relationships; will learn to identify native and ornamental plants; and will learn how to select the right plant for the right place. Winter term course focuses on evergreen trees and shrubs.

LAT 157 Landscape Plants 3.....4 credits
Identification, characteristics, appropriate uses, and cultural requirements of plants used in landscaping in the Pacific Northwest. Students will become familiar with typical Pacific Northwest plant communities and basic ecological relationships; will learn to identify native and ornamental plants; and will learn how to select the right plant for the right place. Spring term course focuses on flowering trees and shrubs, vines, and ground covers.

LAT 280 Co-op Ed: Landscape.....3-12 credits
Prerequisite: Instructor approval. This internship course provides on-the-job learning experiences related to the landscape field in community businesses and organizations. Students will integrate theory and practice, develop skills, explore career options and network with professionals and employers while earning credit toward a degree.

Cooperative Education/Internships

For information, contact the Cooperative Education Division, Bldg. 19/Rm. 231, 541.463.5203.

AB 280 Co-op Ed: Auto Body and Fender	See page 195
AIL 280 Co-op Ed: American Indian Language	See page 234
AM 280 Co-op Ed: Automotive	See page 195
ANTH 280 Co-op Ed: Anthropology	See page 188
ART 280A Co-op Ed: Art and Applied Design	See page 194
ART 280GD Co-op Ed: Graphic Design	See page 227
AV 280 Co-op Ed: Aviation Maintenance	See page 196
BA 280 Co-op Ed: Business Management	See page 198
BA 280AA Co-op Ed: Administrative Office Professional	See page 186
BA 280AC Co-op Ed: Accounting	See page 186
BA 280L Co-op Ed: Legal Assistant	See page 235
BA 280RM Co-op Ed: Retail Management	See page 198
BA 280SM Co-op Ed: Sales and Marketing	See page 198
BI 280 Co-op Ed: Biology	See page 197
BT 206 Co-op Ed: Business Seminar	See page 199
CA 280 Co-op Ed: Culinary Arts, Second Year	See page 208
CG 180 Co-op Ed: Extended Career Exploration	See page 199
CG 280HS Co-op Ed: Human Services	See page 231
CH 280 Co-op Ed: Physics-Chemistry	See page 200
CJA 280 Co-op Ed: Criminal Justice	See page 207
COOP 280SL Co-op Ed: Service Learning	1-12 credits
Prerequisite: Instructor approval. Gain work experience with community partners in addressing real community needs. Through this internship students practice critical thinking, citizenship and civic responsibility, develop skills, explore career options, and network with professionals while earning college credit. Students set learning objectives and engage in faculty-led guided reflection activities.	
CS 206A Coop Ed: Computer Networks Seminar 1	See page 202
CS 206B Coop Ed: Computer Networks Seminar 2	See page 202
CS 280CN Co-op Ed: Computer Network Operations	See page 202
CS 280DP Co-op Ed: Data Processing	See page 202
CS 280GD Co-op Ed: Simulation & Game Development	See page 202
CS 280H Coop Ed: Health Informatics	See page 202
CS 280PR Co-op Ed: Programming	See page 202
CS 280US Co-op Ed: Computer User Support	See page 203
CST 280 Co-op Ed: Construction	See page 205
DA 280 Co-op Ed: Dental Assisting	See page 210
DH 280 Co-op Ed: Dental Hygiene	See page 212
DS 280 Co-op Ed: Diesel	See page 212
ED 280 Co-op Ed: Education	See page 216
ED 280EC Co-op Ed: Early Childhood Education	See page 216
ED 280SE Co-op Ed: September Experience	See page 216
EMT 280P1 Co-op Ed: EMT Internship Part 1	See page 218

EMT 280P2 Co-op Ed: EMT Internship Part 2.....	See page 218
ENGR 280 Co-op Ed: Engineering	See page 220
ENGR 280D Co-op Ed: Drafting	See page 213
ENGR 280E Co-op Ed: Electronic Technology.....	See page 216
ENGR 280M Co-op Ed: Manufacturing Technology	See page 239
ENGR 280W Co-op Ed: Welding	See page 223
ES 280 Co-op Ed: Ethnic Studies	See page 222
FL 280IW Co-op Ed: International Work Experience	See page 234
FN 206 Co-op Ed: Dietary Manager Seminar.....	See page 252
FR 280 Co-op Ed: Dietary Manager	See page 253
FR 280 Co-op Ed: French.....	See page 235
FT 280 Co-op Ed: Flight Tech	See page 225
G 280 Co-op Ed: Geology.....	See page 215
G 280ES Co-op Ed: Environmental Studies	See page 215
GEOG 280 Co-op Ed: Geography	See page 226
GIS 280 Co-op Ed: Geographic Information Science ...	See page 226
GS 280ST Co-op Ed: Science Technology	See page 215
GWE 180 Co-op Ed: General Work Experience	See page 253
GWE 280 Co-op Ed: General Work Experience.....	See page 253
HE 280 Co-op Ed: Health Occupations	See page 229
HIT 280 Co-op Ed: Health Records	See page 228
HRTM 280 Co-op Ed: Hospitality Management.....	See page 231
HST 280 Co-op Ed: History	See page 230
J 280 Co-op Ed: Journalism.....	See page 233
JPN 280 Co-op Ed: Japanese.....	See page 235
LAT 280 Co-op Ed: Landscape	See page 205
MA 206 Co-op Ed: Medical Office Assistant Seminar..	See page 246
MA 280 Co-op Ed: Medical Office Assistant	See page 246
MDP 280 Co-op Ed: Multimedia	See page 246
MTH 280 Co-op Ed: Mathematics	See page 244
MUS 280 Co-op Ed: Music.....	See page 249
NRG 206A Co-op Ed: Energy Management Seminar 1	See page 220
NRG 206B Co-op Ed: Energy Management Seminar 2	See page 220
NRG 280 Co-op Ed: Energy Management.....	See page 220
NRS 280 Co-op Ed: Nursing.....	See page 252
OST 280 Co-op Ed: Occupational Skills.....	See page 253
PE 280 Co-op Ed: Physical Education	See page 222
PE 280A Co-op Ed: Athletics.....	See page 222
PE 280AR Co-op Ed: Aerobics	See page 223
PE 280AT Co-op Ed: Athletic Training.....	See page 223
PE 280C Co-op Ed: Coaching	See page 223
PE 280F Co-op Ed: Fitness	See page 223
PE 280M Co-op Ed: Fitness Management.....	See page 223
PE 280R Co-op Ed: Recreation.....	See page 223
PE 280RT Co-op Ed: Corrective Fitness	See page 223
PE 280W Co-op Ed: Wellness	See page 223
PS 280 Co-op Ed: Political Science	See page 260
PS 280LW Co-op Ed: Pre Law	See page 260
PSY 280 Co-op Ed: Psychology	See page 262
RE 280 Co-op Ed: Real Estate.....	See page 262
RT 280 Co-op Ed: Respiratory Therapy	See page 263
SOC 280 Co-op Ed: Sociology	See page 264
SP 280 Co-op Ed: Speech.....	See page 265
SPAN 280 Co-op Ed: Spanish	See page 235
TA 280 Co-op Ed: Performing Arts.....	See page 266
WATR 206A Coop Ed: Water Conservation Seminar 1	See page 267
WATR 206B Co-op Ed: Water Conservation Seminar 2	See page 267
WR 280 Co-op Ed: English/Writing.....	See page 270
WST 280 Co-op Ed: Watershed Science Technician.....	See page 267

Criminal Justice

For information, contact the Social Science Division, Center Bldg./Rm. 403, 541.463.5427.

CJA 100 Introduction to Criminal Justice 1 3 credits
Philosophy and history of criminal justice agencies, American and foreign; analysis of the policies and practices of agencies involved

in the operations of the criminal justice process from detection of crime; arrest of suspects, prosecution, adjudication, sentencing, and imprisonment to release. Also, the organization of criminal justice agencies; theories and current practices in corrections and crime prevention; The evaluation of contemporary criminal justice services; survey of professional career opportunities.

CJA 101 Introduction to Criminology..... 3 credits
The study of deviant behavior as it relates to the definition of crime; crime statistics; theories of crime causation; crime typologies, the impact of crime, juvenile delinquency, and society's reactions to criminal behavior.

CJA 110 Introduction to Criminal Justice 2..... 3 credits
This course is the second of a two-term Intro to Criminal Justice sequence. It focuses on the court system, processing of defendants, court organization, and the trial process. In addition, the class will provide an in-depth analysis of the corrections system and occupations, sentencing issues, parole and probation and the juvenile justice system.

CJA 201 Juvenile Delinquency..... 3 credits
A review of the historical reasons for the establishment of juvenile courts in the United States; an examination of the juvenile justice process; and an introduction to the functions of the various components of the system. Sociological concepts and theory of the adolescent subculture will be explored. Delinquency prevention aspects as well as treatment methodologies will be included. Oregon juvenile court law is examined.

CJA 210 Criminal Investigation 1..... 3 credits
Fundamentals of criminal investigation, theory, and history; crime scene to courtroom with emphasis on techniques appropriate to specific crimes.

CJA 213 Interviewing and Interrogation..... 3 credits
This course will examine the dynamics of psychological persuasion existing as a product of criminal interrogations. The processes and techniques used will be the focus during the course with specific attention to the practical and legal limitations of achieving the goals of interviewing.

CJA 214 Introduction to Forensic Science..... 4 credits
This course is an introduction to forensic science, crime scene investigations, physical evidence, and legal aspects of evidence, and is designed for all students interested in forensic science. The student will learn how to process crime scenes, the types of physical evidence that may be encountered, and how evidence is analyzed in the laboratory. Emphasis will be placed on the interpretation of analytical test results as they relate to the limitations of the evidence itself, how the evidence was collected, the case context, and other factors. The student will have hands-on laboratory exercises in analyzing and comparing physical evidence. Critical thinking and the application of the scientific method will be emphasized in all laboratory exercises. Class concepts will be reinforced with actual case examples whenever possible.

CJA 220 Introduction to Criminal Law..... 3 credits
Historical development, philosophy of law and constitutional provisions, definitions, classification of crime and their application to the system of criminal justice; legal research, study of case law, methodology, and concepts of law as a social force.

CJA 222 Criminal Law: Procedural Issues..... 3 credits
Developmental history in English common law and United States case law; constitutional and statutory provisions relative to arrest, search and seizure. Rights and responsibilities of citizens and criminal justice personnel and agencies.

CJA 232 Correctional Casework..... 3 credits
Basic concepts of interviewing and counseling techniques used by probation and parole officers, correction officers, and other casework personnel in one-to-one contacts with clients. To prepare the student for practice in the public safety fields, for both juvenile and adult clients.

CJA 243 Narcotics and Dangerous Drugs..... 3 credits
Introduction to the problems of substance abuse alcohol, drugs, narcotics in our society. This course is designed to equip criminal justice, social service, and other human service workers with increased background and knowledge of today's drug technology, including pharmaceuticals, over-the-counter agents, and illicit drugs.

CJA 280 Co-op Ed: Criminal Justice 3-12 credits
Prerequisite: CJ 100 & CJ 110 or instructor permission. This course provides the student with criminal justice-related work experience in community organizations. The student will have the opportunity to integrate theory with practical experience in the professional world. In this course a student may develop skills, explore career options, and network with professionals and employers while earning credit toward a degree.

Culinary Arts

For information, contact the Culinary Arts and Hospitality Management Department, Bldg. 19/Rm. 202, 541.463.3503.

CA 110 Culinary Adventuring: Local Guest Chef Series 2 credits
This course is open to the public. Course may be repeated for credit. It is designed to offer students cooking instruction by well known and respected local chefs and food purveyors through lecture, demonstration, hands-on experiences and tastings.

CA 120 Culinary Adventuring: Seasonal Baking and Pastry 2 credits
Course may be repeated for credit for up to eight credits. A Lane County Food Handler's Card is required. It is designed to apply classical baking and pastry techniques with the use of seasonal produce. Students will learn about local produce availability as well as Oregon's agricultural organic and sustainable values.

CA 121 Culinary Adventuring: The Composition of Cake 2 credits
A Lane County Food Handler's Card is required. This course is designed to teach classical techniques of baking and decorating cake production. All components of making and decorating cakes will be covered. Students will also be introduced to working with specialty cake ingredients.

CA 123 Culinary Adventuring: International Baking and Pastry 2 credits
A Lane County Food Handler's Card is required. This course is designed to apply classical baking and pastry techniques from across the Globe to create authentic and traditional recipes, both sweet and savory. With guided, hands-on instruction, students will learn cooking and baking preparation styles used in different countries.

CA 130 Culinary Adventuring: Oregon Wine Country 2 credits
This course is open to the public 21 years or older. It introduces students to the process of winemaking as it relates to Oregon, especially the Willamette Valley. Each week, winemakers from the Willamette Valley will discuss their wines and demonstrate how they complement foods.

CA 159 Kitchen Operations 2 credits
A Lane County Food Handler's Card is required. This course will give hospitality students an appreciation for the operation of a foodservice kitchen. Students will learn the fundamentals of food safety, sanitation, tools and equipment, and basic cooking skills that are used in a successful production kitchen.

CA 160 Cooking Theories 1 5 credits
Prerequisites or Corequisites: CG 203, MTH 025-MTH 095, CA 175 and HRTM 105. This class will introduce students to tools and equipment, culinary history, terminology and culinary concepts. Focus is on basic culinary theory, introduction to cooking techniques and fundamentals, and practical application of safety and sanitation concepts.

CA 160A Food Preparation and Production 1 3 credits
Prerequisite or Corequisite: CA 175. In this class students will be introduced to the fundamentals of food safety and sanitation; tools and equipment identification and safe use; proper kitchen and personal hygiene; key culinary concepts, terminology and history.

CA 160B Food Preparation and Production 2 2 credits
Prerequisite: CA 160A. In this class, which is a continuation of CA 160A, students will learn and practice the fundamentals of food safety and sanitation; tools and equipment identification and safe use; proper kitchen and personal hygiene; key culinary concepts, terminology and history.

CA 162 Cooking Theories 2 0-5 credits
Prerequisites: CG 203, MTH 025-095, CA 160, CA 175, HRTM 105. This class continues to build the culinary theory, techniques and principles introduced in CA 160, Cooking Theories 1. Focus is on further developing students culinary understanding and skills.

CA 163 Cooking Theories 3 0-5 credits
Prerequisite: CA 162. This class focuses on baking and pastry for cooks; an introduction to the tools and equipment of the bakeshop, baking history, terminology and baking concepts. Focus is on basic baking and pastry theory and introduction to baking and pastry techniques.

CA 163A Beginning Baking and Pastry 3 credits
Prerequisite or Corequisite: CA 175. Students are introduced to the fundamentals of baking and pastry production, including food safety and sanitation and culinary math in relation to recipe comprehension, conversion and costing from the point of view of bakers' percentages. Focus is on classical baking and pastry techniques.

CA 163B Intermediate Baking and Pastry 3 credits
Prerequisites: CA 163A. This course is a continuation of CA 163A. Students will continue to practice fundamentals of baking and pastry production, including food safety and sanitation and fundamental culinary math in relation to recipe comprehension, conversion and costing from the point of view of bakers' percentages.

CA 163C Advanced Baking and Pastry 3 credits
Prerequisite: CA 163B. This course is a continuation of CA 163B. Students will practice all fundamentals of baking and pastry skills learned in the entire course sequence, and expected of a working baker/pastry chef in the industry. This course will focus on specialty dessert techniques and ingredients.

CA 175 Foodservice Sanitation and Safety 2 credits
This course presents the basics of food service sanitation. The text examines a systematic approach to sanitation management by the use of control points and effective use of multiple resources. The NRAEF ServSafe Certificate will be issued upon successful completion of the NRAEF Exam.

CA 176 Concepts of Taste and Flavor 2 credits
This class will introduce students to the vocabulary and concepts of what we term "flavour". Students will explore how these concepts interplay between food items and between food and beverages.

CA 184 Dining Room and Kitchen Lab 1 3 credits
Prerequisites: CA160, CA 175, HRTM 105, CG 203, and MTH 025 or higher. Introductory level lab. This class designed to duplicate working conditions of a restaurant operation. Students will rotate through multiple job positions; learning experiences involve a progressive approach toward food preparation and service skills development.

CA 185 Dining Room and Kitchen Lab 2 4 credits
Prerequisites: CA 184 and CA 162. Intermediate level lab. A continuation of CA 184. Intermediate level of food preparation and dining room service. In this second term the student gains more hands-on experience with line cooking, table service and organization of student restaurant activities.

CA 186 Dining Room and Kitchen Lab 3 4 credits
Prerequisites: CA163 and CA 185. Final lab in course sequence. A continuation CA 185. Advanced level of food preparation and dining room service. In this term the student gains more hands-on experience with planning, production, preparation, and presentation with an emphasis on speed and skills in kitchen production activities.

CA 187 Dining Room and Kitchen Supervision 4 credits
Prerequisite: CA 186. Second-year students focus on the supervision of specific stations within the restaurant for a ten week period. Students will learn how to effectively train and supervise first-year students. Emphasis will be on organizational skills, planning, and training advanced a-la-carte and dining room service dining techniques.

CA 200 Restaurant and Menu Management 3 credits
Prerequisites: HRTM 105. This course will enable the student to apply menu planning principles as an indispensable management tool for a variety of food service operations.

CA 225 Catering Lab 2 credits
Prerequisites: CA 292. Catering Lab is designed to provide authentic working conditions in a catering environment. It offers student learning experiences involving running a full-service conference center catering operation, using the Center for Meeting and Learning and actual scheduled events.

CA 279 Buffet and Banquet Planning 2 credits
Prerequisites: CA 163 and CA 185. This course introduces the basics of planning, organizing, preparing and serving large plated dinners

and buffets. Under instructor supervision and guidance, students are involved in executing at least one major dinner event in coordination with Hospitality Management students.

CA 280 Co-op Ed: Culinary Arts, Second Year 3-12 credits
This course provides the student with culinary arts-related work experience in community businesses and organizations. The student will have the opportunity to integrate theory and practice gained in the classroom with practical experience in the professional world.

CA 292 Advanced Cooking Theories 1 (Garde Manger) 3 credits
Prerequisites: CA 185 and CA 163. This course will explore the principles of successful cold kitchens. Students will develop fine technical skills with particular emphasis on modern and traditional techniques in the preparation of cold entrees, pates, terrines, galantines, chaud-froid and ice carving.

CA 293 Advanced Cooking Theories 2 (International) 3 credits
Prerequisite: CA 292. Focus on advanced cooking and baking techniques used in contemporary international cuisine restaurants. Students will become familiar with dishes and prepare, serve, taste and evaluate multiple menus featuring cuisines from around the globe.

CA 294 Advanced Cooking Theories 3 (American Regional) 3 credits
Prerequisite: CA 293. This course covers advanced cooking and baking techniques used in modern restaurants featuring regional American cuisine. Students will become familiar with dishes and prepare, serve, taste and evaluate multiple menus featuring cuisines from around United States.

CA 297 Culinary Leadership: Principles and Practices 2 credits
Prerequisites: CA 176, CA 187, CA 200, CA 293, HRTM 275. This capstone class is administered in the last term of the degree program. The class reviews key competencies addressed during the two year Culinary Arts program and has three components: review core knowledge, service learning, and an ACF Certified Culinarian written exam equivalent.

Dance

Also see Physical Education

For information about classes with course numbers that begin with:

D—Contact the Music, Dance and Theatre Arts Department, Bldg. 6/Rm. 204, 541.463.5209.

PE—Contact the Health and PE Division, Bldg. 5/Rm. 205, 541.463.5545.

D 152 Dance Basics 2 credits
This introductory course accommodates the pre-major and non-major students. Introducing basic techniques of dance for students who have never taken a technique class, the class presents alignment principles, weight shifts, level changes and elements of movement such as use of rhythm, shape and dynamics. Students develop a strong foundation in dance so they can proceed in their training in ballet, modern or jazz. Class is repeatable up to 12 credits.

D 153 Pilates Mat Work 2 credits
This class explores the Pilates method of body conditioning, a unique system of stretching and strengthening exercises developed by Joseph H. Pilates. Students gain strength, flexibility, and balance through specific exercises, which emphasize uniting the body and mind. Class is repeatable up to 12 credits.

D 154 Pilates Mat Work 2 2 credits
This course builds on the fundamentals of Pilates with more advanced exercises. Students gain strength, flexibility and balance through specific exercises which emphasize uniting the body and mind.

D 160 Dance Composition 3 credits
Prerequisite: D 257 Composition techniques are learned and applied, with specific emphasis on form, quality, spatial relationships, and rhythmic manipulation. Students in this course may present their work in the annual production of "The Works" Student Dance Concert. This is a required course for dance majors, and meets the Arts and Letters requirement for the AAOT degree. Class is repeatable up to 12 credits. Offered fall term only.

D 161 Gyrokinesis 2 credits
GYROKINESIS mat exercises work the entire body through use of fluid spinal movement. Joints and muscles gently work through

rhythmic spiraling and undulating movements, which invigorate the body. Gyrokinesis is smooth, connected, fluid postures which unite in the use of breath.

D 169 Musical Theater 2 credits
Students are introduced to basic dance theories and techniques for musical theater. Choreographed sequences from contemporary and traditional Broadway musicals are learned throughout the term. The class will focus on interpretation and character study. Previous dance experience is helpful but not required.

D 171 Contact Improvisation 2 credits
Contact Improvisation is a dance form based on communicating through touch. Fundamentals include weight sharing, release technique, counterbalance, rolling point, falling, inversions, and lifts. Students explore the physical and expressive aspects of improvisational partnering.

D 172 Dancing the Fluid Body 2 credits
This course explores the concepts of Continuum Movement, a somatic approach to understanding the body and its capacities. Specific breath and sound techniques are introduced to stimulate the fluidity of the body. Students explore wave motion and spiral movements varying from subtle micro-movements to dynamic full-bodied expression. Discussions of the body in relation to culture, anatomy, and ecology are springboards for movement explorations.

D 173 African Dance 2 credits
This class is an introduction to African dance. Students learn contemporary and traditional dances from Guinea while exploring rhythm and movement within the cultural context of community. Relevant history is explored through assigned readings, video, and class discussions. Class is repeatable up to 12 credits.

D 175 Tap Dance Beginning 2 credits
This class is an introduction to tap dance. Students learn basic vocabulary and technique in both individual exercises and choreographed sequences. The course covers the basics of rhythm, including tempo, beat, meter, accent, syncopation, and musical structures. Improvisational skills are developed as students integrate their understanding of tap with a sense of musicality and performance. The course includes an historical overview of the development and evolution of the form, in film, lectures, experientials and performance.

D 176 Fluid Yoga 2 credits
This Yoga class explores yoga postures, breath, and cultivates an inner listening to the waves and spirals present in our primarily fluid bodies. Emphasis is placed on developing a yoga practice that encourages creativity and fluidity. Class is repeatable up to 12 credits.

D 177 Modern Dance 1 2 credits
This beginning level class for dancers with little or no previous dance experience, accommodates the pre-major and non-major student. Modern dance technique is introduced with focus on three-dimensional use of the spine and torso, joint articulation and mobility, core strength, expressivity and spatial awareness. Given realistic progressive development, students will repeat this level three times before advancing to Modern 2. Second and third terms offer an accelerated introduction to accommodate newcomers yet sustains the development of returning students. Class is repeatable up to 12 credits.

D 178 Modern Dance 2 2 credits
This intermediate level class accommodates the pre-major and non-major student. This class further develops the student's awareness of modern dance technique and vocabulary. Training continues with dance movements that incorporate: three-dimensional use of the spine and torso, joint articulation and mobility, core strength, expressivity and spatial awareness. Students will deepen their understanding of these concepts while developing more sophisticated connections both in the body and in relation to space. Given realistic progressive development, students will repeat this level for a full year or more. Class is repeatable up to 12 credits.

D 179 Modern Dance 3 2 credits
This intermediate-advanced level class accommodates the dance-major and non-major student. This class further develops the student's awareness of modern dance technique and vocabulary. Training continues with more complex dance movements that incorporate: three-dimensional use of the spine and torso, joint articulation and mobility, core strength, expressivity and spatial awareness.

Students will deepen their understanding of these concepts while developing more sophisticated connections both in the body and in relation to space. Students learn longer movement sequences, which involve a more complex use of space, weight, time, and dynamic effort and quality variations. Given realistic progressive development, students will repeat this level for three terms. Class is repeatable up to 12 credits.

D 183 Body/Mind Stretch and Relaxation 2 credits

This course explores the body-mind connection through stretch and relaxation exercises and techniques. The course is designed to increase one's personal awareness of their body and to integrate the body and the mind in movement. Study of the skeleton, muscle, organ, fluid and nervous systems will enhance one's ability to stretch efficiently. There is an emphasis placed on the parasympathetic nervous system, which is activated by internal focusing, eyes half-closed and slow, fluid movement.

D 184 Hip Hop 1 2 credits

This introductory course explores Hip-Hop dance vocabulary and style. Students learn body isolations, rhythmic patterns, and dance combinations. Students should be in good condition without chronic injuries. Class is repeatable up to 12 credits.

D 185 Ballet 1 2 credits

This beginning level class for dancers with little or no previous dance experience accommodates the pre-major and non-major student. This class presents the fundamental principles and vocabulary of classical ballet with focus on correct body alignment and musicality. Second and third terms offer an accelerated introduction to accommodate newcomers yet sustains the development of returning students. Given realistic progressive development, students repeat this level three times before advancing to Ballet 2. Class is repeatable up to 12 credits.

D 186 Ballet 2 2 credits

This intermediate level class accommodates the pre-major and non-major student, and develops the student's alignment, coordination and musicality. This class introduces more challenging center floor phrases, adagios, petit allegros and grande allegros. Given realistic progressive development, students repeat this level three times before advancing to Ballet 3. Class is repeatable up to 12 credits.

D 187 Ballet 3 2 credits

This intermediate-advanced level class accommodates the dance major and non-major student. Focus is on technical execution, musicality, and line. Class work builds on the student's ballet vocabulary through more advanced center floor phrases, adagios, petit allegros and grande allegros. Given realistic progressive development, students repeat this level for three terms. Class is repeatable up to 12 credits.

D 188 Jazz Dance 1 2 credits

This beginning level class accommodates the pre-major and non-major student. This class develops the student's alignment and coordination in basic jazz dance vocabulary. Jazz movements are introduced which incorporate isolations, spatial awareness, and rhythmic variations. Students are encouraged to take ballet and modern to augment their jazz training. Class is repeatable up to 12 credits.

D 189 Jazz Dance 2 2 credits

This beginning-intermediate level class accommodates the pre-major and non-major student. This class develops the student's alignment and coordination in jazz dance vocabulary. Training continues with jazz movements that incorporate syncopation of body parts, dynamics, and spatial and rhythmic variations. Students are encouraged to take ballet and modern to augment their jazz training. Class is repeatable up to 12 credits.

D 194 Hip Hop 2 2 credits

This intermediate level course explores Hip-Hop dance vocabulary and style. Students learn discipline and professionalism while exploring popular dance trends and street dance techniques. With emphasis on athleticism in dance, body isolations, intricate rhythmic patterns, and mastering dance combinations, students are expected to be in good condition free of chronic injuries. Class is repeatable up to 12 credits.

D 196 Balinese Dance 2 credits

This course explores Balinese Dance in relation to art, spirituality, and daily life. Students learn traditional dances, their cultural

and historical significance, and their importance in contemporary Balinese life. Globalization and Western cultural influences will be addressed. No prior dance experience necessary.

D 251 Looking at Dance 4 credits

This fun and enriching course focuses on various cultural and historical perspectives of dance. From Hip Hop to Classical Ballet, from Folk dance to World dance, students explore dance as an art form in its expressive, communicative, and aesthetic aspects. Students develop an understanding and appreciation for dance as a performing art. Meets Arts and Letters requirement for the AAOT degree. Writing 121 recommended. Offered winter term only.

D 256 Body Fundamental/Body as Knowledge 4 credits

This course introduces students to body systems, muscular, skeleton, organ, fluid, nervous, fascial and endocrine system. Re-patterning movement is introduced through various somatic disciplines such as: Bartenieff fundamentals, Laban Movement Analysis, Ideokinesis, and Body Mind Centering including Developmental Movement. Value is placed on embodiment of anatomy through movement, touch and imagination to gain insight into functions and movement potential. A required course for dance majors and a beneficial class for everyone. Meets Arts and Letters requirements for the AAOT degree and satisfies a University of Oregon dance major pre-requisite. Required for Dance majors. Offered fall term only.

D 257 Dance Improvisation 2 credits

This course focuses on exploring and creating new movement through dance improvisation. Students work in solos, duets, and groups, to develop spontaneity, confidence, awareness, and concentration as they experience dance as a creative process. Students experiment with the elements of time, space, and energy. This course is a pre-requisite for D160 and D260. Class is repeatable up to 12 credits.

D 260 Group Choreography 3 credits

Prerequisite: D 160 and D 257. Group Choreography tools and techniques are learned and applied. Emphasis is placed on dynamics, special relationship, clarity and form. Students learn to articulate personal responses to choreographic projects, while supporting creativity and individuality. May be used to meet Arts and Letters requirement for the AA/OT degree. Class is repeatable up to 12 credits. Offered winter term only.

D 261 Dance Rehearsal and Performance 1-3 credits

Designed to provide practical application of classroom theory and skills, this course is taken by participants in our annual dance concerts performance. May be repeated for maximum of nine credits. Class is repeatable up to 12 credits.

ED 225 Multiple Intelligences-Motion 3 credits

Using the latest findings in brain research, this dynamic teaching intensive challenges participants to approach creative movement as an essential tool for cognitive, social and emotional learning for children of all abilities. With a focus on sequential, comprehensive and integrative curriculum, this workshop bridges the gap between arts and academia. In daily hands-on brain-compatible concept-based dance activities, participants define, explore and create best practices in education for every child. No prior dance experience necessary.

PE 187B Ballroom Dancing 1 credits

Introductory course in the basics of social dance forms including Waltz, Foxtrot, Swing, Rumba and Cha Cha. Emphasis on good dance posture and frame, and proper lead and follow technique. Open to all students; no prior dance experience necessary.

PE 187M Latin Dancing 1 credits

Introductory course in the basics of Latin dance forms including Salsa, Cha-Cha, Rumba, American Tango, Cumbia, and Merengue. Emphasis on good dance posture and frame, and proper lead and follow technique. Open to all students; no prior dance experience necessary.

PE 187P Salsa Dancing 1 credits

Learn the basic steps of salsa and casino rueda, beginning and intermediate combinations, spins and turns, and individual footwork. Emphasis on good dance posture and frame, proper lead and follow technique and Latin hip motion. Open to all students; no prior dance experience necessary.

PE 187S Swing Dancing..... 1 credits
Introductory course gives basic instruction in single and triple-time East Coast swing, and introduction to 8-count Lindy Hop. Emphasis on good dance posture and frame, and proper lead and follow technique. Open to all students; no prior dance experience necessary.

Dental Assisting

For information, contact the Health Professions Division, Bldg. 4/Rm. 222, 541.463.5617. Except for DA 103 and DA 110, you must be accepted into the Dental Assisting program to take these classes.

DA 102 Advanced Clinical Experiences 3 credits
Must be enrolled in the Dental Assisting Program. Knowledge and skills taught throughout the program are utilized as students apply a variety of expanded function chairside assisting and client care skills.

DA 103 Dentistry Law and Ethics 2 credits
Course content includes the development of dentistry and its related professions. Covers ethics and jurisprudence for dental professionals. A study of the Oregon Dental Practice Act, roles of the dental health team and an introduction to the dental office environment are also included in this course. May be offered online.

DA 107 Dental Health Education 1..... 1 credits
Must be currently enrolled in the Dental Assisting Program This course covers the basic concepts of preventive dentistry including the study of plaque-related diseases, fluoride therapy, brushing and flossing techniques.

DA 108 Dental Health Education 2..... 3 credits
Must be enrolled in Dental Assisting program. This course covers the practical application of preventive dentistry concepts. Includes patient motivation, coronal polishing, fluoride application, nutritional counseling, the recognition of normal and abnormal oral conditions and community service programs.

DA 110 Health Sciences 3 credits
The study of structure and function of the human body. Bacteriology and microbiology are discussed. *The first two terms of Anatomy and Physiology (passed with a grade of C or better) can be substituted for this course.

DA 115 Dental Anatomy 3 credits
Must be currently enrolled in the Dental Assisting Program This course covers the study of head & neck anatomy with emphasis on individual teeth and tooth surfaces using the universal numbering system.

DA 192 Dental Materials..... 3 credits
Must be currently enrolled in the Dental Assisting Program. Course content covers the composition, clinical properties, preparation, use and storage of materials, and study model construction used in dentistry.

DA 193 Dental Materials 2..... 3 credits
Must be enrolled in the Dental Assisting Program. Course covers completion of laboratory procedures from DA 192 associated with dental specialties, such as amalgam and composite, die construction, retainers, bleaching trays, temporary crowns & restorations, and custom trays.

DA 194 Dental Office Procedures..... 3 credits
Must be currently enrolled in the Dental Assisting Program. Principles of appointment planning, telephone techniques, case presentation, and management of client accounts. Teaching is done in a computer lab to support computerized instruction

DA 195 Chairside Procedures 1 6 credits
Must be enrolled in the Dental Assisting Program. Course covers chairside assisting procedures, such as preparation of client, oral evacuation techniques, instrument exchange, dental examinations, & operative dentistry. Asepsis & infection control are included.

DA 196 Chairside Procedures 2..... 7 credits
Must be currently enrolled in the Dental Assisting Program. Course covers signs & symptoms of medical emergencies that may occur in the dental office. Specialties of dentistry, principle procedures, instrument set-ups, and clinical experience are also included.

DA 210 Dental Radiology 1..... 4 credits
Must be enrolled in the Dental Assisting Program. Course covers

background, terminology, & physics associated with exposing radiographs. Health, safety measures and legalities are included. Exposing technique, processing, mounting and critiquing are covered in lecture and lab.

DA 211 Dental Radiology 2..... 2 credits
Must be enrolled in the Dental Assisting Program. Continuation of DA 210. Provides basis for occlusal film projections and extra-oral radiographs. Students apply all skills learned in Fall term, and progress to exposure of radiological films on clinical patients.

DA 280 Co-op Ed: Dental Assisting..... 6-12 credits
Prerequisite: Enrollment in DA Program. Course provides dental assisting work experience in community businesses. Includes opportunity to integrate theory and practice. Student may develop skills & explore career options. Includes instruction on resumes, cover letters, interviewing and job search skills.

EL 115H Effective Learning: Health Science Majors..... 3 credits
This course is designed for health occupation majors who wish to strengthen their study skills and strategies. Students will learn how to take notes from lectures and textbooks, study for tests, improve memory, read and study from textbooks, manage time effectively, and use the library. Course work requires college-level reading skills.

Dental Hygiene

For information, contact the Health Professions Division, Bldg. 4/Rm. 222, 541.463.5617. You must be accepted into the Dental Hygiene program to take these classes.

DH 107 Dental Infection Control and Safety..... 1 credits
Prerequisites: Instructor Permission Introduction to the chain of infection, infectious and plaque associated diseases affecting the dental office environment and protection of the health care worker. Topics include bloodborne pathogens, federal regulations, dental office clinical asepsis protocol, LCC Exposure Control Program, management of waste, office safety programs, chemical and emergency plans. Competency in Infection Control protocols are evaluated during laboratory sessions. May be offered online.

DH 113 Dental Anatomy and Histology 2 credits
Prerequisite: Admission to the DH Program or consent of instructor The study of dental histology and morphology of the teeth and surrounding soft tissues. May be offered online.

DH 118A Clinical Dental Hygiene 1 4 credits
Prerequisites: Enrolled dental hygiene program or instructor consent. Co-requisites: DH118A and DH118B taken together and require simultaneous registration. introduction to basic instrumentation, assessment procedures, and clinical protocol for dental hygiene care. May be offered online.

DH 118B Clinical Dental Hygiene 1 Lab..... 2 credits
Clinical Lab required for DH 118A.

DH 119A Clinical Dental Hygiene 2-Lecture Seminar..... 3 credits
Prerequisites: Admission to program or instructor consent . Co-requisites: DH119A and DH119B are taken together and require simultaneous registration. Continuation of preclinical skills in instrumentation, evaluation of clients, treatment planning and client education. Didactic, laboratory and clinical instruction, with emphasis on removal of deposits, preparation for clients and the application of preventive dental procedures. Client care begins with the child, adolescent and adult patient with limited periodontal needs. May be offered online.

DH 119B Clinical Dental Hygiene 2-Lab..... 4 credits
Clinical Lab required for DH 119A.

DH 120A Clinical Dental Hygiene 3:Lecture/seminar..... 3 credits
Prerequisites: Admission to DH Program or instructor consent. Co-requisites: DH220A and DH220B are taken together and require simultaneous registration. Lecture, instructional lab and clinical course focusing upon the dental hygiene process of care, advanced instrumentation techniques and treatment of the slight to moderate periodontal patient. May be offered online.

DH 120B Clinical Dental Hygiene 3 Clinic Lab..... 4 credits
Clinical Lab required for DH 120A.

DH 132 Dental Materials for the Dental Hygienist 2 credits
Prerequisites: Enrolled in DH Program or Instructor Permission.

Composition, properties and manipulation of dental materials. Laboratory and clinical experience with dental materials. May be offered online.

DH 139 Special Needs Dental Patient.....2 credits

Prerequisite: Enrolled in D H Program/Instructor Permission. Knowledge and skill development in assessment, diagnosis, planning and treatment of dental patients with developmental disabilities, complex medical problems and significant physical limitations. Development of critical thinking and problem solving skills in the care of patients with special needs, prevention of emergencies and selection of treatment. May be offered online.

DH 220A Clinical Dental Hygiene 4-Lecture/seminar.....2 credits

Prerequisites: Admission to DH Program or Permission of Instructor Co-requisites: DH220A and DH220B are taken together and require simultaneous registration Lecture, instructional lab and clinical course focusing upon the dental hygiene process of care, advanced instrumentation techniques and treatment of the moderate to advanced periodontal patient. May be offered online.

DH 220B Clinical Dental Hygiene 4-Clinical Lab 5 credits

Clinical Lab required for DH220B.

DH 221A Clinical Dental Hygiene 5.....2 credits

Prerequisites: Admission in DH Program or instructor permission Co-requisites: DH221A and DH221B are taken together and require simultaneous registration Lecture, instructional lab and clinical course focusing on continuation of the theory and practice of the dental hygiene process of care, including advanced instructional theory and practice in therapeutic interventions for comprehensive dental hygiene care. May be offered online.

DH 221B Clinical Dental Hygiene 5 Clinic Lab.....6 credits

Clinical Lab required for DH221A.

DH 222A Clinical Dental Hygiene 6.....2 credits

Prerequisites: Admission in D H Program or instructor permission. Co-requisites: DH222A and DH222B are taken together and require simultaneous registration. Continuation of the practice of the Dental Hygiene process of care with focus on the integration of comprehensive dental hygiene care into the general dentistry practice setting. Competency testing will prepare students for WREB board examinations and Licensure. May be offered online.

DH 222B Clinical Dental Hygiene 6 Clinic Lab.....5 credits

Clinical Lab required for DH222A.

DH 228 Oral Biology 1.....4 credits

Prerequisite: Admission to the DH Program or consent of instructor Identify, describe, and locate the bones of the skull, muscles, cranial nerves, blood vessels, and lymphatics of the head and neck; glands of the oral cavity; the tongue, the temporomandibular joint; and the alveolar processes. The student will also be able to explain and recognize terms and processes related to the development of the head, face and oral cavity. May be offered online.

DH 229 Oral Pathology for the Dental Hygienist.....3 credits

Prerequisite: Admission to the DH Program or consent of instructor Concepts in general, systemic, and oral pathology. Emphasis on entities frequently encountered, clinical signs and symptoms, and concepts of differential diagnosis. May be offered online.

DH 233 Anesthesia/Analgesia for Dental Hygiene Therapy.3 credits

Prerequisites: Admin. in DH Program or instructor Permission. The theories and practices of local anesthesia and nitrous oxide/oxygen conscious sedation. Review of anatomy, physiology, pharmacology, and emergency procedures associated with local anesthesia and NO₂/O₂ conscious sedation. Preparation for the administration of infiltration and block anesthesia in dental hygiene procedures. Laboratory and clinical experience in administration of local anesthesia and N₂O/O₂. May be offered online.

DH 234 Trends and Issues in Dental Hygiene 2 credits

Prerequisite: Admission to the DH Program or consent of instructor. Exploration of current trends and issues in the profession, ethics and jurisprudence, practice management and researching employment opportunities for the dental hygienist. May be offered online.

DH 237 Community Dental Health.....3 credits

Prerequisites: Admission to DH Program or Instructor permission An introduction to dental public health practices. Emphasis on use of an evidence based philosophy for incorporating scientific literature

into community dental health practices. Instruction in basic research, statistical concepts and electronic data bases. Program planning is emphasized. Field work in public health clinics, with community groups for dental presentations and in public dental programs. May be offered online.

DH 238 Community Dental Health.....1 credits

Prerequisites: Acceptance into Dental Hygiene Program. Preparation of a community dental health portfolio demonstrating implementation of dental health program plans and participation in field work assignments. Portfolio projects focus on the identification of community groups and development of sound approaches to dental public health needs. The student participates in field work assignments and student initiated community health promotion projects. May be offered online.

DH 243A Oral Roentgenology 1 2 credits

Prerequisite: Admission to the DH Program or consent of instructor. Co-requisite: DH 244A and DH 244B are taken together and require simultaneous registration. Historical background, terminology; concepts and principles of x-radiation, x-ray generation, radiologic health and safety measures; normal radiographic dental anatomy; radiographic legalities. Film technique, including critiquing, exposing, processing, and mounting. Laboratory provides skills in dental radiographic exposure on manikins as well as processing techniques. May be offered online

DH 243B Oral roentgenology 1: Lab 1 credits

Clinical Lab. Lab required for DH 243A.

DH 244A Oral Roentgenology 2 1 credits

Prerequisite: Admission to the DH Program or consent of instructor Continuation of Oral Roentgenology 1. Radiologic interpretive knowledge and skills are introduced as a diagnostic aid to assist with dental hygiene diagnoses. Patient management skills, pedodontic, edentulous, occlusal, panoramic and accessory radiographic techniques are included. Intraoral panoramic and digital radiography on patients and practicing film interpretation skills on completed client radiographs. May be offered online. Lab required for DH 244A.

DH 244B Oral Roentgenology 2: Lab 1 credits

Clinical Lab required for DH 244A.

DH 254 Pharmacology.....3 credits

Prerequisite: Admission to the DH Program or consent of instructor. An introduction to various drugs used in the practice of dentistry; an intro to the most commonly prescribed drugs that students might encounter on a patient's medical history. Students will study nomenclature, classification, dosage, contraindications, and effects of pharmacological compounds. May be offered online.

DH 270 Periodontology 1.....2 credits

Prerequisites: Enrolled in DH Program or instructor permission The study of the normal periodontium, periodontal pathology, etiology and principles of periodontal disease, examination procedures, principles of periodontal therapy, non surgical periodontal therapy and prevention modalities. American Academy of Periodontology classifications of periodontal disease, maintenance considerations and referral for specialized periodontal care are presented. May be offered online.

DH 271 Periodontology 2.....1 credits

Full Prerequisites: Accepted in DH Program or instructor permission Treatment of the moderate to advanced periodontal patient, selection of surgical procedures and maintenance. The course reviews periodontal and restorative considerations, occlusion and TMJ disorders, periodontal surgery, dental implant and maintenance, periodontal emergencies and a review of evidence based periodontal research. Specialty office visit to observe treatment modalities. May be offered online.

DH 275 Dental Hygiene Restorative Functions 1.....2 credits

Admission in Dental Hygiene Program or Instructor Permission Restorative Functions 1 content includes tofflemier placement, wedge, etiology of the decay process, cavity preparation, properties of amalgam, maintenance of dental anatomy, occlusal considerations, and amalgam placement and finishing. Laboratory and clinical practice for skill development. May be offered online.

DH 276 Restorative Functions 2.....1 credits

Prerequisites: Admission in Dental Hygiene Program or Instructor Permission. Restorative Functions 2 content includes amalgam

polishing; direct placement, esthetic materials, composition and classification; handling, placement and finishing; light cure techniques; and anatomical considerations for anterior and posterior composite placement. Laboratory and Clinical Practice for skill development. May be offered online.

DH 280 Co-op Ed: Dental Hygiene 3-12 credits
This course provides the student with dental hygiene work experience in community businesses and organizations. The student will have the opportunity to integrate theory and practice gained in the classroom with practical experience in the professional world.

EL 115H Effective Learning: Health Science Majors.....3 credits
This course is designed for health occupation majors who wish to strengthen their study skills and strategies. Students will learn how to take notes from lectures and textbooks, study for tests, improve memory, read and study from textbooks, manage time effectively, and use the library. Course work requires college-level reading skills.

Design—See Art, Studio and Graphic Design

Diesel and Heavy Equipment

For information, contact the Advanced Technology Division, Bldg. 15/Rm. 201, 541.463.5380.

DS 154 Heavy Duty Braking Systems..... 1-12 credits
Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Operation, diagnosis, testing, failure analysis, and repair of heavy duty braking systems. Technical information and shop projects to apply and understand theories and principles include: fundamentals of braking and applied preventive maintenance program-trucks/tractors; disk/cam brake systems; anti-lock air brake systems; heavy duty wedge brakes; power assist units; truck/tractor air brake system components; and diesel engine and exhaust brakes and retarders in on and off highway heavy duty equipment.

DS 155 Heavy Equipment Hydraulics 1-12 credits
Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Operation, diagnosis, testing, failure analysis, and repair of on and off highway heavy equipment hydraulics. Technical information and shop projects to apply and understand theories and principles include: introduction to hydraulics; electro-hydraulic systems, pilot controlled hydraulic systems, hydraulic system components; reservoirs, hydraulic seals, filters, pumps, accumulators, oil coolers, valves, actuators, connectors, conductors and circuits.

DS 158 Heavy Equipment Chassis and Power Trains 1-12 credits
Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Operation of on and off highway automatic transmissions, diagnosing, testing fluid couplings and torque converters, and repair of heavy equipment chassis and power trains. Technical information and shop projects to apply and understand theories and principles include: frames; suspensions; conventional steering systems; track-type undercarriages; final drives and steering mechanisms; clutches; standard transmission; on and off highway automatic transmissions; drive lines; front-and rear-drive carrier units ; heavy duty tires, wheels, and rims; and wheel hubs, dead and live axles of on and off highway diesel equipment.

DS 256 Diesel and Auxiliary Fuel Systems 1-12 credits
Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Operation, diagnosis, testing, failure analysis, and repair of diesel and auxiliary fuel systems. Technical information and shop projects to apply and understand theories and principles include: alternative type fuel systems; diesel fuel systems including mechanical and electronic diesel engine controls; and diesel engine performance analysis of on and off highway current model engines.

DS 257 Diesel Electrical Systems..... 1-12 credits
Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Operation, diagnosis, testing, failure analysis and repair of heavy duty diesel electrical/electronic systems. Technical information and shop projects to apply and understand theories and principles include: electrical fundamentals, batteries, starting, charging, lighting, and electronic control systems, multiplexing, heavy duty electrical circuits, electrical connectors, conductors, and air conditioning systems of on and off highway diesel equipment.

DS 259 Diesel Engines and Engine Overhaul..... 1-12 credits
Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Operation, diagnosing, testing, failure analysis overhaul and

repair of on and off highway diesel engines. Technical information and shop projects to apply and understand theories and principles include: the development of the diesel engine; diesel engine operating principles; failure analysis; the cylinder block and components; cylinder head and components; crankshaft, main, rod and cam, bearings, vibration damper, flywheel, and flywheel housing; pistons, rings, and connecting rod assembly; camshaft and timing gear train; lubrication systems and lube oil; cooling systems and coolant; intake systems; exhaust systems; turbochargers and superchargers; hand tools, precision measuring tools, fasteners, and shop equipment.

DS 260 Lift Truck/Material Handling Equipment 1-12 credits
Prerequisite: Instructor Consent. Operation, diagnosing, testing, and repair of lift trucks and other material handling equipment. Technical information and shop projects to apply and understand theories and principles include mast/upright mechanisms, diesel, gas, electric, and L.P. lift trucks, periodic maintenance, and schematics.

DS 280 Co-op Ed: Diesel 3-12 credits
This course provides students with diesel-related learning in community businesses and organizations. Students integrate theory and practice gained in the classroom with practical experience in the professional world. Students may develop skills, explore career options and network with professionals and employers while earning college credit toward a degree.

Drafting

For information, contact the Advanced Technology Division, Bldg. 15/Rm. 201, 541.463.5380.

DRF 121 Mechanical Drafting 4 credits
Prerequisite: DRF 167 And DRF 142. An introduction to the ASME Y14.5 Dimensioning and Tolerancing standard. Develops basic skills in mechanical drafting, including dimensioning, section, and auxiliary views. Students will improve drafting quality and develop drawing production speed.

DRF 137 Architectural Drafting-Plans..... 4 credits
Prerequisite: DRF 167 And DRF 208 Or Instructor Consent. Architectural drafting techniques, methods and procedures, layout and drafting of standard residential working drawings for a 1,200 sq. ft. building.

DRF 142 Graphic Concepts 2 credits
Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. An introductory course in drafting graphic concepts for the drafting program and transition to the CAD courses. Course includes Windows file management, measuring and sketching techniques, geometry of objects, drafting standards, lettering, and project setup procedures.

DRF 167 CAD 1 4 credits
Prerequisite: Basic computer literacy and minimum reading score of 68 OR RD 080 OR Prior College and DRF142 (may take concurrently). Introduction to computer-aided drafting using AutoCAD or equivalent software in architectural and mechanical drafting. Basic drawing, dimensioning, editing, and set-up commands to produce working drawings. May be offered online.

DRF 168 CAD 2 4 credits
Prerequisite: DRF 167. Intermediate course in computer-aided drafting using AutoCAD or equivalent software in architectural and mechanical drafting. Text and dimensioning in more depth, Paper Space setup and plotting, references and blocks, and some customizing tools. May be offered online

DRF 203 Electrical Drafting 2 credits
Prerequisite: DRF 167 Drafting techniques required for electrical and electronic fields. Schematics, wiring and routing diagrams, logic and printed circuit layout design and drawings.

DRF 205 Drafting: Structures 4 credits
Prerequisite: DRF 167, MTH 076 and MTH 086 or instructor consent. Graphical methods to investigate forces applied to rigid bodies at rest, including beams and trusses. The course covers types of structures, how structures carry loads, vectors, moment, equilibrium, and the construction of load, shear, and moment diagrams for simple beams. Students will use CAD for graphical solutions; students without CAD skills who are able to use trigonometry for problem solving may also enroll in this class.

DRF 206 Co-op Ed: Drafting Seminar 2 credits
Prerequisite: DRF 168. Students will increase their understanding of industry expectations as well as develop job search tools and skills. Course is designed to help students present themselves to employers in a competent and professional manner and to move initially into their cooperative education internships and then into their professional careers.

DRF 207 Drafting: Strength of Materials 4 credits
Prerequisite: MTH 076, MTH 086, and DRF 205. Stresses and strains that occur within bodies; material properties including elasticity; shape properties including centroids, moments of inertia, and section modulus; flexural stress in beams; and buckling in columns.

DRF 208 Residential Buildings 4 credits
Prerequisite: DRF 167. An investigation of light frame construction techniques and the production of residential construction drawings. Topics: residential construction materials, components and systems related to wood frame structures. Students will work from sketches of a residential structure to produce detail drawings.

DRF 210 Commercial Buildings 4 credits
Prerequisite: DRF 137, DRF 167, and DRF 208. Fundamentals of building materials, construction techniques, processes and procedures used in commercial structures. Students examine the creation of construction documents and working drawings for a light commercial building project.

DRF 211 Mechanical Systems and Environmental Design 4 credits
Fundamental principles and technologies of mechanical systems in buildings, including energy, water, lighting, heating, ventilation, and air conditioning. Emphasis is on green-building strategies.

DRF 220 Building Information Modelling 4 credits
Prerequisites: DRF 167. The student will create a virtual building using an advanced computer-aided drafting/design program that utilizes a 3D feature-based parametric solid modeler. The students will then generate a bill of materials, create a photo-realistic rendering, and produce a set of drawings to include floor plans, elevations, sections, and details.

DRF 232 Mechanical Design 4 credits
Prerequisite: DRF 121, DRF 142, and DRF 167. Methods used in creating mechanical drawings, including weldments, fasteners, assembly drawings, bills of material, and revisions.

DRF 233 Geometric Tolerancing 4 credits
Prerequisite: DRF 121, DRF 142, and DRF 167. Detailed study of the geometric tolerancing portion of the current ASME Y14.5 Dimensioning and Tolerancing standard.

DRF 234 Power Trains and Accessories Design 4 credits
Prerequisite: DRF 121, DRF 142, and DRF 167. A study of mechanisms for transmitting power: four-bar linkages, cams, gears, V-belts, and roller chain. Includes kinematic schematics, cam displacement diagrams, gear drawings, gear ratios, and design of V-belt and chain drives.

DRF 245 Solid Modeling 3 credits
Prerequisite: DRF 167. Fundamentals needed to create and edit part and assembly models. Topics include: Creating Sketched Features, Adding Placed Features to Parts, Assembly Modeling Fundamentals, Advanced Design Tools and Creating Parts Lists.

ENGR 280D Co-op Ed: Drafting 3-12 credits
Gain on-the-job learning experience as a drafter in local business, industry and governmental sites. Develop skills, explore career options, and network with professionals and employers while earning college credit. Meet with the co-op coordinator the term before (if possible) to set up the internship.

Drama—See Theatre Arts

Early Childhood Education

For information, contact the Child and Family Education Department, Bldg. 24, 541.463.5619.

ECE 110 Observing Children's Behavior 1 credits
Prerequisite: WR 115 or WR 121 or WR 122. Study of objective techniques for observing and recording children's behavior. Some focus

on linkages between observing and curriculum planning. Class is primarily a lecture format that includes on-site observations.

ECE 120 Introduction to Early Childhood 2 credits
Prerequisite: WR 115 or WR 121 or WR 122. Required course for ECE majors. Course is designed to overview the field of early childhood education. It explores career options, types of programs, history, advocacy and personal qualities of successful child care professionals.

ECE 130 Child Care and Guidance 3 credits
Acquaints student with the logic and ethics of developmentally appropriate guidance of children aged birth through five years: Focuses on discipline and guidance, social and emotional behavior patterns, daily routines. Instruction regarding child behavior and positive guidance techniques will be given through lectures, visual presentations, and classroom discussions.

ECE 140 Theory & Supervised Teaching 1 3 credits
Designed to provide the student with actual experience in the supervision, guidance, and care of young children based on the standards of NAEYC for Early Childhood Professional Preparation. This is work experience in a lab-school child-care facility. Students have specific assignments and responsibilities and must demonstrate competencies for a grade. They are given the opportunity to observe appropriate curriculum and have increasing responsibility to carry out age appropriate curriculum activities. They learn to demonstrate consistent appropriate guidance and developmentally appropriate curriculum.

ECE 150 Creative Activities for Children 3 credits
Introduces students to creative activities suitable for preschool children: art, children's literature and storytelling, music, rhythms, games, finger-plays, and dramatic play. Development of the student's creative imagination will be stressed. Lectures and demonstrations are combined with experiences in the use of various media.

ECE 160 Exploring Early Childhood Curriculum 4 credits
Students will gain understanding and experience in planning daily and weekly program activities for young children. There is an emphasis on planning appropriate experiences based on observation of children and knowledge of early childhood learning strategies. Students will plan a variety of curriculum experiences which are developmentally appropriate for preschool-age children. Included will be a study of the theories, types and benefits of play as the basis of curriculum planning.

ECE 170 Infants and Toddlers 4 credits
Prerequisite: WR 115 or WR 121 or WR 122. The course is designed to examine the growth and development of infants and toddlers. Optimum infant and toddler development and safety will be studied. Lectures, in-class discussions, and visual media offer a varied presentation.

ECE 210 Applying Early Childhood Curriculum 4 credits
Prerequisite: ECE 160. Study and evaluation of various approaches to Early Childhood Education, with the emphasis on emergent, curriculum-based programs. Practice in planning and teaching based on a variety of developmental theories and methods. Study of science and math methods and materials, movement and outdoor games is included. This is an advanced course in Early Childhood Education curriculum focusing on group care for young children. The prerequisite course is Exploring Early Childhood Curriculum: ECE 160. If this class is taken out of sequence, please see the instructor before continuing with the course.

ECE 230 Family, School, Community Relations 3 credits
Designed to help the student understand and develop methods and procedures for fostering effective parent, school and community relations: development of methods and techniques in preparation for and delivery of a parent conference, understanding how community agencies can best serve parents and children in relation to school programs, and practical experience in communication skills with parents.

ECE 240 Theory & Supervised Teaching 2 4 credits
Prerequisite: ECE 140. Theory & Supervised Teaching 1. Designed to provide the student with actual experience in the supervision, guidance and care of young children based on the standards of NAEYC for Early Childhood Professional Preparation. This is work experience in a lab school child care. Students have specific assignments and responsibilities and must demonstrate competencies

for a grade. They are given the opportunity to observe appropriate curriculum and have increasing responsibility to plan and carry out age-appropriate curriculum activities. They learn to demonstrate consistent appropriate guidance and developmentally appropriate curriculum.

ECE 250 Infant and Toddler Environments 3 credits
Prerequisite: ECE 170-Infants and Toddlers. Course will include: a) how suitable materials and a carefully planned physical environment can enhance optimum development; b) how to staff a center appropriately; c) brief review of infant-toddler development; d) basic care giving techniques; e) how to plan activities; and f) resources and references.

ECE 253 Diversity Issues in Early Childhood Education 3 credits
This course explores the concept of human diversity in early childhood settings. It will specifically include an awareness and appreciation of issues of ability, belief, class, culture, gender, language, race, and family experiences as they affect the development of the young child and his or her family. An exploration of how children develop awareness and attitudes regarding diversity will be included. Students will also evaluate and develop appropriate materials and methods to increase children's awareness and appreciation of diversity.

ECE 260 Administration of Child Care Programs 3 credits
Prerequisite: ECE 140. An overview of administrative management issues in the establishment and operation of child care centers, with an emphasis on full day programs. Overall program planning, organizational structure, budgeting, personnel management, and legal aspects of child care. State licensing rules are included.

ED 280EC Co-op Ed: Early Childhood Education 3-12 credits
This course offers ECE majors (with 6th term standing) an opportunity to gain work experience in Early Childhood. Cooperative Education offers internship opportunities in a variety of early childhood settings. ECE majors earn college credit and a grade for on the job work experience related to their education and career goals. The field experience is supervised by ECE faculty and qualified staff at the site, and may include a weekly seminar.

HDFS 226 Child Development 3 credits
Prerequisite: WR 115, or WR 120, or WR 121, or WR 122. Study of the physical, social-emotional, and intellectual development of the child from birth through adolescence. Some emphasis on prenatal development and influences. A survey of various child-study approaches. Instruction and experience in observing and recording the behavior of young children. Study of adult-child differences, value of play, and discipline.

HDFS 227 Children Under Stress 3 credits
Prerequisite: HDFS 226. Designed to acquaint the student with the social, economic, and cultural factors which contribute to a child's developmental experiences in such a way as to inhibit or enhance his/her best growth. Emphasis will be placed on the family, the educational system, and socio-cultural environments.

HDFS 228 Young Children with Special Needs 3 credits
Prerequisite: WR 115, or WR 120, or WR 121, or WR 122. The development, needs, and behavior of preschool aged children with special needs. General and practical hints to help integrate children with special needs into childcare programs. An overview of inclusion, along with a focus on specific disabilities is covered, including autism spectrum disorder, speech and language, and attention deficit disorder.

HDFS 229 Middle Childhood-Ages 6-12 3 credits
A program elective for Early Childhood majors. This course is a study of the physical, psychosocial, and cognitive development of the child in the middle years of childhood, ages six through twelve. Attention is given to the subculture of the society of children with the impact of peers and family. The development of moral and religious judgment is studied, as well as the accompanying attitudes toward specific problems such as death, politics, and prejudice. School programs are examined with implications of matching skills to be taught with a child's learning style. Curriculum methods and learning activities in appropriate content areas are explored.

HDFS 233 Parenting 3 credits
Provides an introduction to the many aspects of parenting including advantages and disadvantages, parenting roles, stages of parenthood, and special situations (single and step-parenting, extended families, and parenting exceptional children). The course format

includes reading assignments from the textbook, forum discussions of reading, group project.

Earth and Environmental Science

For information, contact the Science Division, Bldg. 16/Rm. 156, 541.463.5446.

ENVS 181 Terrestrial Environment 4 credits
Interactions among humans and natural land-based systems. Topics include terrestrial ecology, biodiversity, agriculture, rangelands, soils, groundwater, mineral and energy resources, waste disposal, recycling, ecological economics, conservation, and sustainable production. Take ENVS 181-183 in any order.

ENVS 182 Atmospheric Environment and Population 4 credits
Interactions among humans and atmospheric and ecological systems. Topics include weather, weather hazards, climate, global warming, ice and glacier loss, desertification, biomes, population, urbanization, air pollution and ozone depletion. Presents sustainable choices. Take ENVS 181-183 in any order.

ENVS 183 Aquatic Environment 4 credits
Freshwater and marine biology, geology, chemistry, and their interactions with humans. Topics include streams, watersheds, groundwater, aquatic biodiversity, fisheries, circulation, climate, water pollution, sustaining aquatic systems, energy from water and water resources. Take ENVS 181-183 in any order.

ENVS 184 Global Climate Change 4 credits
Causes, consequences, geologic history and science of climate change. Topics include sun-Earth cycles, greenhouse effect, ocean/atmosphere/ice systems, climate models and data, predictions, feedbacks, tipping points, carbon sequestration, energy options. Advise ENVS 182, G 102, or GEOG 141 first.

G 101 Earth's Dynamic Interior 4 credits
Introduces the geology of earthquakes, volcanoes and mountains resulting from plate interactions. Topics: minerals, the classification and formation of rocks, Earth's interior, magnetism, mineral resources and mining, simple geological maps and crustal deformation. Take either G 101 or G 102 first.

G 102 Earth's Dynamic Surface 4 credits
Surveys the geology of Earth's surface. Topics: erosion, fossil fuels, weathering, soils, landslides, streams, floods, groundwater, oceans, coasts, tsunamis, glaciers, melting, deserts, desertification, climate change, topographic maps and landforms. Take either G 101 or G 102 first.

G 103 Evolving Earth 4 credits
Surveys geologic history of Earth and life. Topics: sedimentary environments, strata, plant and animal evolution, how plate actions built continents and mountains, fossils, age relationships of rock layers, unconformities, geologic maps and cross-sections. Advise G 101 or G 102 first.

G 146 Rocks and Minerals 4 credits
Examines rocks, minerals, economic geology, resources, mining, environmental impacts, energy alternatives and resource conservation. Topics: how rocks, minerals and gems form, are identified and classified, their symmetry, crystals, textures and structures, and how to decode their geologic histories.

G 147 National Parks Geology 4 credits
Introduces geologic history, plate tectonics, and landform formation in national parks and monuments, including western parks, among others. Topics: volcanoes, mountains, stream and glacial erosion, rocks, rock layers and structures, topographic and geologic maps. Advise another geology class first.

G 148 Geologic Hazards 4 credits
Students learn the science, processes, and causes of geologic hazards, analyze the energy of earthquakes, volcanic eruptions, and meteorite impacts, the forces of landslides floods, tsunamis and coastal erosion, the recurrence of these hazards, and study examples of local and global events.

G 201 Earth Materials and Plate Tectonics 4 credits
Geology 201, 202, 203—for science majors. Global plate tectonic influence on earthquakes, volcanoes, Earth's internal structure, mountains, deformation, magnetism, and formation of rocks. Explores minerals, geologic maps, geologic structures and resources. Take this course or G202 before G203.

G 202 Earth's Surface Systems 4 credits
Geology of landforms and hazardous geological systems, topographic maps, remote sensing, sediment movement, fossil fuels, weathering, soils, mass wasting, landslides, streams, floods, groundwater, coasts, tsunamis, glaciers, deserts, climate change, plate tectonics and review of rocks and minerals. Take this class or G 201 before G 203.

G 203 Evolution of the Earth 4 credits
Prerequisite: Grade of C- or better in G 101 or G 102 or G 201 or G 202. How plate motions, climate change, and other factors influence the distribution and evolution of continents, mountain ranges and organisms through geologic time. Other topics: fossils, age relationships, isotopic age-dating, stratigraphy and analysis of complex regions using geologic maps and cross-sections.

G 280 Co-op Ed: Geology 1-12 credits
This internship course offers a work experience that integrates theory and practice in the field of geology. It provides opportunities to develop skills, explore career options and network with professionals and employers while earning academic credit.

G 280ES Co-op Ed: Environmental Studies 1-12 credits
This internship course offers a work experience that integrates theory and practice in the field of environmental studies. It provides opportunities to develop skills, explore career options and network with professionals and employers while earning academic credit.

GS 106 Physical Science 4 credits
Prerequisite: MTH 052 or above with grade of 'C-' or better or pass placement test or instructor's permission. GS106 surveys Earth and space sciences for non-science majors. Topics: geologic processes, mountain building, time, hazards, minerals, rocks, maps, atmosphere, climate, space imagery and cosmology from asteroids, planets, stars, to galaxies and beyond. Take GS104, GS105, GS106 in any order.

GS 142 Earth Science: Earth Revealed 3-4 credits
Introduces geology of plate tectonics, mountain building, and structures, integrating them with Earth's history. Additional topics: minerals, rocks, volcanism, earthquakes, weathering, landslides, rivers, groundwater, deserts, glaciers, coasts and fossil fuels. Optional 4th credit requires labs done at home. May be offered as a telecourse.

GS 147 Oceanography 3-4 credits
Surveys basic geological, physical, chemical, and biological processes of oceans, including geology, plate tectonics, seawater properties, waves, currents, tides, ocean life, biodiversity, fisheries and marine resources and pollution. Optional 4th credit requires lab exercises. May be offered as a telecourse.

GS 280ST Co-op Ed: Science Technology 1-12 credits
This internship course offers a work experience that integrates theory and practice in the field of applied science. It provides opportunities to develop skills, explore career options and network with professionals and employers while earning academic credit.

Economics

For information, contact The Social Science Division, Center Bldg./Rm. 403, 541.463.5427.

ECON 200 Principles of Economics: Introduction to Economics 3 credits
MTH 111 College Algebra and sophomore standing recommended. First term of a three-term sequence in principles of economics. Introduces the basic economic concepts of scarcity, choice production possibilities, and market operations. Also includes economic measurements, and the circular flow of income, and the role of government. May be offered online.

ECON 201 Principles of Economics: Introduction to Microeconomics 3 credits
Prerequisite: ECON 200 or ECON 202. MTH 111 College Algebra and sophomore standing recommended. Second term of a three-term sequence in principles of economics. A study of basic microeconomics including elasticity, profits the operations of the four market structures, government policies toward business, and resource markets. May be offered online.

ECON 202 Principles of Economics: Introduction to Macroeconomics 3 credits
Prerequisite: ECON 200 or ECON 201. MTH 111 College Algebra

and sophomore standing recommended. Third term of three-term sequence in principles of economics. Study of basic macroeconomics including alternative macroeconomic models of the level of economic activity, money and banking, fiscal policy and monetary policy.

ECON 204 Introduction to International Economics 4 credits
Introduces principles of international development, trade, and finance. Topics include: history of international development, comparative advantage, free trade, international trade agreements, international economic institutions, exchange rates. Labor and capital migration are covered, time permitting.

ECON 250 Class, Race and Gender in the US Economy 4 credits
This course examines the economic causes of social stratification within the labor market, based upon class, race and gender. Topics include: earnings and employment disparities; uneven poverty rates; differential access to housing, health, and education; and economic discrimination. This course examines how the market both enables and obstructs various social groups in their participation in the 'American Dream'. Presented from a political-economy perspective recognizing that economic discrimination is both a measurable and enduring characteristic of market economies.

ECON 260 Introduction to Environmental and Natural Resource Economics: Water 4 credits
This course introduces the fundamental economic concepts, methods, and policy options used to analyze the interaction between the economy and the natural environment, including natural resources. Major topics covered include the economics of: pollution and environmental protection; resource extraction and depletion; externalities and public goods; and sustainability and resilience. Methods of economic analysis introduced include: cost-benefit analysis; valuation of environmental services, and impact analysis. Policy options considered include: property rights, effluent controls, emission charges, tradable pollution permits, and regulatory restrictions. Meets course requirements for the Water Conservation Technician program.

Education

Also see Early Childhood Education

For information, contact the Cooperative Education Division, Bldg. 19/Rm. 231, 541.463.5203.

ED 130 Comprehensive Classroom Management 3 credits
This course provides a foundation in classroom management theory and application. Students will gain knowledge of appropriate techniques for managing a classroom. They will also learn problem solving strategies for handling of unproductive student behaviors both in the classroom and in other school settings.

ED 131 Instructional Strategies for Education Professionals 3 credits
This course provides students with instructional strategies that have a positive impact on K-12 student achievement. Principles based on instructional research, case studies, and classroom examples are provided to give learners tools to use in the classroom.

ED 200 Foundations of Education Seminar 3 credits
Learn about classroom management, the history of education as a discipline, and curriculum design. Each student creates a fiction or nonfiction picture book and learns about project learning as a teaching strategy. Usually taken at the same time as a practicum in an elementary, middle, or high school classroom.

ED 201 Foundations of Education Seminar Part 2: Instructional Strategies Language Arts 3 credits
Prerequisite: ED 200 and ED 209. Learn about classroom management, educational philosophy, and the legal, political and economic foundations of education as well as how to teach language arts through reading and writing in the content areas. Usually taken at the same time as a practicum in an elementary, middle, or high school classroom.

ED 258 Multicultural Education 3 credits
This course addresses the philosophy and curriculum that develop a culturally responsive educational setting. This class will enable students to meet the needs of all students from a variety of diverse backgrounds. Areas of study include equity, diversity, and social justice as related to education.

ED 280 Co-op Ed: Education 3-12 credits
Work as an aide in an elementary, middle, or high school classroom to explore teaching as a career. Put up bulletin boards, grade papers, prepare art projects, tutor one-on-one and small groups, and assemble science/art kits. Course may be repeated to work with different age groups in different schools.

ED 280SE Co-op Ed: September Experience 3-12 credits
Students learn how to create a classroom environment by helping prepare one under the direction of an experienced teacher. Students earn three credits for three weeks of work beginning the last week in August. Students should take one term of seminar ED 200, ED 130, or ED 131 before taking this practicum course.

Electronics

For information, contact the Advanced Technology Division, Bldg. 15/Rm. 201, 541.463.5380.

ENGR 280E Co-op Ed: Electronic Technology 3-12 credits
This course provides students with electronics learning experiences in businesses and industrial sites. Students integrate theory and practice gained in the classroom with practical experience in the professional world. Students may develop skills, explore career options and network with professionals and employers while earning credit toward a degree. Cooperative Education is a required class for the Electronic Technology Program.

ET 100 Reading and Conference 1-3 credits
Prerequisite: Instructor consent A flexible course offering all students in electronics classes an opportunity for remedial, supplemental, and developmental training.

ET 121 Shop Practices 2 credits
Prerequisite: Minimum reading score of 68 or RD 080 or prior college. This first year course in electronics technology addresses the general lab skills and knowledge required to function safely and effectively in an electronics laboratory or shop environment. The student will be introduced to concepts in electronic circuit assembly, wire termination, and soldering. Included is an overview of electrical schematics and diagrams used in the design, assembly, and repair of electrical and electronic systems. The proper use of common lab equipment and hand tools will be covered. This is a hands-on course intended to give the student experience performing tasks that are best taught by practice. Throughout the course the underlying theme is on work site safety and the ability to follow directions.

ET 129 Electrical Theory 1 1-4 credits
Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College AND MTH060 or higher with a grade of "C-" or better, or pass a placement test through the Testing Office. First course of a two-term sequence in electrical theory. The first term defines the basic electrical units, the basic laws of electrical theory as they apply to DC circuits such as series, parallel, and series-parallel circuits. AC waveforms and AC circuit components are introduced. Electronic test equipment such as the digital multimeter, oscilloscope and function generator is used to measure electrical signals and troubleshoot basic electrical circuits.

ET 130 Electrical Theory 2 1-4 credits
Prerequisite: ET 129 Second course of a two-term sequence in electrical theory. This course covers basic AC circuits and components, right triangle mathematics, RLC circuits, filters, and resonant circuits and RL/RC transient circuits. In the lab students will build and troubleshoot basic AC circuits using the oscilloscope, function generator, and DMM.

ET 131 Electrical Theory 3 4 credits
Prerequisite: ET 129, ET 130, ET 145, and ET 151. This course is the third course of a three-term sequence in electrical theory. Electrical Theory 3 combines electrical theory and electrical drafting. It uses and adds to the concepts learned in electrical theory, digital, and semiconductor classes. Students study and interpret electrical circuits, then draw the circuits using schematic capture software. Using computer analysis tools such as PSpice, students are able to simulate and analyze circuits using powerful methods. Troubleshooting, analysis and circuit performance with changing parameters and conditions are studied.

ET 145 Semiconductor Devices 1 1-4 credits
Prerequisite: ET 129 First course of a two-term sequence in the study

of solid state semiconductor theory. ET 145 begins with the characteristics and use of both zener and general purpose diodes in common circuits. The second part discusses the operation of NPN and PNP bipolar transistors and common amplifier configurations.

ET 146 Semiconductor Devices 2 1-4 credits
Prerequisite: ET 145 Second course of two-term sequence. Transistor theory is expanded to include the operation and use of Field Effect Transistors. The basic use of Silicon Controlled Rectifiers, Triacs, operational amplifiers and 555 timers are also explored in this course.

ET 151 Digital Electronics 1 1-4 credits
Prerequisite: ET 129 and MTH 060 or higher. This course is an introduction to the field of digital electronics. It includes a study of number systems, binary arithmetic, basic logic functions, the analysis and synthesis of combinational logic circuits and the implementation of logic circuits using MSI building blocks. The last part of the course introduces latches and flip-flops. The various flip-flops and their characteristics are studied and clocked sequential circuits, such as simple counters are built.

ET 152 Digital Electronics 2 1-4 credits
Prerequisite: ET 129 and ET 151 Second of a two-course sequence in basic digital theory, using the fundamental building blocks learned in ET 151 to develop more complex circuits. The course is laboratory-focused to build, test and troubleshoot digital systems. A car warning system, adder/subtractor circuits, and a digital function generator are examples of laboratory projects that develop an understanding of more, advanced digital principles.

ET 201 Industrial Instrumentation 1-4 credits
Prerequisite: Second year standing. Course covers the elements that define a manufacturing controlled process. The course begins at the system level with basic statistical terms and spreadsheet data analysis. The second part discusses physical transducers and signal conditioning. The third part introduces analog to digital data conversion topics and the final part covers DC and stepper and motors.

ET 229 Motors 1 1-4 credits
This class addresses the concepts and principles of electromechanical devices. Emphasis will be placed on the theory and operation of AC and DC motors used in manufacturing and the HVAC industries. Transformers and power distribution systems will be studied along with adjustable frequency AC drives and stepper motors.

ET 230 Motors 2 1-4 credits
Prerequisite: ET 229. This course is a continuation of ET229 Motors 1. It addresses the relationship between electromechanical prime movers and the circuit elements used in their controls. The course progresses from electrical safety to electrical symbols and diagrams to control logic and devices. The focus will be on the operation, servicing, and troubleshooting of electromechanical systems beyond their initial design. Special emphasis is placed on the development of troubleshooting skills throughout the course.

ET 234 Programmable Controllers 1 1-4 credits
Prerequisite: Second year standing. This course covers the basics of relay and ladder logic technology as it pertains to Programmable Logic Controllers. Techniques in programming are explored and an emphasis is placed on interfacing I/O devices to the PLC. More advanced topics such as timers, counters, and sequencers are also covered. The student will also be introduced to a variety of troubleshooting problems at both component and system levels.

ET 235 Programmable Controllers 2 1-4 credits
Prerequisite: ET234/Programmable Controllers 1. This class provides an introduction to the robot and its capabilities and explores the various tasks that robots are programmed to perform. Interfacing between robots, PLC's, and field devices are practiced with an emphasis on troubleshooting.

ET 239 Microprocessor Applications 1-4 credits
Prerequisite: Second year standing. This course is a study of micro-controllers and their programming. These small circuits are self contained computers, often found on a single chip. They are found embedded in thousands of everyday products where they control various processes. They are used by electronics engineers as well as by experimenters designing gadgets. The student learns and uses the BASIC programming language and explores how the processors can accept inputs, perform math functions, measure external

quantities, light LED displays, control motors, produce sound and measure light.

ET 247 Linear Circuits 4 credits

This course is an extension of the two course series that covers the theory of solid-state semiconductor devices. The focus will be on the integrated circuit operational amplifier and the circuits that include these integrated circuits as functional devices. A detailed overview will include common linear op-amp circuits, active filters, comparator circuits, oscillators and timers, data converters, and voltage regulator circuits. The course will cover the application of integrated devices and as such the analysis of internal transistor circuitry will be brief.

ET 281 Radiotelephone 1-4 credits

Prerequisite: Second year standing or instructor consent The principles of radio communications systems including Amplitude and Frequency Modulations are explored. This class also includes the examination of basic telephone systems.

ET 287 Microcomputer Hardware 1-4 credits

Prerequisite: Instructor Consent. Current technology of specific PC hardware components. Installation and troubleshooting of these components include memory, video display, clock speeds, microprocessor differences, disk drives, input devices, and ports. The physical connection within a network, including cabling and installation of Network Interface Cards, is introduced. Hardware troubleshooting techniques emphasized.

Emergency Medical/Paramedic

For information, contact the Health Professions Division, Bldg. 4/Rm. 222, 541.463.5617. You must be accepted into the Emergency Medical/Paramedic program to take these classes.

EL 115H Effective Learning: Health Science Majors 3 credits

This course is designed for health occupation majors who wish to strengthen their study skills and strategies. Students will learn how to take notes from lectures and textbooks, study for tests, improve memory, read and study from textbooks, manage time effectively, and use the library. Course work requires college-level reading skills.

EMT 151 Emergency Medical Technician Basic Part 1 5 credits

This course is part 1 of an Emergency Medical Technician-Basic level. Successful completion of this two part course gains eligibility to sit for the Oregon State EMT-B certification exam and/or the National EMT-B certification exam. This course provides instruction in a variety of medical and trauma related emergencies. This is a demanding course designed for those who will function within an emergency medical services system. Supplies and equipment used is consistent with the tools of the trade. Fire departments and private ambulance services that respond to 911 emergencies carry very specific equipment and operate within very specific parameters. Students are taught how to apply their skills within this structure. This course is also a required component of the Associate of Applied Science Degree in Emergency Medical Technology.

EMT 152 Emergency Medical Technician Basic Part 2 5 credits

Prerequisite: EMT 151. This course is Part 2 of an Emergency Medical Technician-Basic level. Successful completion of this two part course gains eligibility to sit for the Oregon State EMT-B certification exam and/or the National EMT-B certification exam. This course provides instruction in a variety of medical and trauma related emergencies. This is a demanding course for those who will function within an emergency medical services system. Supplies and equipment used is consistent with the tools of the trade. Fire departments and private ambulance services that respond to 911 emergencies carry very specific equipment and operate within very specific parameters. Students are taught how to apply their skills within this structure. This course is also a required component of the Associate of Applied Science Degree in Emergency Medical Technology.

EMT 169 Emergency Medical Technology Rescue 3 credits

Elementary procedures of rescue practices, systems, components, support, and control off rescue operations including ladder procedures and basic rescue tools. Introduction to techniques and tools of patient extraction, emphasizing application to traffic assistance, as required for paramedic certification. Prerequisite: EMT152

EMT 170 Emergency Response Communication/Documentation 2 credits

Covers principles of therapeutic communication, verbal, written, and

electronic communications in the provision of EMS, documentation of elements of patient assessment, care and transport, communication systems, radio types, reports, codes, and correct techniques.

EMT 171 Emergency Response Patient Transportation 2 credits

Covers ambulance operations, laws, maintenance and safety, emergency response driving and route planning.

EMT 175 Introduction to Emergency Medical Services 3 credits

Explores the role and responsibilities of a paramedic, to include: different kinds of emergency medical services systems, applicable Oregon law, relationship with governmental regulatory agencies, exposure risk to infectious disease and exposure to critical incident stress.

EMT 196 Crisis Intervention 3 credits

Designed to provide students pursuing a degree in Emergency Medical Technology with the knowledge to effectively manage psychological emergencies. Included in this course: understanding and managing acute stress reactions, suicide, rape and sexual assault, child abuse, death and dying, drug and alcohol emergencies, burn-out of the emergency worker and coping with job-related stress.

EMT 270 Emergency Medical Technology-

Paramedic Part 1 10 credits

Corequisite: EMT 271. Course is part 1 of a 3 part course in paramedic education. This course covers the knowledge, skill and behaviors necessary to function effectively as a member of an emergency response team at the EMT-Paramedic level. This course focuses on general principals of pathophysiology, airway management and ventilation, venous access, pharmacology, patient assessment, clinical decision making and cardiovascular emergencies. Cognitive and psychomotor objectives are measured for competency by a combination of written and/or practical exams. Affective objectives are evaluated throughout the course by using the Professional Behavior Evaluation instrument and, when necessary, Professional Behavior Counseling. Successful completion is required for entry into EMT272. Successful completion is required to meet AAS/EMT-P requirements. Program graduates are eligible to take the Oregon State/National EMT-Paramedic exam.

EMT 271 Emergency Medical Technology-

Paramedic Clinical Part 1 1 credits

Corequisite: EMT 270. This course is part 1 of a 3 part clinical experience that includes direct patient care related outcomes necessary for completion of program objectives. The use of multiple departments within the hospital enables the student to see a wide distribution of patient situations. In the emergency department, which most closely approximates the types of patients that paramedics see, students are presented with a variety of patient presentations and complaints, important elements in building up a library of patient care experiences to draw upon in future clinical decision making responsibilities. This experience takes place within a hospital/clinical environment and under direct supervision. All skills are first taught in the classroom before being performed in the clinical setting. Criminal background check and drug testing required.

EMT 272 Emergency Medical Technology-

Paramedic Part 2 10 credits

Prerequisite: EMT 270, EMT 271. Corequisite: EMT 273. Course is part 2 of a 3 part course in paramedic education. This course covers the knowledge, skill and behaviors necessary to function effectively as a member of an emergency response team at the EMT-paramedic level. This course focuses on prehospital trauma care, medical emergencies, emergency childbirth, care of the newborn, neonate and pediatric patient. Cognitive and psychomotor objectives are measured for competency by a combination of written and/or practical exams. Affective objectives are evaluated throughout the course by using the Professional Behavior Evaluation instrument and, when necessary, Professional Behavior Counseling. Successful completion is required for entry into EMT274. Successful completion is required to meet AAS/EMT-P requirements. Program graduates are eligible to take the Oregon State/National EMT-Paramedic Certification Exam. Special Fee: \$260.00 for Advanced Cardiac Life Support and Prehospital Trauma Life Support certification courses.

EMT 273 Emergency Medical Technology-

Paramedic Clinical Part 2 3 credits

Prerequisite EMT 270, EMT 271. Corequisite: EMT272 This course is part 2 of a 3 part clinical experience that includes direct patient care related outcomes necessary for completion of program objectives.

The use of multiple departments within the hospital enables the student to see a wide distribution of patient situations. In the emergency department, which most closely approximates the types of patients that paramedics see, students are presented with a variety of patient presentations and complaints, important elements in building up a library of patient care experiences to draw upon in future clinical decision making responsibilities. This experience takes place within a hospital/clinical environment and under direct supervision. All skills are first taught in the classroom before being performed in the clinical setting. Criminal background check and drug testing required.

EMT 274 Emergency Medical Technology-Paramedic Part 3

4 credits
Prerequisites: EMT 272, EMT 273. Corequisite: EMT 275. Course is part 3 of a 3 part course in paramedic education. This course covers the knowledge, skill and behaviors necessary to function effectively as a member of an emergency response team at the EMT-Paramedic level. This course focuses on prehospital toxicological emergencies, environmental emergencies, and geriatric emergencies. This course also teaches how to integrate the principles of assessment based management to perform an appropriate assessment and implement the management plan for patients with common complaints. Cognitive and psychomotor objectives are measured for competency by a combination of written and/or practical exams. Successful completion is required for entry into EMT280P2. Successful completion is required to meet AAS/EMT-P requirements. Program graduates are eligible to take the Oregon State/National EMT-Paramedic Certification Exam.

EMT 275 Emergency Medical Technology-Paramedic Clinical Part 3

4 credits
Prerequisites: EMT 272, EMT 273. Corequisite: EMT 274. This course is part 3 of a 3 part clinical experience that includes direct patient care related outcomes necessary for completion of program objectives. The use of multiple departments within the hospital enables the student to see a wide distribution of patient situations. In the emergency department, which most closely approximates the types of patients that paramedics see, students are presented with a variety of patient presentations and complaints, important elements in building up a library of patient care experiences to draw upon in future clinical decision making responsibilities. This experience takes place within a hospital/clinical environment and under direct supervision. All skills are first taught in the classroom before being performed in the clinical setting. Criminal background check and drug testing required.

EMT 280P1 Co-op Ed: EMT Internship Part 1..... 3 credits
Prerequisite: EMT 272 EMT 273 Corequisite EMT 274. Course is part 1 of a 2 part paramedic internship on a 911 ambulance under the close supervision of a paramedic preceptor. Students learn to identify pertinent findings and how to prioritize treatment and transport decisions. Students may serve as team leader in a variety of pre-hospital advanced life support emergency medical situations.

EMT 280P2 Co-op Ed: EMT Internship Part 2..... 5 credits
Prerequisite: EMT 274, EMT 275. Course is part 2 of a 2 part paramedic internship on a 911 ambulance under the close supervision of a paramedic preceptor. Students learn to identify pertinent findings and how to prioritize treatment and transport decisions. Students may serve as team leader in a variety of pre-hospital advanced life support emergency medical situations.

Energy Management

For information, contact the Science Division, Bldg. 16/Rm. 253, 541.463.3997.

NRG 101 Introduction to Energy Management..... 3 credits
Prerequisite: Program Admittance. This course defines the need for energy management as an integral part of society at all levels. Students will understand basic energy accounting and analysis protocol. The course presents the various vocational opportunities available to energy management students through lectures, video and guest speakers.

NRG 102 Blueprint Reading: Residential and Commercial 3 credits
Reading commercial architectural plans, examining their characteristics for service and maintenance of electrical, plumbing, HVAC, and energy management related design and materials. Introductory

drafting and plans drawing skill will be presented including sketches, free hand and cutting plan methods.

NRG 103 Sustainability in The Built Environment..... 3 credits
Prerequisite: Program Admittance. Introduces the relationship of sustainability and buildings by addressing the "Three Es of Sustainability" in the built environment. Explores the ENVIRONMENTAL influence of buildings; ECONOMIC benefits of conservation and efficiency measures; and SOCIAL EQUALITY of improving quality of life. The course uses the Leadership in Energy and Environmental Design framework education.

NRG 111 Residential/Light Commercial

Energy Analysis 3 credits
Prerequisite: PH 101. Topics include residential/light commercial heating systems; heat transfer through building envelope; degree days; sources of internal heat gains; heat loss calculations, indoor air pollution; codes and regulations. Spreadsheets will be used.

NRG 112 Commercial Energy Use Analysis..... 4 credits
Prerequisite: NRG 111 and NRG 121 and MTH 095 or Math Placement Test. Emphasis is on the analysis of energy use in commercial buildings. Topics include utility bill analysis, audit data, identifying energy efficiency measures, use of micro-dataloggers, energy savings and investment calculations, audit report writing. Students complete a supervised field audit.

NRG 113 Building Energy Simulations..... 4 credits
Prerequisite: NRG 112 and MTH 095 or Math Placement Test. The course covers the variety of computer programs available for analyzing commercial buildings. Topics include BIN methodology, hourly simulations and an overview of current programs on the market such as eQuest. Students perform supervised computer simulations.

NRG 121 Air Conditioning System Analysis..... 3 credits
Prerequisite: PH 101 Students investigate the physical principles of heating, ventilation, and air conditioning systems. Topics include the energy equation, refrigeration, sensible and latent heat equation, psychometrics, heat and cooling load equations, central forced air furnaces, SEERs, EERs, AFUEs, fuels, and unitary single zone and multi-zone secondary systems.

NRG 122 Commercial Air Conditioning

System Analysis 3 credits
Prerequisite: NRG 121 Students learn to identify commercial HVAC system types and the general energy impact of each type. Calculations will be used to determine energy characteristics in boilers and Bin analysis. Students will investigate HVAC delivery systems including fans pumps dampers, control valves, and ducting. The course includes field work.

NRG 123 Energy Control Strategies..... 4 credits
Prerequisite: NRG 122 and NRG 124. Topics include building system control theory and devices, including electric, pneumatic, and digital controls. An emphasis is placed on identifying and understanding control strategies to estimate energy savings. Hands on labs reinforce device identification. Students complete an energy efficiency controls calculation project.

NRG 124 Energy Efficiency Methods..... 4 credits
Prerequisite: PH 102. Corequisite: NRG 121. A systems approach is used to analyze the input, output, and efficiency of commonplace energy conversion devices. Students become fluent in using different units used to denote and measure energy/power; learn what quantities need to be measured to determine energy/power in various systems; and, determine the energy/cost savings associated with efficiency improvement strategies.

NRG 131 Lighting Fundamentals..... 3 credits
Prerequisite: PH 101 and PH 102 or Instructor Consent. Topics include assessment of quantity and quality of light, light sources, luminaries, lighting controls, manufacturer lamp and ballast specifications, lighting power density, lighting-HVAC interactions, retrofit opportunities, cost savings analysis, and lighting codes/regulations. Requires a directly supervised lighting audit project.

NRG 132 Lighting Applications..... 3 credits
Prerequisite: NRG 131 and MTH 095 or Math Placement Test. Topics will include a review of terminology and lighting fundamentals. Students evaluate lighting systems, luminaries and associated components and perform illuminance calculations, become familiar with the IES Illuminance selection procedure and IES recommended

practices for various space types. Students will work as team members.

NRG 141 Energy Investment Analysis.....3 credits
Prerequisite: NRG 111 or Instructor Consent. Emphasis on analysis of energy investments using spreadsheets to consider total cost-benefits over the life of the investment. Topics: interest, simple payback and life-cycle cost analysis, time value of money, cash flow equivalence, cost-benefit analysis, effects of tax credits, depreciation, inflation and/or escalating fuel costs on energy investments, and cost estimating procedures.

NRG 142 Energy Accounting.....3 credits
Prerequisite: BT 123 Course will include review of energy units, data gathering for energy accounting utility rates and schedules, energy data organization, adjusted baselines, cost avoidance, load factor, data analysis, data presentation, use EPA's Portfolio Manager software.

NRG 154 Alternative Energy Technologies.....3 credits
A survey of the sources of energy that may be used to increase energy supply in the Pacific Northwest. Included are geothermal, wind, low head hydro, solar and biomass. Environmental, social and economic advantages of each source are assessed.

NRG 155 PV System Design and Installation 1 4 credits
Prerequisite: PH 101 and PH 102 and MTH 095 or Math Placement Test. Corequisite: NRG 157. This hands-on course will cover the National Electrical Code (NEC) specifics concerning photovoltaic (PV) installation article 690. Code compliant wiring of modules, inverters, charge controllers, and batteries will be explored in detail. Students will use materials designed for installation practice both indoors and out.

NRG 156 PV System Design and Installation 2 4 credits
Prerequisite: NRG 155 This hands-on course is a continuation of NRG 155. Students will learn the unique differences between grid intertie and off-grid systems and associated components. Students will use the NEC as it relates to PV installation. Emphasizes safety on the job.

NRG 157 Renewable Energy Systems.....3 credits
Prerequisite: First Year of Energy Program; Corequisite: NRG 141 This course will provide an overview of the Solar PV and Solar Thermal industry. Topics include PV theory, an introduction to PV and thermal system types and efficiencies, solar site evaluation, available solar radiation, tools used in the solar industry, and the economics of solar.

NRG 158 Thermal Design and Installation 1.....4 credits
Prerequisite: PH 101 and PH 102 and MTH 095 or Math Placement Test. This hands-on course covers the Oregon Plumbing code as it relates to solar Domestic Hot Water (DHW) system installation. System type, tanks, controls, pumps, valves, mounting systems and installation safety will be discussed and demonstrated. Students will use materials designed for installation practice both indoors and out.

NRG 159 Thermal Design and Installation 2.....4 credits
Prerequisite: NRG 158 This hands-on course continues the learning outcomes from Thermal 1 regarding the Oregon Plumbing code as it relates to solar Domestic Hot Water (DHW) system installation. Investigates system type, tanks, controls, pumps, valves, mounting systems and installation safety in greater depth.

NRG 162 Solar Photovoltaic System Design and Installation 3 4 credits
Prerequisites: NRG155 and NRG156. Students will understand the performance characteristics, applied electrical code, associated electrical equipment with an emphasis on battery electrical storage systems, and skills necessary for the design and installation of photovoltaic energy systems. Students will install a system and sit for the North American Board of Certified Energy Practitioners Entry Level exam.

NRG 171 Materials Management / Solid Waste Management for Institutions 3 credits
Focuses on materials procurement, materials disposal, the supply chain, and material acquisition waste avoidance. Students learn how to establish an organizational procurement program and to work with vendors to prioritize responsible procurement decisions. Students learn about consumption, waste, and climate change.

NRG 172 Understanding the LEED Framework & Green Buildings.....3 credits
Students learn the LEED certification framework which emphasizes state of the art strategies for sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality. This course will fully investigate the LEED Framework.

NRG 173 Carbon Footprints for Climate Action in Complex Organizations.....4 credits
This course teaches students how to conduct a greenhouse gas inventory for a complex organization focusing on reduced GHG emissions. This process includes reviewing existing protocols, setting inventory boundaries, collecting data for direct and indirect emissions sources, making calculations (including practicing estimation techniques), and reporting results.

NRG 174 Conducting a Full Sustainability Assessment.....4 credits
Students learn how to select sustainability assessment indicators and benchmarks, evaluate them and how to report findings. The course will concentrate on setting goals for sustainability performance, selecting and making appropriate calculations and then accurately reporting an organization's performance.

NRG 206A Co-op Ed: Energy Management Seminar 1.....1 credits
Students will increase their understanding of industry expectations as well as develop job search tools and skills. Students will learn and practice presenting themselves to employers in a competent and professional manner in preparation for a cooperative education internship.

NRG 206B Co-op Ed: Energy Management Seminar 2.....1 credits
Prerequisite: NRG 206A. This course is a continuation of NRG 206A and further develops students' understanding of industry expectations as well as job search tools and skills. The emphasis is to provide additional skills that will help students find employment upon earning their degree.

NRG 280 Co-op Ed: Energy Management.....3-12 credits
This internship course offers a work experience that integrates theory and practice in the field of energy management. It provides opportunities to develop skills, explore career options and network with professionals and employers while earning academic credit toward the degree.

Engineering Transfer

Also see Drafting, Electronics and Physics

For information, contact the Mathematics Division, Bldg. 16/Rm. 166, 541.463.5392.

ENGR 101 Engineering Orientation.....3 credits
Prerequisite or Corequisite: MTH 251, completed with a "C-" or better within the past four terms. An introduction to engineering, its evolution, ethics, and methods. An overview of various engineering disciplines and curriculum requirements, an introduction to a variety of modeling and analysis methods, written and oral communication activities, discussion of professional ethics and social implications of engineering work. The course includes visits by guest speakers, possible field trips, introductory activities on measurement methods, data collection, use of electronic spreadsheets and the internet, group projects and/or oral and written reports.

ENGR 102 Engineering Orientation 2.....4 credits
Prerequisite: MTH 251, completed with a grade of "C-" or better within the past four terms. This course is an introduction to creating abstract models of engineering systems. Students will formulate solution methods using spreadsheet and high-level language software, both introduced gradually and throughout the course.

ENGR 115 Engineering Graphics 3 credits
Prerequisite or Corequisite: MTH 112, completed with a grade of "C-" or better within the past four terms. An introduction to graphic communication, including visualization, multiview and pictorial projections, sections, auxiliary views, and ASME dimensioning and tolerancing standards. Graphic concepts are applied using freehand sketching and CAD.

ENGR 211 Statics 4 credits
Prerequisite: MTH 252 and PH 211 completed with a grade of "C-" or better within the past 4 terms. Principles of statics of particles and

rigid bodies are studied with a vectorial approach. Particular attention will be given to the composition, resolution and equilibrium of coplanar and non-coplanar force systems; two dimensional trusses and frames; centroids and moments of inertia of plane areas; coulombic friction; and the distribution of shear and bending moments in simple beams. A programmable graphics calculator comparable to the TI-83+ or TI-89 is recommended.

ENGR 212 Dynamics 4 credits

Prerequisite: ENGR 211 and MTH 254 and PH 211, all completed with a grade of "C-" or better within the past 4 terms. This is a fundamental dynamics course of particles and rigid bodies. Topics include kinematics and kinetics of particles and kinematics of rigid bodies; Newton's second law of motion; rectilinear and curvilinear motion; linear and angular momentum; principles of work and energy; impulse and momentum and D'Alembert's Principle.

ENGR 213 Strength of Materials 4 credits

Prerequisite: ENGR 211 and MTH 253, both completed with a minimum grade of "C-" or better within the past 4 terms. Course presents theory of stress and strain, shear, bending, torsion and combined stresses, temperature-induced stresses, and elements of indeterminate analysis. Additional topics include axially loaded members, thin-walled pressure vessels, torsional and flexural loading, failure theory and column buckling.

ENGR 221 Electrical Fundamentals 1 4 credits

Prerequisite: PH 212 completed with a grade of "C-" or better within the past four terms. Linear circuits will be analyzed via Kirchoff's Laws using idealized circuit elements. Steady state and sinusoidal responses of passive and active circuits will be addressed. The course emphasizes a combination of conceptual understanding, mathematical analysis, lab experiments and computer simulations. This course is designed for engineering majors.

ENGR 280 Co-op Ed: Engineering 3-12 credits

This internship course offers a work experience that integrates theory and practice in the field of engineering. It provides opportunities to develop skills, explore career options and network with professionals and employers while earning academic credit.

English—See Literature, Writing

English as a Second Language—See Study Skills

Environmental Science—See Earth and Environmental Science

Ethnic Studies

For information about classes with course numbers that begin with:

CG—Contact the Counseling Department, Bldg. 1, Rm. 103, 541.463.5299.

ES—Contact the Social Science Division, Center Bldg./Rm. 403, 541.463.5427.

ES 101 Historical Racial & Ethnic Issues 4 credits

This course explores the nature and complexity of racial and ethnic diversity in U.S. society. Using current developments in ethnic studies scholarship, we will examine the social construction of race and ethnicity, theories of prejudice, and a historical overview of various ethnic and racial groups. The course concludes with a comparative analysis of the intersection between race, class, and gender. ES 101 and ES 102 do not have to be taken in sequence.

ES 102 Contemporary Racial & Ethnic Issues 4 credits

This course explores the nature and complexity of racial and ethnic diversity in U.S. society. Using current developments in ethnic studies scholarship, we will examine multiple sources of discrimination, and how discrimination impacts self and society. We will also review the contemporary and experiences and issues facing various ethnic and racial groups. The course concludes with strategies for overcoming exclusion. ES 101 and ES 102 do not have to be taken in sequence.

ES 111 Chicano/Latino Leadership 1:

Quien Soy? Quienes 2-4 credits

This course will examine the diversity that resides within the Chicano, Mexicano, Latino, Hispanic and Caribbean cultural experience in the Americas. The class will provide a framework for understanding the ways in which distinctive social and cultural patterns arose, thus, bringing awareness of contemporary expression and their historical basis. We will explore root causes to explain how

the attitudes and behaviors of the Latino community were shaped. We will assess the ability to survive as Raza by fashioning syncretic adaptive strategies to the changing conditions since 1492. A theory of transformation model will be a guiding theme of the class as students will be challenged to create a leadership that will create a leadership that will transform the condition of the Chicano/Latino community.

ES 112 Chicano/Latino Leadership 2:

Cultural Heroes 2-4 credits

This class will explore the concept of cultural heroes within the context of the Chicano/Latino experience. We will identify socio-historic processes that serve to highlight or diminish Chicano/Latino cultural heroes. Students will discuss and create strategies in which to celebrate and honor Chicano/Mexicano, Latino, Hispanic and Caribbean cultural heroes in school and community events. In addition, this class will explore the contributions and achievements of Chicano/Latinos in the Americas. We will survey the Chicano/Latino historical presence in the social, economic, political and cultural landscape of the United States and identify socio-historic processes that serve to highlight or diminish Chicano/Latino contributions and achievements. A theory of transformation model will be a guiding theme of the class as students will be challenged to create a leadership that will transform the condition of the Chicano/Latino community.

ES 113 Chicano/Latino Leadership 3:

Affirmation & Resistance 2-4 credits

This class will examine the impact of La Leyenda Negra (The Black Legend), Manifest Destiny and negative images assigned to Spanish/Mexican and Latino culture in the United States and Latin America. In addition, this class will provide a critical examination of Chicano/Latino cultural expressions in the public discourse with a focus on cultural/ethnic celebrations. We will explore the production of Chicano/Latino culture and cultural celebrations (e.g. Cinco de Mayo) via mainstream popular culture and culture produced by and for Chicano/Latinos. A theory of transformation model will be a guiding theme of the class as students will be challenged to create a leadership that will transform the condition of the Chicano/Latino community.

ES 211 Chicano/Latino Experience: Historical

and Ideological Perspectives 4 credits

This course focuses on the historical origins of the largest Latino population in the U.S. The course begins with an exploration of the consequences of contact between the different worldviews of Meso-americans and Europeans, and examines how Mexican natives and mestizos came to be viewed as 'foreigners' in their ancestral homeland. Throughout the course, we will review historical and contemporary indigenous cultural survival efforts.

ES 212 Chicano/Latino Experience: Political

and Ideological Perspectives 4 credits

This course examines the efforts of Mexican Americans to achieve equality and self-determination through the twentieth century. Special attention will be paid to the emergence of multiple ideological and culturally nationalistic social justice movements that evolved into a unifying Chicano Movement of the late 1960s and early 70s. Finally, this course explores the continuing evolution and emergence of contemporary Chicano/Latino social justice movements.

ES 213 Chicano/Latino Experience: Contemporary

Identity and Cultural Issues 4 credits

This course explores the historical and contemporary identity/cultural issues affecting the largest Latino communities in the United States. We will review theories of ethnic identity development, as well as the social and political construction of 'race'. This course also examines how U.S. foreign policy in Latin America has influenced perceptions within and outside of the Latino community. Finally, we review the use of pan-ethnic labels and their function in the construction of an all-encompassing Hispanic Nation.

ES 221 African American Experience: Down from

the Pyramids, Up From Slavery 10,000 BCE-1877 4 credits

The focus of this course is on African, Afro-European, Afro-Native American, Caribbean, South and North American Maroon societies. In this course we examine various cultural constructs through which Africans in America understand and influence the world. The chronology of this course encompasses Dynastic Egypt, pre-European Conquest Africa, pre-Columbian America, to Post Reconstruction America 1877. ES 221, 222, and 223 examine culture, identity, gender

and women's roles, economics, and African and Native American responses to systematic oppression towards goals of individual and group liberation. May be offered as a live interactive courses.

ES 222 African American Experience:

Aspiration 1877-1945 4 credits
This course examines African, Afro-European, Afro-Native American, and African-American contributions to various liberation movements in the Americas. We examine various cultural constructs through which Africans in the Americas understand and influence the world. The chronology of this course encompasses Post-Reconstruction America to the end of World War II. ES 221, 222, and 223 examine culture, identity, gender and women's roles, economics, and African and Native American responses to systematic oppression towards goals of individual and group liberation. May be offered as a live interactive courses.

ES 223 African American Experience: A Luta Continua:

The Struggle Continues 1945 to Present 4 credits
Contemporary African, Afro-European, Afro-Native American, Caribbean, and Africans in South and North America are examined in this course. The chronology of this course encompasses World War II to the present and confronts issues such as prison incarceration rates, the 'War on Drugs', Affirmative Action backlash, and Multiculturalism, as well as the cultural influences of gospel, jazz, rock and roll, and liberation movements. ES 221, 222, and 223 examine culture, identity, gender and women's roles, economics, and African and Native American responses to systematic oppression towards goals of individual and group liberation. May be offered as a live interactive courses.

ES 231 Asian American Experience:

First and Second Generations..... 4 credits
This course will focus primarily on the experiences of first-and second-generation Asian Pacific Americans through personal narratives, historical texts, documentaries essays, and creative works. Material will cover a wide historical period, from the mid-1800s to the present, and will include the experiences of individuals from a number of different groups, comparing and contrasting the similarities and differences of their experiences.

ES 232 Asian American Experience:

Social Movements of the 20th Century 4 credits
Throughout the 20th century, Asian Americans and Pacific Islanders have been discriminated against in various arenas (e.g., immigration, employment, political, education, housing, social, etc.). This course examines how Asian Americans and Pacific Islanders have responded to institutional forms of oppressions. Students will read and discuss works of various Asian American writers, scholars, and political activists to place Asian American social movements within a larger context of U.S. history.

ES 233 Asian American Experience: Contemporary

Issues in Asian America 4 credits
Where and how do Asian Pacific Americans fit into contemporary U.S. society and culture? This course will examine current situations and issues faced by Asian Pacific Americans such as recent immigration trends, anti-Asian violence and anti-immigrant sentiment, the Hawaiian sovereignty movement, African American/Korean American conflict, LGBT issues, multiracial identities, and interracial marriage. This course will also examine contemporary cultural production by Asian Pacific Americans.

ES 241 Native American Experience: Consequences

of Native American & European Contact..... 4 credits
This course deals with Native Americans and Alaskan Native cultures and history, both prior to and immediately following, contact with Europeans during the past five hundred years. The course is divided into two general segments: First, the course will explore Native cultures in their traditional settings, before the arrival of outsiders. It surveys the great diversity of lifestyles, belief systems, languages, social and political structures, and creative expressions, which characterize the numerous tribal communities of the North American continent. Second, the course focuses on the major European encounters with native societies, beginning with the expedition of 1492 and extending into the Twentieth Century. The disparate responses and resistance strategies of various indigenous populations confronting the ideological and physical intrusion of Europeans is studied. ES 241, 242, or 243 courses may be taken at any time, in any order, with no prerequisites

ES 242 Native American Experience:

Nineteenth Century Federal-Indian Relations 4 credits
This course focuses on nineteenth century United States and Canadian federal-native relations. In the nineteenth century, the United States and Canadian federal governments took different yet similar paths in how they dealt with the sovereign Native peoples within their borders. While no single course can adequately deal with the complexity of the subject matter surveyed, it is organized to help understand the public policies and events shaping tribal life in North America during this period. In the nineteenth century, paternalistic attitudes held by the dominant culture, created federal government policies whose effects can still be found today in the lived experiences of Native Americans.

ES 243 Native American Experience:

Contemporary Native American Issues 4 credits
This course explores contemporary relationships between the United States government, Native Americans, Alaskan Natives, and Native Hawaiians. Particular attention is paid to tribal sovereignty, treaty rights, land and resource ownership and use, religious and identity renewal, Native American political activism, education, and social and economic issues in contemporary rural and urban Native America. This course also focuses on various positive interactions and alliance-building relationships between Native Americans, the dominant society, and other groups of people of color in the U.S. ES 241, 242, or 243 courses may be taken at any time, in any order, with no prerequisites.

ES 244 Native American Story Telling..... 4 credits

This course is designed for students to experience the art of teaching and learning in the oral tradition adopted from the Native American traditions of the instructor. Students will be required to learn the socio/cultural context in which some Native American stories are based. Students will gain an understanding of the term "tribal" by doing some research on their own ethnic tribal roots and compare it to the definition presented by the instructor. Rather than learning different tribal stories and discussing them, students will learn the social, cultural and environmental grounds for Native American stories, create their own stories, present them to class and the class will learn them (all done orally), and then discuss the stories.

ES 250 Class, Race and Gender in the US Economy 4 credits

This course examines the economic causes of social stratification within the labor market based upon class, race and gender. The course uses a political economy perspective to examine issues such as earnings and employment disparities, uneven poverty rates, differential access to housing, health and education. We will examine how the market both removes and produces obstacles, which restrict many social groups from fully participating in the promise of the 'American Dream.' We will examine the common goals, aspirations and struggles shared by diverse social groups, while recognizing that socio-economic discrimination is still an enduring and measurable characteristic of market economies. Attention will be placed upon gaining an understanding of the impact of discrimination from the perspective of the affected groups through firsthand accounts.

ES 280 Co-op Ed: Ethnic Studies 3-12 credits

In this internship course Ethnic Studies students are encouraged to work with local service agencies that serve underrepresented minority communities or organizations that operate from a social justice perspective. Student may develop skills, explore career options, and network with professionals while earning college credit.

Exercise and Movement Science

For information, contact the Health and PE Division, Bldg. 5/Rm. 205, 541.463.5545.

EXMS 135 Applied Exercise Physiology 1.....3 credits

Prerequisite: EXMS 295 or PE 295 and EXMS 194T or PE 194T. Exercise metabolism and fuel sources for energy, cardiovascular response to activity, basic functioning of physiological systems, and musculoskeletal adaptations to acute exercise, and long-term physical training. Designed for students preparing for the fitness industry, pre-physical therapy, cardiac rehabilitation, teaching or coaching. Course content and information will also help prepare students for national certification exams. Students must be accepted into the Exercise and Movement Science Program and be in good academic standing to be eligible to take this course.

EXMS 194F Professional Activity: Fitness

Assessment and Exercise Prescription-Field Techniques.....3 credits
Prerequisite: Program Admission. This course introduces EXMS students to basic fitness assessment and exercise prescription principles. Students learn to assess and prescribe exercise for healthy populations or populations with medically controlled disease. Provides students with foundational skills for exercise science careers.

EXMS 194L Fitness Assessment and

Exercise Prescription-Laboratory Techniques 3 credits
Prerequisite: PE235. Advanced fitness assessment procedures performed in a laboratory setting are presented. Students interpret assessment results and then prescribe appropriate exercise for various populations. Students also learn to identify effects of common pharmacological agents on exercise response and capacity.

EXMS 194S Professional Activity: Principles

of Strength Training and Conditioning Instruction.....2 credits
Prerequisite: Program Admission. This course introduces EXMS Program students to fundamental techniques of resistance training, and programs/systems of conditioning. Includes development of exercises for flexibility, balance, strength, and aerobic conditioning. Provides students with foundational skills for exercise science careers.

EXMS 194T Techniques of Group Exercise Leadership 2 credits

Prerequisite: PE 194F, PE 194S, PE 196. Students are introduced to group exercise leadership methods including safety, motivation, communication, organization and lesson/activity planning. Students experience leading/teaching in a variety of fitness activities. This course is applicable to both personal trainers and group fitness leaders.

EXMS 196 Applied Anatomy and Kinesiology 3 credits

Prerequisite: Program Admission. This course introduces EXMS Program students to basic anatomy and kinesiological principles of movement and exercise. Topics include identification of major muscle groups and joints, skeletal structure, planes/axes of movement, and basic biomechanical factors.

EXMS 214 Physiology of Exercise & Healthy Aging 3 credits

An introductory course covering the physiological changes that occur during the aging process and the positive effects of exercise on disease risk, longevity and quality of life. Aging theories, structural and functional changes, and exercise programming for elderly populations will be discussed. May be offered online.

EXMS 227 Introduction to Exercise Science.....3 credits

An introductory course exploring careers in the exercise science field. An overview of sub-disciplines related to exercise science will also be presented, such as: exercise physiology, biomechanics, motor learning and control, athletic training and sports medicine, nutrition, and sports psychology.

EXMS 235 Applied Exercise Physiology 2.....3 credits

Prerequisite: PE135. A continuation of PE135 Applied Exercise Physiology I for students in the second year of the Fitness Specialist Program. Topics include exercise for unique populations (e.g., individuals with obesity, coronary disease, chronic obstructive pulmonary disease, diabetes, musculoskeletal disorders or other degenerative diseases, as well as children, adolescents, older adults, and male/female populations), environmental considerations during exercise, conditioning for optimal performance, and nutritional principles related to exercise. Course content and information will help prepare students for national certifications. Students must be accepted into the Exercise and Movement Science Program and be in good academic standing to be eligible to take this course.

EXMS 275 Exercise and Sport Biomechanics.....3 credits

Prerequisite: MTH 065 or MTH 070 or MTH 095 or MTH 105 or MTH 111 or pass a placement test and EXMS 196 or BI 231 or PTA 132 or HO 150. An introductory course to the basic principles of biomechanics and how they can be applied in the context of sport and exercise to reduce injury and improve performance. Using anatomy, kinesiology, and math, students will learn to observe, analyze and correct errors in sport and exercise mechanics.

EXMS 294 Foundations of Fitness Management.....3 credits

Introduction to management topics specific to the fitness industry including: fitness program administration, personnel management, risk management, legal liability, equipment acquisition, facility planning and maintenance. Students will also be guided in job search practices and resume development.

EXMS 295 Injury Prevention & Management.....3 credits

Prerequisite: EXMS 196 or PE196 and EXMS 194F or PE 194F and EXMS 194S or PE 194S. This course is designed to assist students in developing and progressing exercise prescriptions for individuals with the goal of preventing or managing common athletic/exercise related injuries. Students learn how to work within their scope of practice in this framework.

PE 280 Co-op Ed: Physical Education 1-12 credits

Prerequisite: Instructor approval for site and credit load. Supervised internship in a physical education program on or off campus. May gain knowledge, develop skills, get teaching experience and explore career options while earning credit toward a degree or certificate. Work sites may be paid or volunteer. Journals and other written assignments required.

PE 280A Co-op Ed: Athletics.....3-12 credits

Prerequisite: Instructor approval for site and credit load. Supervised internship in the non-coaching aspects of an athletic program on or off campus. May gain knowledge, develop skills, get experience and explore career options while earning credit. Work sites may be paid or volunteer. Journals and other written assignments required.

PE 280AR Co-op Ed: Aerobics 1-12 credits

Prerequisite: Instructor approval for site and credit load. Supervised internship in an aerobic fitness program on or off campus. May gain knowledge, develop skills, get teaching experience and explore career options while earning credit toward a degree or certificate. Work sites may be paid or volunteer. Journals and other written assignments required.

PE 280AT Co-op Ed: Athletic Training.....1-12 credits

Prerequisite: Instructor approval for site and credit load. Supervised internship in an athletic training site on or off campus. May gain knowledge, develop skills, get experience and explore career options while earning credit toward a degree or certificate. Work sites may be paid or volunteer. Journals and other written assignments required.

PE 280C Co-op Ed: Coaching 3-12 credits

Prerequisite: Instructor approval for site and credit load. Supervised internship in a coaching site on or off campus. May gain knowledge, develop skills, get coaching experience and explore career options while earning credit toward a degree or certificate. Work sites may be paid or volunteer. Journals and other written assignments required.

PE 280F Co-op Ed: Fitness 1-12 credits

Prerequisite: Instructor approval for site and credit load. Supervised internship in a professional fitness program on or off campus. May gain knowledge, develop skills, get experience and explore career options while earning credit toward a degree or certificate. Work sites may be paid or volunteer. Journals and other written assignments required.

PE 280M Co-op Ed: Fitness Management 1-12 credits

Prerequisite: Instructor approval for site and credit load. Supervised internship in the management of a fitness program, on or off campus. May gain knowledge, develop skills, get experience and explore career options while earning credit toward a degree or certificate. Work sites may be paid or volunteer. Journals and other written assignments required.

PE 280R Co-op Ed: Recreation.....3-12 credits

Prerequisite: Instructor approval for site and credit load. Supervised internship in a recreational program on or off campus. May gain knowledge, develop skills, get experience and explore career options while earning credit toward a degree or certificate. Work sites may be paid or volunteer. Journals and other written assignments required.

PE 280RT Co-op Ed: Corrective Fitness 1-12 credits

This course provides students with an opportunity to work in a fitness environment that develops exercise programs for individuals with injuries and/or disabilities. Students will gain technical skills and knowledge under the guidance of fitness professionals.

PE 280W Co-op Ed: Wellness 1-12 credits

Prerequisite: Instructor approval for site and credit load. Supervised internship in an employee wellness or similar program, on or off campus. May gain knowledge, develop skills, get experience and explore career options while earning credit toward a degree or

certificate. Work sites may be paid or volunteer. Journals and other written assignments required.

Fabrication and Welding

For information, contact the Advanced Technology Division, Bldg. 15/Rm. 201, 541.463.5380.

ENGR 280W Co-op Ed: Welding 3-12 credits

This course provides students with welding-related learning in businesses and industrial sites as well as integrating theory and practice gained in the classroom with practical experience in the professional world. Students may develop skills, explore career options and network with professionals and employers while earning college credit toward a degree.

RTEC 100 Basic Career Technical Skills 2-6 credits

This course explores the basic skills for entering technical careers such as mechanics, manufacturing, aviation, electronics, etc. The course includes; safety, math, tools, basic electricity, basic hydraulics, employability skills, rigging, blue prints, and communication. Students may not receive credit for both RTEC 100 and APPR 101.

WLD 111 Blueprint Reading for Welders.....3 credits

Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. This course provides instruction necessary to interpret blueprints that are typically used by metal fabrication shops. Emphasis is placed on understanding types of lines, dimensioning, views, notations, abbreviations, welding symbols and steel nomenclature.

WLD 112 Fabrication/Welding 1 12 credits

Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Comprehensive skills necessary for the fabrication of metal products. This course introduces basic blueprint reading and shop fabrication techniques, shielded metal arc, GMAW, and gas tungsten arc welding processes. These skills are learned in the context of assigned and graded practice projects.

WLD 113 Fabrication/Welding 2 12 credits

Prerequisite: WLD 112 or WLD 111 and WLD 121 and WLD 143 and WLD 242 or instructor consent Comprehensive skills necessary for the fabrication of metal products. This course builds and advances skills previously learned. Instruction and practice in blueprint reading, shop fabrication techniques, shielded metal arc, FCAW-G, and gas tungsten arc welding is provided.

WLD 114 Fabrication/Welding 3 12 credits

Prerequisite: WLD 112 and WLD 113 or WLD 111 and WLD 121 and WLD 122 and WLD 143 and WLD 154 and WLD 242 and WLD 256 or instructor consent Comprehensive skills necessary for the fabrication of metal products. This course builds and advances skills previously learned. Instruction and practice is given in calculating material costs, shop fabrication techniques, FCAW-SS, gas tungsten arc welding, and SMAW.

WLD 121 Shielded Metal Arc Welding 1 1-4 credits

Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Skill development in SMAW, oxy-acetylene cutting, understanding and practicing safe work methods in the welding shop and welding in all positions (flat, horizontal, overhead, and vertical), using the shielded metal arc process.

WLD 122 Shielded Metal Arc Welding 2 1-4 credits

Prerequisite: WLD 121 or performance test and written examination Skill development in electric arc welding. Training in the selection of electrodes and their use on metals of varying thicknesses, and continued training in oxyacetylene cutting. Welding using a wide variety of electrodes. The student will be instructed in safe work habits and the optimum use of materials and equipment.

WLD 139 Welding Lab.....1-6 credits

Prerequisite: Instructor consent and minimum reading score of 68 OR RD 080 OR Prior College. Only available to students who have taken or are registered in the arc welding, wire drive processes, and/or fabrication/welding sequence. This is an opportunity for additional time in the welding lab.

WLD 140 Welder Qualification (Cert):

Wire Drive Processes 3 credits

Prerequisite: WLD 143 or WLD 154 or WLD 112 or WLD 113 or WLD 114 or instructor consent This course studies the purpose and standards of American Welding Society welder qualification tests. It also

provides instruction and practice in the preparation, welding and finishing of test specimens to code standards using wire drive processes. Course includes AWS D1.1 Welder Qualification Test.

WLD 141 Welder Qualification (Cert): SMAW.....3 credits

Prerequisite: WLD 122 or WLD 112 or WLD 113 or WLD 114 or instructor consent. This course studies the purpose and standards of American Welding Society welder qualification tests. It also provides instruction and practice in the preparation, welding and finishing of test specimens to code standards using shielded metal arc welding processes. Course includes AWS D1.1 Welder Qualification Test.

WLD 142 Pipe Welding Lab: Carbon Steel 3 credits

This is a hands-on course that instructs in set-up procedures and welding techniques required to weld carbon steel pipe in various positions. The code taught will be that of the American Welding Society (AWS). The scope of the course is limited to the practicing of pipe welding techniques. At additional cost, a student may take an AWS pipe welder qualification code test to be arranged with the instructor.

WLD 143 Wire Drive Welding 1 1-4 credits

Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Skills development in gas metal arc welding (GMAW) of carbon steel. Students will be instructed in proper care, set-up and use of GMAW equipment. Preparing weld test specimens and performing weld tests is included in this course.

WLD 151 Fundamentals of Metallurgy.....1-3 credits

Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Physical, chemical and mechanical nature of carbon and alloy steels. Includes study of the purpose and practice of various thermal treatments and cold working processes common to metal using industries.

WLD 154 Wire Drive Welding 2 1-4 credits

Prerequisite: WLD 143 or instructor consent. Technology and application of wire drive process using gas shielded cored wire is taught.

WLD 159 Wire Drive Welding 3 1-4 credits

Prerequisite: WLD 143 or instructor consent. Technology and application of the wire drive process using self shielded cored wire is taught.

WLD 160 Wire Drive Welding 4 1-4 credits

Prerequisite: WLD 143 and WLD 154. This course provides technical information about, and practice in, Gas Metal Arc Welding (GMAW) and Flux Cored Arc Welding (FCAW) that builds on knowledge and skills learned in Wire Drive Welding 1, 2 & 3. Instruction in material preparation and testing of weld samples will also be provided.

WLD 165 Industrial Welding Practices 3 credits

Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College and WLD121, WLD122, WLD143 and WLD154. This course is designed for the welder trainee who has had limited or no industrial experience. Making quality weldments in typical industrial situations where circumstances are often less than ideal. The student will learn how to weld joints that are difficult to access, not directly visible, have surface contamination, or severe gap and fit up irregularities.

WLD 215 Fabrication/Welding 4 12 credits

Prerequisite: Second year standing or instructor consent This course instructs in the skills and technology associated with fabrication of metal products. Welding practice is provided in wire drive, SMAW and GTAW processes. Fabrication skills taught include blueprint reading, metal layout, part preparation and assembly and final finishing. Also studied are concepts in ferrous metallurgy and their applications. Marketable products may be manufactured in the process of learning skills. This course includes practice and testing for AWS D1.1 Welder Qualification Exams.

WLD 216 Fabrication/Welding 5 12 credits

Prerequisite: Second year standing or instructor consent. This course instructs in the skills and technology associated with fabrication of metal products. Welding practice is provided in wire drive, SMAW and GTAW processes. Fabrication skills taught include blueprint reading, metal layout, part preparation and assembly and final finishing. Also studied are concepts in ferrous metallurgy and their applications especially pertaining to welding of carbon and stainless steel. Marketable products may be manufactured in the process of learning skills.

WLD 217 Fabrication/Welding 6 12 credits
Prerequisite: Second year standing or instructor consent. This course instructs in the skills and technology associated with fabrication of metal products. Welding practice is provided in wire drive, SMAW, and GTAW processes. Fabrication skills taught include blueprint reading, metal layout, part preparation and assembly and final finishing. Also studied are aluminum metallurgy concepts in wear analysis, selection and application of wear or corrosion resisting surface treatments in addition to applied aluminum metallurgy. Marketable products may be manufactured in the process of learning skills.

WLD 242 Gas Tungsten Arc Welding 1 3 credits
Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. This course teaches the technology of, and provides practice in, gas tungsten arc welding (GTAW) of carbon and stainless steel sheet material. Students will be instructed in proper care, set-up and use of GTAW equipment. Testing of weld samples is included in this course.

WLD 256 Gas Tungsten Arc Welding 2 3 credits
Prerequisite: WLD 242 or Instructor consent. This course provides continuing training in the technology and practice of the gas tungsten arc welding (GTAW) of carbon and stainless steel sheet. Testing of weld samples is included in this course.

WLD 257 Gas Tungsten Arc Welding 3 3 credits
Prerequisite: WLD 242 and WLD 256. This course provides technical information about, and practice in, gas tungsten arc welding of aluminum alloy sheet materials. Instruction in material preparation, finishing and testing of coupons will also be provided.

Family Studies—See Human Relations

Film—See Literature, Media Arts

Flight

Also see Aviation Maintenance

For information, contact Flight Technology, Airport Road, 541.463.4195.

AS 111 The Air Force Today 1 credits
Deals with the Air Force in the contemporary world through a study of the total force structure, strategic offensive and defensive forces, general purpose forces, and aerospace support forces.

AS 112 The Air Force Today 1 credits
Deals with the Air Force in the contemporary world through a study of the total force structure, strategic offensive and defensive forces, general purpose forces, and aerospace support forces.

AS 113 The Air Force Today 1 credits
Deals with the Air Force in the contemporary world through a study of the total force structure, strategic offensive and defensive forces, general purpose forces, and aerospace support forces.

AS 120 Leadership Laboratory 1 credits
Cadets learn officership, leadership, drill and ceremony, and customs and courtesies. Lec/lab. Graded P/N. OTHER PREREQS: Taken concurrently with AS 111, AS 112 and AS 113. Only offered to students enrolled in the AFROTC officer commissioning program.

AS 211 The Development of Air Power 1 credits
Study of air power from balloons and dirigibles through the jet age; a historical review of air power employment in military and non-military operations in support of national objectives; a study of changes in the nature of military conflict; and a look at the evolution of air power concepts and doctrine. OTHER PREREQS: If enrolled in the AFROTC officer commissioning program, must be taken concurrently with AS 220.

AS 212 The Development of Air Power 1 credits
Study of air power from balloons and dirigibles through the jet age; a historical review of air power employment in military and non-military operations in support of national objectives; a study of changes in the nature of military conflict; and a look at the evolution of air power concepts and doctrine. OTHER PREREQS: If enrolled in the AFROTC officer commissioning program, must be taken concurrently with AS 220.

AS 213 The Development of Air Power 1 credits
Study of air power from balloons and dirigibles through the jet age; a historical review of air power employment in military and non-military operations in support of national objectives; a study of changes in the

nature of military conflict; and a look at the evolution of air power concepts and doctrine. OTHER PREREQS: If enrolled in the AFROTC officer commissioning program, must be taken concurrently with AS 220.

AS 220 Leadership Laboratory 1 credits
Cadets are placed in element leadership positions in order to know and comprehend the Air Force concepts of command, discipline, tradition, and courtesies. Lec/lab. Graded P/N. OTHER PREREQS: AS 220 is taken concurrently with AS 211, AS 212, and AS 213. Only offered to students enrolled in the AFROTC officer commissioning program.

BA 254 General Aviation Management 3 credits
This course will present a detailed examination of general aviation's role in the national economy, regional economy and local economy. The course will cover the most effective uses and management of general aviation resources. It will stress the role of the fixed base operator, and the importance of the interview in the hiring process.

FT 101 Exploring Aviation Careers: Summer Academy 1 credits
This course is designed to provide a hands-on opportunity for the participants in multiple major career specialties in the air transportation industry. This course includes 3 hours of dual flight instruction recorded as official logged flight time. Classroom instruction with labs including experience as a pilot, aviation maintenance technician, avionics technician, air traffic controller, airport management and briefings with the TSA.

FT 102 General Aviation Careers 1 credits
A survey of general aviation career areas, both flying and non-flying, as presented by a variety of guest speakers from the aviation industry. Class attendance is mandatory for credit; this is not a graded course.

FT 103 Aircraft Development 4 credits
Prerequisite: Testing: minimum reading score of 68. A survey course developing the evolution of the aviation industry. This course develops the interdependence of developing technology, materials sciences, political influences and economics. The student will exit this course understanding how these factors have driven the state of the industry today and projections for the future.

FT 113 Aviation Science 4 credits
A foundational course developing applicable principles in the fields of physics, chemistry and mechanics. These principles are developed to an applications level to support an understanding of how major aircraft systems operate.

FT 115 Aircraft Structures and Systems 3 credits
Designed to give a pilot a thorough understanding of airplane systems and structural design.

FT 130 Primary Flight Briefing 3 credits
Prerequisite: Testing: minimum reading score of 68. This course will help students to master key areas of aeronautical knowledge necessary to progress efficiently toward the Private Pilot Certificate.

FT 228 Multiengine Ground School 2 credits
Recommend possession of FAA private pilot license. A two part multi-engine course: Part 1 develops the understanding of multi-engine airplane systems and basics of multi-engine airplane flight operations including emergency procedures. Part 2 develops advanced multi-engine airplane systems and operation. Multi-engine airplane operational procedures training including both normal and emergency procedures skills development.

FT 239 Professional Pilot Flight Lab 1-7 credits
Prerequisites: Admission to the Flight Technology program. The Professional Pilot Course is designed to prepare applicants for their careers as professional pilots in the air transportation industry. The Professional Pilot Course includes certification training for Private Pilot, Commercial/Instrument Pilot in single-engine, multi-engine airplanes and helicopter. Professional Pilot students may be prepared to become qualified as flight instructors with ratings so they may provide instrument instruction and multi-engine airplane instruction. The Professional Pilot Course is a comprehensive course of study including preparation that will meet Airline Transport Pilot (ATP) proficiency. Emphasis throughout the Professional Pilot Course is placed on instrument piloting skills and the use of conventional and advanced navigation systems including GPS and digital/electronic display technology. This course is repeatable.

FT 249 Flight 10 1-3 credits

This course will present the principles of attitude instrument flying using a simulator. The course will cover all instrument procedures used under instrument flight conditions.

FT 250 Private Pilot Ground School 5 credits

This course introduces and develops each knowledge and skill areas essential for successful completion of the FAA written examination for a Private Pilot Airplane and/or Helicopter. Topics include FARs, airplane structures, aerodynamics, meteorology, navigation, accessing and using performance data and numerous other industry information resources.

FT 251 Commercial Pilot Ground School 5 credits

Recommend private pilot license or equivalent. This course develops the knowledge and skills required for a candidate to successfully complete and pass the FAA written test required to be certificated as a commercial pilot.

FT 252 Instrument Ground School 5 credits

Recommend completion of Commercial Pilot Ground School FT 251. This course prepares the student for successful completion of the FAA written examination required for an Instrument rating. The course develops an understanding of the IFR environment, systems and procedures.

FT 254 Aerodynamics 3 credits

An analysis of the physics of flight; the characteristics of high-speed and low-speed flight and the effects of pressure, altitude, weight, center of gravity, and airfoil design on aircraft performance.

FT 255 Fundamentals and Flight Instructor-Instrument Ground School 3 credits

Recommend current passing score on FAA commercial pilot and instrument pilot knowledge exam or possession of valid commercial or ATP pilot certificate. A survey of psychological principles relating to the human learning process, plus a concise review of federal regulations, radio navigation, and principles of meteorology appropriate to IFR flight operations in the United States.

FT 256 Flight Instructor-Airplane Ground School 3 credits

Recommend participants be the holder of a FAA Commercial Pilot certificate with an Instrument rating, or an ATP certificate. This course develops details of airplane flight operations and maneuvers analysis; FAA regulations and recommended procedures for flight instruction. Detailed analysis of reference documents and resources for flight instructors. Upon completion of this course, participants will be prepared for the FAA Flight Instructor written examination.

FT 280 Co-op Ed: Flight Tech 3-12 credits

This course provides students with flight-related learning in businesses and public organizations. Students integrate theory and practice gained in the classroom with practical experience in the professional world. Students may develop skills, explore career options and network with professionals and employers while earning credit toward a degree.

GS 109 Meteorology 5 credits

This course is a survey of the field of meteorology with detailed emphasis on the elements specific to the aviation industry. Students exit this course understanding how to access, analyze and use weather data to make decisions essential for safe flight.

Foreign Languages—See Language Studies**French—See Language Studies****General Science****Geography**

For information, contact the Social Science Division, Center Bldg./Rm. 403, 541.463.5427.

GEOG 141 Natural Environment 4 credits

This course is designed to introduce and analyze natural processes and the impacts of human/cultural activities operating in our environment. Dynamic processes create and alter landforms, climatic patterns, and biotic regional differences on the earth's surface. Understanding the causes and results of global climate change as it impacts future geographies is a fundamental theme in this course. Analysis of natural processes with added human impacts

will introduce the student to scientific methodologies, using graphs, models and mapping techniques. This course is strongly recommended as a prerequisite for ENV5 184, Global Climate Change. This course meets the AAOT science or social science requirement. May be offered online.

GEOG 142 Introduction to Human Geography 4 credits

This course is an introduction to human geography patterns and concepts that help explain the spatial distribution for contemporary cultures. Concepts of region, movement of cultural ideas, and human interaction with their natural and built environment are stressed. Globalizations and changes in cultures resulting from environmental alterations will be presented. Changing cultural patterns will be explored and analyzed using maps, videos, and in-class exercises. This course fulfills the race, gender, and ethnicity requirement. May be offered online.

GEOG 151 Digital Earth 4 credits

Digital Earth is a computer-aided instructional introduction to geospatial concepts course that includes both lectures and hands-on computer labs that implement various geospatial technologies to explore fundamental concepts and theories in cultural and physical geography. Students will be introduced to spatial theory and technology. Students will focus on how spatial technology is woven into our daily lives and what can be accomplished with web-based spatial technologies. Students will learn how technologies such as GPS, Google Earth, Multispec and I-Tree Canopy can be used to solve real-world problems and aid critical decision making.

GEOG 201 World Regional Geography 3 credits

An introduction to major culture regions of the world through the study of human patterns and the natural environments. Cultures, resources, and historical contexts illuminate the world's distinctive regional nature. An emphasis is placed on development within the context of globalization. GEOG141 or GEOG142 is recommended prior to this class.

GEOG 216 Geography of Pacific Asia xx credits

Geography of Pacific Asia focuses on functional world region that includes East and Southeast Asia, and the Pacific. The course has two primary components: (1) a descriptive introduction to the region focusing on processes associated with physical, human/cultural, political, economic and environmental patterns; (2) a thematic exploration of human and physical geographic concepts with reference to these regional patterns. a substantial research component will allow students to create an annotated bibliography on a topic of regional importance.

GEOG 280 Co-op Ed: Geography 2-12 credits

This course provides the student with geography-related work experience in community businesses and organizations. Students will have the opportunity to integrate theory and practice gained in the classroom with practical experience in the professional world. In this course a student may develop skills, explore career options and network with professionals while earning transferable college credit.

GIS 151 Digital Earth 4 credits

Digital Earth is a computer-aided instructional introduction to geospatial concepts course that includes both lectures and hands-on computer labs that implement various geospatial technologies to explore fundamental concepts and theories in cultural and physical geography. Students will be introduced to spatial theory and technology. Students will focus on how spatial technology is woven into our daily lives and what can be accomplished with web-based spatial technologies. Students will learn how technologies such as GPS, Google Earth, Multispec and I-Tree Canopy can be used to solve real-world problems and aid critical decision making.

GIS 245 Maps and Spatial Information 4 credits

Prerequisites: GIS 180 or GEOG 180, or consent of the instructor. Maps and Spatial Information is the second in the series of Geographic Information Science and Technology courses. The course will build on the foundations of geospatial technology introduced in GIS/GEOG 180. Students will use ArcInfo software to explore cartographic principles, projections, data capture, data structures, and data analysis. Access to a current computer outside of class (new within last 3 years) is strongly recommended. Students who do not have access to a computer may be at a disadvantage.

GIS 246 Introduction to GIS 4 credits

Prerequisites: Math 65 & GIS 245, or Consent of instructor This

course is the third in a series of Geographic Information Science and Technology courses. The course will focus on the development of skills and techniques used to create, analyze, and display spatial data in a geographic information system. The following skills and techniques will be emphasized: data and project management, digitizing, editing, and spatial analysis. Access to a current computer outside of class (new within last 3 years) is strongly recommended. Students who do not have access to a computer may be at a disadvantage.

GIS 249 Raster Analysis & Remote Sens. 4 credits
Prerequisite: GIS 246 or instructor consent. Raster and Remote Sensing will focus on raster data analysis. Basic concepts we will explore topics such as surface interpolation (creating grids from point estimates, e.g. weather maps), topographic analysis, slope failure, distance analysis, and modeling.

GIS 250 Cartographic Design 4 credits
Prerequisites: GIS 246 or instructor approval. This course provides students with advanced instruction in cartography. The objective of this course is to expand student's skills communicating spatial data effectively. Advanced elements of cartographic layout such as modifying scale bar, direction indicators, and legends are covered. Advanced symbolization, labeling, and annotation will be addressed. GIS map layouts will be exported to Adobe Illustrator, refined and finalized for production.

GIS 251 GIS for Water Technicians 2 credits
Prerequisite: GIS 246, or consent of instructor. GIS for Water Technicians is an elective class in the Geographic Information Science and Technology program. This course will develop the student's abilities to collect, organize, display, and analyze temporal and spatial data with particular emphasis on water conservation. Students will improve their understanding of applied water conservation using problem based learning utilizing GIS and GPS technology.

GIS 252 GIS Water Resources 2 credits
Prerequisite: GIS 246, or consent of instructor. GIS Water Resources is an elective class in the Geographic Information Science and Technology program. This course introduces the major concepts of water resources and develops student's ability to incorporate Geographic Information Science into problem solving. Students will learn how to utilize GIS as a tool for both data management and analysis based on real world examples in water resources. This course builds on the concepts developed in GIS 251 and GIS 246.

GIS 253 Emerging Trends in Geospatial Technology 4 credits
Prerequisite: GIS 246 or instructor approval. This advanced course provides students with instruction and hands-on experience in emerging trends in geospatial technology. The rapid advances in geospatial technology, such as open-source, 3D visualization and on-line-interactive mapping, as well as innovations in the geospatial industry will be presented. Students will learn how to apply geospatial problem solving and visualization skills and techniques using new technologies.

GIS 254 Spatial Data and Scripting 4 credits
Prerequisite: GIS 246, and CS 133P This course will introduce students to automation of geoprocessing tasks using ArcGIS model builder and scripts. Students will learn how to work with attribute tables, customize data models, read and write text files, work with lists and create geometries.

GIS 260 Applications in GIS 4 credits
Prerequisite: GIS 246 or consent of the instructor. This course will provide advanced experience in Geographic Information Science (GIS) concepts and applications. The course builds on the experience and knowledge gained in GIS 245 (Maps and Spatial Information), GIS 246 (Introduction to GIS) and CIS 247 (Information Analysis and Visualization). Students will gain practical experience by performing a number of GIS tasks such as: database management, cartographic design, document conversion, analysis and workforce training. Experience will be gained via real-world, applied, capstone projects.

GIS 280 Co-op Ed: Geographic Information Science 3-12 credits
Cooperative Education is a field experience opportunity for students who have earned the GIS Pathways Certificate or who have completed four GIS classes: GIS 151 (also GEOG 151), GIS 245, GIS 246, and one GIS elective. Contact the Lynn Songer, GIS Instructor-songerl@lanec.edu.

Geology—See Earth and Environment Science

Graphic Design

For information, contact the Art and Applied Design Department, Bldg. 11/Rm. 101, 541.463.5409.

ART 115GD Basic Design: Fundamentals for Graphic Designers 4 credits

Beginning course in two-dimensional design covering fundamental visual elements, concepts, and principles with an emphasis on how those fundamentals apply to graphic design. It also includes career information. Course work includes necessary competencies for the Graphic Design program.

ART 119 Typography 1 3 credits

Prerequisite: ART 115 or ART 131. Explores the use and design of letterforms and typographic design. Basic typographic history and classification of typefaces is covered, while essential craftsmanship and technical skills are stressed. Coursework includes necessary competencies for the Graphic Design program.

ART 200 Graphic Design History 3 credits

A team-taught interdisciplinary approach to graphic design history and its relationship to traditional art. Students examine the chronology and development of graphic design within a social context, through an exploration of styles, movements, and individual careers. Emphasis is on mid-19th century design to the present. Open to all students and required for graphic design majors.

ART 216 Digital Design Tools 4 credits

An introduction to core layout, vector, bitmap, and document-sharing software used in graphic design. Coursework includes necessary competencies for the graphic design program.

ART 218 Printing Technology 2 credits

Prerequisite: Acceptance into the second year of the graphic design program. Co-requisite: ART 227. Introduces graphic design students to printing technology, including pre-press, press, finishing processes, proofing, papers, and inks. Coursework includes necessary competencies for the graphic design program.

ART 221 Graphic Design 1 4 credits

Prerequisite: ART 115, ART 116, ART 119. An introduction to design, layout, typography, and the design process from concept to mockup. Coursework includes necessary competencies for the Graphic Design program.

ART 222 Graphic Design 2 4 credits

Prerequisite: ART 221. An exploration of typical print design problems with an emphasis on layout strategy and concept. Coursework includes necessary competencies for the Graphic Design program.

ART 223 Graphic Design 3 4 credits

Prerequisite: ART 222. An Exploration of advanced graphic design problems as well as portfolio preparation. Students are exposed to professional and business issues in the field. Coursework includes necessary competencies for the Graphic Design program.

ART 225 Digital Illustration 3 credits

Prerequisite: ART 216. Students gain experience in using vector software to create technical and creative illustrations. Coursework includes necessary competencies for the Graphic Design program.

ART 227 Graphic Design Production 1 3 credits

Prerequisite: Art 216. Co-requisite: ART 218 and acceptance into the second year of the graphic design program. An introduction to digital prepress production with emphasis on page layout software and professional standards of production. Coursework includes necessary competencies for the graphic design program.

ART 228 Graphic Design Production 2 4 credits

Prerequisites: Art 227, Art 218, MUL 212, ART 225. An intermediate course in digital prepress production. Coursework includes necessary competencies for the graphic design program.

ART 229 Graphic Design Production 3 4 credits

Prerequisites: ART 228, Art 218, Mul 212, Art 225. An advanced course in digital production where students produce projects in a studio setting under professional conditions and standards.

ART 237 Illustration 1 3 credits

Prerequisite: ART 131. An introduction to the field of illustration with an emphasis on solving illustration problems and developing

a personal style. Most assignments concentrate on black and white illustration techniques.

ART 280GD Co-op Ed: Graphic Design 3-12 credits
Prerequisite: Instructor approval. This course provides the student on-the-job experience in professional graphic design sites in the community. Students integrate theory and practice gained in the classroom with practical experience in the professional world. Students develop skills, explore career options and network with professionals and employers while earning credit toward a degree.

ART 289 Web Production 3 credits
Prerequisite: CS 195 and ART 216 or MUL 212. Intermediate web-development course emphasizing production using web authoring software Adobe Dreamweaver. Topics include site building and management, GUI customization, typography, CSS and integration of multimedia.

GD 110 Introduction to Graphic Design 1 credits
An introductory course that presents information about a career of graphic design. Includes a look at job opportunities, the design process, required skills, education, and work conditions. Coursework includes necessary competencies for graduation from the Graphic Design program.

Health Occupations

For information, contact the Health Professions Division, Bldg. 4/Rm. 222, 541.463.5317.

HO 101 Introduction to Health Occupations 2 credits
This course explores the health care system and a variety of health careers. It includes an overview of the health care delivery system, historical background, holistic health and cultural competencies. In addition, it explores educational requirements, employability skills and demands, ethical, legal and safety standards, salary ranges and future job prospects for a variety of health careers. The course concludes with a comparison of all of the careers introduced in terms of their future viability and appropriateness for each student. May be offered online.

HO 102 Diversity Issues in Healthcare 3 credits
This course explores the influence of membership in ethnic, religious, age, class and gender groupings on communication in health care settings on both the health care provider and the receiver of health care. Utilizing both theory and personal experience, students will identify personal attitudes and behaviors and gain experience in using effective methods of communicating with individuals from backgrounds represented in both patient and health care provider populations. May be offered online.

HO 103 Health Literacy and Communication 3 credits
This course is designed to introduce the issue of health literacy and explore the links between health literacy, health outcomes and health care disparities. Students will gain a foundational understanding of health literacy by defining and identifying the factors that influence health literacy and exploring health communication expectations, examine varying levels of literacy, learn how to identify these levels and practically approach the differing needs of those at each level of literacy. This will also include learning how health literacy and communication impacts the health care system, populations at risk, cultural competence and communication, the responsibility to increase health literacy and identify resources and tools available to improve health related communication and improve health outcomes. Course may be offered online.

Health Records

For information, contact the Health Professions Division, Bldg. 4/Rm. 222, 541.463.5617. You must be accepted into the Health Records program to take some of these classes.

EL 115H Effective Learning: Health Science Majors 3 credits
This course is designed for health occupation majors who wish to strengthen their study skills and strategies. Students will learn how to take notes from lectures and textbooks, study for tests, improve memory, read and study from textbooks, manage time effectively, and use the library. Course work requires college-level reading skills.

HIM 270 ICD Coding 4 credits
Prerequisite: HO100 and co-req/pre-req: HO150 (BI231 and BI232 may be substituted for HO150). Examines the development of

coding classification systems. Introduces ICD coding classification system, its format and conventions. Stresses basic coding steps and guidelines according to body systems. Provides actual coding exercises in relation to each system covered. Prerequisites: HO100 Medical Terminology, HO150 Human Body Systems 1. Prerequisites or co-requisites: HO 153 Pharmacology, HO152 Human Body Systems 2, (or BI 230, 231, and 232). All co-req/pre-reqs must be passed with a C or better.

HIM 273 CPT Coding 1 4 credits
Prerequisite: HO 100 and co-req/pre-req: HO 152 (BI 231, BI 232, and BI 233 may be substituted for HO 152). Study and application of Current Procedural Terminology (CPT) and Health Care Procedural Coding System (HCPCS) coding. Includes coding systems, reimbursement, coding guidelines and standards, evaluation and management, and surgical, radiology, pathology, and laboratory and medicine procedures. Lab hours may include coding practice using both hardcopy worksheets and using online coding applications.

HIM 275 CPT Coding 2 4 credits
Prerequisites: HIM 273 This course will continue to explore the CPT coding system with the remaining body systems, along with HCPC coding which is essential to healthcare reimbursement and data collection schemes. Additional coding and billing systems may be explored, such as DRG, as applicable. The course is designed to provide students with the current trends and regulatory requirements.

HIT 104 Clinical Terminology 3 credits
An opportunity to learn terminology used in a medical setting such as names of clinical instruments, surgical procedures, laboratory tests and pharmacology. Particularly for those interested in health careers, but open to anyone. May be offered online.

HIT 120 Introduction to Health Records 2 credits
This course is designed to introduce the Health Records student to the career opportunities in health information management, work settings, basics of the patient record, and basics of the healthcare delivery system. Students will learn about the Health Insurance Portability and Accountability Act (HIPAA). Important guidelines for building a resume and portfolio. May be offered as a live interactive courses.

HIT 154 Introduction to Medical Science 3 credits
Prerequisites: Successful completion of Human Body Systems 1 (HO150) and Human Body Systems 2 (HO152), or BI231, BI232, and BI233 (all three with grades of C or higher); or instructor consent. Provides an overview of human disease in terms of general vocabulary, overall frequency and significance of disease, and diagnostic approach including laboratory resources. Course covers basic pathologic processes; diseases of organs and organ systems; discussion of some multisystem diseases and disease processes. May be offered online.

HIT 160 Practice Management 3 credits
Introduces medical practice management software. Students learn to create/maintain patient files, make appointments, store treatment information, match CPT and diagnosis codes with treatment procedures and charges, create and follow insurance claims for collection of payments from Medicare, Medicaid, private insurance and other reimbursement organizations. Introduces medical practice management software. May be offered online.

HIT 196 Medical Transcription 2 3 credits
Prerequisites: HO100, HO 195. Consent of instructor required. Prior completion of HO190 is highly suggested for successful completion of this course. Contact instructor via e-mail and attend the first class to be released to register. Continuation of Medical Transcription 1 HO 195 with higher standards for accuracy, neatness, terminology usage, spelling, etc. This course includes speech recognition exercises.

HIT 197 Medical Transcription 3 3 credits
Prerequisites: HO100, HO190, HIT 196. Consent of instructor required. Contact instructor via e-mail and attend the first class to be released to register. Continuation of Medical Transcription 2. Seven medical specialties are studied employing increasingly difficult dictation. Class discussions include challenging terminology, document formatting, references and resources. May be repeated for up to six credits. Students seeking MT Career Pathway certificate are required to successfully complete 6 credits.

HIT 222 Reimbursement Methodologies 3 credits
Prerequisites: HO 112, pre-or co-requisite: HO 114, or instructor consent. The study of coded data and health information in reimbursement and payment systems appropriate to all health care settings. Emphasis on ability to identify correct codes and appropriate documentation in order to obtain maximum reimbursement. Technologic advances in claims submission and coding will be included. May be offered as a live interactive courses.

HIT 280 Co-op Ed: Health Records 3-12 credits
Prerequisites: Admission to the Health Records Technology Program; SUCCESSFUL COMPLETION OF FALL AND WINTER TERM HEALTH RECORDS TECHNOLOGY COURSES. Instructor consent required. Contact instructor via e-mail prior to registration. The purpose of this course is to provide students meaningful learning experiences related to the field of health records. This course allows students the opportunity to earn college credit while working in the health care community under supervision.

HO 100 Medical Terminology 1 3 credits
At times of high demand, registration may be limited to one time per academic year. A programmed course covering medical terminology, derivation, pronunciation and meaning. May be offered online.

HO 110 Administrative Medical Office Procedures 3 credits
Principles of filing and records management specifically for the medical facility. Legal and ethical concerns of confidentiality & privacy. Fundamentals of client reception, appointment scheduling, telephone techniques, and letter composition.

HO 112 Medical Insurance Procedures 3 credits
Completion of MTH 025 is strongly recommended but not required. Medical reimbursement management for private health and accident insurance, Medicare, Medicaid, Workers' Compensation. Abstracting information from health records for billing and transfer forms. Introduction to the use of CPT-4 and ICD-9-CM coding. This course includes computation component. Introduction to the CMS 1500 FORMS. May be offered as a live interactive courses.

HO 114 Medical Coding Procedures 3 credits
Prerequisites: HO100, corequisites: HO150 (or BI231 with grade of C or higher); or work experience and instructor consent. A course for anyone involved in health care delivery, particularly dealing with insurance and/or Medicare and government regulations. Basics of ICD-CM and CPT-4 including abstracting health records and assigning code numbers to diagnoses and procedures for indexing health data and processing reimbursement claims. May be offered online.

HO 150 Human Body Systems 1 3 credits
Prerequisite or corequisite: HO 100. Designed to help the student identify selected fundamental concepts of the anatomy and physiology of the cell and skin, musculoskeletal, nervous, sensory, endocrine, and circulatory-lymphatic systems. May be offered online.

HO 152 Human Body Systems 2 3 credits
Prerequisites: Human Body Systems 1 HO 150. Designed to help the student identify selected fundamental concepts of the anatomy and physiology of the respiratory, digestive, urinary, and reproductive systems. A basic introduction to microbiology is included. May be offered online.

HO 153 Introduction to Pharmacology 3 credits
This course provides an overview of pharmacology for healthcare students including: principles, history, general drug classifications, regulations, pharmacokinetics, drug interactions, usage and dosage. Students will be introduced to the care and handling of many medications and gain awareness of drug related issues. Drug effects will be analyzed by a body systems approach.

HO 190 Medical Formatting 3 credits
Prerequisite: BT120, corequisite: HO100. A course designed to increase keyboarding skills including proofreading, spelling, English grammar, punctuation, medical terminology, and ability to format medical reports and correspondence in proper manner utilizing all of the above. May be offered as a live interactive courses.

HO 195 Medical Transcription 1 3 credits
Prerequisite: HO100, keyboard 45 wpm, and BT 120; Completion of HO190 is highly suggested for success of this course. This course is designed to introduce the student to transcription of medical dictation with particular emphasis on accuracy and correct usage of med-

ical terminology and English grammar. Correct spelling will also be emphasized. Speech recognition is introduced.

HO 220 Legal and Ethical Aspects of Healthcare 3 credits
An overview of the United States legal system. A study of the principles of law and ethics as applied to the healthcare field with particular reference to all phases of medical records management and medical assisting.

Health and First Aid

For information, contact the Health and PE Division, Bldg. 5/Rm. 205, 541.463.5545.

HE 125 Workplace Health and Safety 3 credits
This course will increase overall safety awareness and provide practical knowledge of occupational and environmental health and safety. Students will explore the connections between psychological health, personal behaviors, attitudes, and the accidents and illnesses that occur in the workplace.

HE 152 Drugs, Society and Behavior 3 credits
This course provides current information concerning the impact of drugs on society & personal behavior. Students will examine a variety of issues related to health & drug use. Topics include: pharmacology, stimulants, depressants, opiates, psychedelics, as well as drug history & control issues.

HE 209 Human Sexuality 3 credits
This course increases knowledge and awareness of current sexual health issues to help students make informed, responsible sexual health decisions. Physiological, psychological, and sociological factors that contribute to the development and expression of sexuality will be explored and discussed. May be offered online.

HE 222 Consumer Health 3 credits
This course helps students make informed decisions as a health consumer. Topics include: health conditions & diseases, self-care, fitness consumerism, advertising/quackery, alternative health, health care facilities, health insurance, death & dying, budgeting, consumer laws, & preventative health. May be offered online.

HE 240 Holistic Health 3 credits
This course explores the expanding field of holistic health therapies. Students will examine how complementary and alternative medicine (CAM) contrasts with conventional Western medicine, and gain skills to make informed health care choices. May be offered online.

HE 250 Personal Health 3 credits
This course is designed to empower students to make informed personal health decisions. Students will explore the connection between personal behavior & health outcomes. Topics will include behavior change strategies, disease prevention, health promotion, psychological health, & communication. May be offered as a telecourse.

HE 251 Wilderness First Aid 3 credits
This course includes fundamental first aid care and emergency procedures in an outdoor environment. Techniques of assessing and handling the sick and injured in a remote location are included. Assessing injured and/or ill victims in a variety of emergency situations will be studied and practiced.

HE 252 First Aid 3 credits
This course focuses on emergency first aid response, assessment, care, prevention and health promotion. Students will study & practice life-saving skills related to airway obstruction, rescue breathing, CPR, shock, soft tissue & skeletal injuries, sudden illness, and a variety of other emergencies.

HE 255 Global Health and Sustainability 4 credits
The focus of this course is on global sustainability and understanding the connection between the underlying issues of poverty, hunger, violence, disease, and disruption of ecosystems. We will explore the global impacts of economic, political, and constructs on the health of people and the planet.

HE 261 Cardiopulmonary Resuscitation 1 credits
Principles and procedures to provide basic life support to victims of airway obstruction, respiratory and cardiac distress and or arrest. Meets National Safety Council and OSHA and American Red Cross standards for certification of adult, child and infant CPR. Students will receive Community CPR and AED certification, adult, child and Infant.

HE 262 First Aid 2: Beyond the Basics.....3 credits

This course provides the advanced first aid training needed to earn a 2-yr CPR/AED certification for the Professional Rescuer. The course focuses on the knowledge and skills necessary for patient assessment, emergency care & prevention of breathing or cardiac emergencies, chronic disease or trauma.

HE 275 Lifetime Health and Fitness.....3 credits

This course provides an overview of current and evidence based fitness research and its relationship to achieving optimal health. Students will explore the components of fitness, best practices in nutrition, weight management guidelines, stress management, and chronic disease prevention. May be offered online.

HE 280 Co-op Ed: Health Occupations 3-12 credits

This internship course provides on-the-job learning experiences in the health occupations field. Students earn college credit while working under the supervision of a health care professional. Internship sites are selected to support each student's career goals, contributing to the student's education and future employability.

HE 290 Comprehensive Approaches to Weight Management 3 credits

The Weight Management course explores overweight, obesity and disordered eating from a public health perspective. Evidence-based research, genetics, environmental and family influences, exercise, diet, and multifaceted responsibility will be examined. May be offered online.

History

For information, contact the Social Science Division, Center Bldg./Rm. 403, 541.463.5427.

HST 101 History of Western Civilization 4 credits

A survey of the historical development of the early Western world, peoples, and societies that have influenced it including the Greeks, the Jewish, the Romans, and Christians, the Germanic and Islamic influences in the wake of the fall of Rome, and the early Renaissance. This course will provide an overview of diverse peoples and nationalities, the creation of and changes in religious systems, ideas, social structures, and political institutions while considering connections to our modern world. May be taken out of sequence.

HST 102 History of Western Civilization 4 credits

A survey of the historical development of the Western world over a period of several hundred years including the Italian Renaissance, expansion to and colonization of the western hemisphere, the Reformation era, the Enlightenment and Scientific Revolution, early Industrial Revolution, finishing with the French Revolution. This course will provide an overview of diverse peoples, nationalities, creation of, and changes in religious/value systems, scientific theories, social structures, economies, and political thought and institutions. Main themes of Western societies will be synthesized and considered in light of our modern world. May be taken out of sequence.

HST 103 History of Western Civilization 4 credits

A survey of the historical development of the Western world from approximately 1800 to the late twentieth century, including industrialization and labor, social movements, mid 19th-century political revolutions, imperialism, ideologies and politics of the 19th and 20th-century, the world wars and decolonization, Cold War, and popular culture. This course will provide an overview of diverse peoples, nationalities, and cultures while putting them in the context of changing social, political, economic conditions and values. These concepts, events, and people will guide our understanding of the present world. May be taken out of sequence.

HST 104 World History.....4 credits

World History is the story of peoples on a global stage. This course will look at the origin and diffusion of civilizations in the ancient world including Asia, Africa, Middle East and Mediterranean, Europe and the Americas. Themes and topics will include world religions, early empires, communication, interaction and exchange. These survey courses will use the global approach, which focuses on the big picture and looks at the convergence of peoples across the earth's surface into an integrated world system begun in early times and intensified after the rise of capitalism in the early modern era. All of the courses will consider the connections of select topics and concepts to the shaping of our present world. May be taken out of

sequence. Class may be offered as a telecourse with videos available online, library checkout, and through television broadcast.

HST 105 World History.....4 credits

A survey of diverse peoples using the theme of "movement" to highlight cultural contact during the emergence of new world patterns beginning in approximately 1400 to 1815: It will include topics of exploration and expansion, state building, religions and their impact on culture, war, politics, selected individuals, global trade and consequences. May be taken out of sequence. May be offered as a telecourse.

HST 106 World History.....4 credits

A survey of the modern patterns of world history from approximately 1800 to late 20th-century including topics of industrialization and nationalism, mass society, imperialism, Communism, war and revolution, the Cold War, nation-building in Latin America, Africa and the Middle East. Select individuals and events will be examined in historical context to guide understanding of present thought and conditions in our "global village". May be taken out of sequence. May be offered as a telecourse.

HST 155 History of Islam 4 credits

The History of Islam course will study the development and spread of Islam from its formation to the current era. The class will explore the breadth of Islam throughout the world and its influence in different regions, and how those regions influenced Islam; specifically, Islam within different cultural and societal contexts in history.

HST 195 History of the Vietnam War 4 credits

This course examines the Twentieth-century conflict in South East Asia, and is designed to help students grasp the political, social, and economic realities of the Vietnam War, as it progressed in both South East Asia and the United States. This course includes rare documentary film footage and archival photographic material of soldiers and civilians, as well as those political figures that were central to the development and outcome of this struggle. History 195 is not a military history course, but a course designed to shed light on the reasons for Western involvement and the factors behind the failure of Western military and political policies. Offered as an online class only.

HST 201 History of the United States 4 credits

Survey of United States history focusing on the creation and development of the country socially, economically, politically, and culturally. Native America, European colonization, colonial development, origins of slavery, Revolution, early Republic. May be taken out of sequence. May be offered as a telecourse.

HST 202 History of the United States 4 credits

Survey of United States history focusing on the development of the country socially, economically, politically, and culturally. Jacksonian era, expansion, commercial and industrial revolution, slavery, Civil War, Reconstruction, Gilded Age, Populism. May be taken out of sequence. May be offered as a telecourse.

HST 203 History of the United States 4 credits

Survey of United States history focusing on the creation and development of the country socially, economically, politically, and culturally. Imperialism, Progressivism, the 1920s, Depression and New Deal, World Wars and Cold War, 1960s, 1970s and recent developments. May be taken out of sequence. May be offered as a telecourse.

HST 207 History of the American West.....4 credits

A survey course of the trans-Mississippian West covering social, political, intellectual, and environmental history. The course will include the study of this region of America and its peoples, from indigenous times into the 20th century. Some emphasis will be placed on contrasting the "mythical" West from historical facts, by involving the image of the West itself in movies, novels, music, and American folklore.

HST 208 US History Since 1945 4 credits

A survey of American history and culture since the Second World War. Some of the issues and people looked at are: the use of atomic weapons; the Marshall Plan; the Korean War; African-Americans' struggle for civil rights; Vietnam; post-War immigration; multiculturalism; the Cold War; the changing role of women in American society; and the politics and Presidents of the era.

HST 209 American History: The Civil War 4 credits
The Civil War course is based in part on the award-winning documentary film series of the same name. Its subject matter is the history of the U.S. Civil War and it is designed to help students grasp the political, social, and economic realities of the conflict as it progressed in both the North and South, the problems of the Northern and Southern governments during the war, the major military campaigns of the war, and the impact of the war upon the civilian population. Offered online as an online class only.

HST 266 US Women's History 4 credits
This course explores the distinctive experiences of women in the United States from its earliest period to current time. The course will follow a chronological framework with a focus on themes and topics such as Native American women, women and witchcraft, slavery, women's rights movement, women and work, women and war, the 'feminine mystique,' and personal politics. The coursework will also include implications of race, class, and ethnic differences among women over time.

HST 280 Co-op Ed: History 2-12 credits
This course provides the student with history-related work experience in community organizations. Students will have the opportunity to integrate theory and practice gained in the classroom with practical experience in the professional world. In this course a student may develop skills, explore career options, and network with professionals and employers while earning college credit.

Hospitality Management

For a list of days and times these classes are offered, visit lanec.edu and click on Winter Classes. For information, contact Culinary Arts and Hospitality Management, Bldg. 19/Rm. 202, 541.463.3503.

HRTM 100 Intro to Culinary and Hosp. 3 credits
This is an introductory course designed to provide a broad overview of the hospitality management and culinary arts industry and the various segments that comprise the industry. Emphasis in this course is given to understanding the scope and complexity of this industry, the career opportunities available, and the training and skills necessary to achieve a successful career.

HRTM 104 Introduction to Travel and Tourism 3 credits
This course is designed to provide students with a basic knowledge of tourism-related concepts. There will be an emphasis on community-based sustainable tourism development.

HRTM 105 Restaurant Operations 3 credits
This course offers a broad overview of restaurant operations. Topics include: bar and beverage management, front and back-of-the-house operations, and basic customer service skills.

HRTM 106 Introduction to Hospitality Management 3 credits
This course explores the hospitality industry touching upon topics such as hotel management, food and beverage management, event management, and the cruise industry. This course places an emphasis on Sustainable Standard Operating Procedures for the hospitality industry.

HRTM 109 Principles of Meetings and Convention Management. 3 credits
This course is intended to serve as an overview of the Meeting, Convention, and Special Event Management industry. Students will have a general understanding of the principles, practices, operations and management of the industry.

HRTM 110 Hospitality Sales and Marketing 3 credits
This course is the study of marketing concepts, methods, and techniques used in the hospitality industry with a focus on consumer behavior as it relates to sustainable products and services.

HRTM 120 Communications and Guest Relations 3 credits
This course covers management of the total hospitality guest experience, from proper service techniques to motivating and empowering employees. The class serves as a strong introduction to developing and maintaining quality customer service.

HRTM 130 Hospitality Information Systems 3 credits
This course will cover the technological side of the hospitality industry. Restaurant management systems and hotel property management systems will be discussed. Technology strategies for business intelligence and systems procurement decisions will be discussed.

HRTM 140 Security in the Hospitality Industry 3 credits
This course summarizes issues surrounding the security needs of travelers, hotel guests, restaurant patrons, and ancillary business involved with the hospitality industry. The student will compare and contrast a wide variety of security and safety equipment and procedures.

HRTM 209 Advanced Principles of Meeting, Convention, and Special Event Management 3 credits
Prerequisite: HRTM 109. The purpose of this course is to acquire an in-depth knowledge about the meeting, convention, and special event management field and to become familiar with management techniques and strategies required for successful planning, promotion, implementation, and evaluation of those events. Focus will be placed on sustainable standard operating procedures for such events.

HRTM 225 Hospitality Management Lab 2 credits
Prerequisite: HRTM Majors Only. This course offers student learning experiences involving the running of a full-service conference center operation, using the Center for Meeting and Learning as the laboratory. Students are required to complete 30 lab hours in the Center for Meeting and Learning.

HRTM 230 Hotel Operations 1 3 credits
This course is an introduction to the hotel industry. General principles of hotel management including the basic working knowledge of hotel departments will be covered. This course places an emphasis on Sustainable Standard Operating Procedures for the hospitality industry.

HRTM 231 Hotel Operations 2 3 credits
Prerequisite: HRTM 230. This course will continue to build on the fundamentals covered in HRTM 230 with a more in depth look at the management structure and functions of the executive committee. This course will focus on case studies as well as roundtable discussions with hotel executives.

HRTM 260 Supervision in the Hospitality Industry 3 credits
New, aspiring supervisors will find practical advice for dealing effectively with people in a hospitality work environment. Topics include effective communication, orientation and training, managing productivity, coaching, discipline, and professional development.

HRTM 265 Hospitality Financials 1 3 credits
This course presents an overview of cost-control procedures including purchasing, storage, issuing, security, production, and financial topics for food and beverage, labor, and other expense areas in the hospitality industry.

HRTM 275 Hospitality Financials 2 3 credits
Prerequisite: HRTM 265. This course provides the student with the tools to understand the financial structure of a hospitality organization. The implementation of financial controls, including labor and menu pricing, will be discussed. The curriculum will include the completion of a business plan.

HRTM 279 Buffet and Banquet Planning 2 credits
Prerequisite: HRTM 225. Students in this course will plan, organize, and execute the Classical Cuisine dinners at the Center for Meeting and Learning. The students perform all front-of-the-house activities including: promotion, dining room management and service, entertainment, décor, reservations, and post event critique.

HRTM 280 Co-op Ed: Hospitality Management 3-12 credits
This course provides the student with hospitality management-related work experience in community businesses and organizations. The student will have the opportunity to integrate theory and practice gained in the classroom with practical experience in the professional world.

HRTM 281 Restaurant Ownership 3 credits
This course will discuss and develop systems and procedures for opening a restaurant. All essential elements for developing a restaurant concept including finding a location, negotiating a lease, financing, menu development, financial controls, training, and staffing will be covered.

HRTM 286 Fundamentals of Wine, Spirits, and Beer 3 credits
This course provides an introduction to bar and beverage management; Topics include: identification, production, purchasing, and service of spirits, wine and beer. The course emphasizes internal

beverage controls, as well as the legal and social responsibilities of managing bar and beverage operations.

HRTM 290 Hospitality Leadership 4 credits
Prerequisite: HRTM 120 and HRTM 260. This course is the hospitality management capstone for second-year students. The course will explore the leadership qualities of successful operators in the hospitality industry. A community service requirement of 20 hours is included.

Human Relations

For information, contact the Counseling Department, Bldg. 1/103, 541.463.5299.

CG 101 Native Circles: It's Your Life.....3 credits
Is an introduction to resources and the local Native community. With a Native perspective students learn to achieve goals, assess skills and to balance own identity with benefitting from educational or other institutions. The impact of class differences and race on personal success is examined.

CG 144 Introduction to Assertive Behavior 1-3 credits
Assertiveness skills are taught in a two-stage process, first, defining assertive behavior, and second, learning how to behave assertively. Training will focus on areas of work and school settings, social/family situations, and consumer situations. Includes deciding when to be assertive.

CG 145 Coping Skills for Stress and Depression.....1-3 credits
This course presents the theory and practice of managing stress and depression. Topics include recognizing and modifying causes of and response to stress. The symptoms, causes, forms of and treatment for depression are reviewed. The topic of stress will be covered in more detail than depression.

CG 151 Student Veterans: Understanding Military to College Systems 3 credits
Students will learn how prior military experience can be used to achieve a more successful college experience. Student veterans who complete the course will also have the tools needed to manage their time; analyze, think, and write critically; maximize learning success, and communicate clearly.

CG 152 Student Veterans: Navigating Life Transitions 3 credits
This course explores the complex nature of transition from civilian life, to military service, to life as a veteran. Throughout life, everyone faces transitions (marriage, divorce, loss of health). In CG 152 students will explore different kinds of transitions, and how they are impacted by them.

CG 153 Student Veterans Resources.....3 credits
Developing a clear understanding of available resources within a college environment can be difficult. Those with prior military service are further challenged to grasp the numerous community resources intended for veterans. This course explores resources and services available on and off campus.

CG 203 Human Relations at Work 1-3 credits
This course presents the interpersonal 'people skills' that are important in the modern workplace. Topics are varied. Focus includes awareness of individual work styles and how to work effectively with people with different styles in a diverse workplace.

CG 204 Eliminating Self-Defeating Behavior 1-3 credits
A class for people looking to eliminate a recurring behavior, feeling, or thought which is negatively affecting their quality of life. Self-defeating behaviors can be active, such as smoking or negative self-talk, or passive, such as avoiding decisions or conflict.

CG 211 Dreikursian Principles of Child Guidance 1.....1-3 credits
In this lively, interactive class students learn principles and skills for strengthening relationships between parents and children. Topics include improving communication, setting reasonable and consistent limits, stimulating independence/responsibility, and improving structure and routine.

CG 212 Dreikursian Principles of Child Guidance 2.....1-3 credits
Prerequisite: CG 211. Students engage in specialized study after completing Principles of Child Guidance. Learn in-depth ways to facilitate positive relationships with adults and children. Students engage in weekly reading, discussions, and experiences.

CG 213 Improving Parent Child Relations.....3 credits
View real life in-home parent-child interactions with a focus on building credibility as a parent, encouragement, effective communication and stimulating children's healthy development. Typical parent/child problems are illustrated in a variety of family types and children.

CPSY 195 Introduction to Addictive Behavior.....3 credits
This class is intended to infuse substance abuse prevention technology into the general populace of employed professionals such as teachers, lawyers, nurses and other occupations, to enable non-counseling lay people to become proficient in the basics of self-care when dealing with addicts. Because CPSY 195 has some similar course content to HS 102 Psychopharmacology, only one of these courses may be counted toward degree and certificate requirements at Lane. In addition, CPSY 195 may not be substituted for any course in Human Services certificate or degree programs. May be offered as a live interactive courses.

CPSY 200 Understanding Addictive Behavior 3 credits
Overview of addiction and the impact on individuals and society, introduces models and theories of addiction. The social and cultural environments of substance abuse and addictions will be explored. Students will be introduced to models of prevention and treatment. May be offered as a live interactive courses.

Human Services

For information, contact the Social Science Division, Center Bldg./Rm. 403, 541.463.5427.

CG 280HS Co-op Ed: Human Services.....3-12 credits
In this internship course students gain practical human service-related work experience in community organizations. Students will integrate theory, practice skills learned in the classroom, explore career options and network with professionals and employers while earning credit toward their degree.

HS 102 Psychopharmacology.....4 credits
Students will be introduced to the behavioral, psychological, physical and social effects of psychoactive substances on the individual user as well as the family and society. Students will learn basic pharmacology and about commonly abused drugs. Models of treatment for substance use and disorders will be explored including issues related to diverse cultures, lifestyles, gender and the needs of special populations. This class is accepted by ACCBO to meet certification requirements for alcohol & drug counselors.

HS 107 Aging: A Social and Developmental Perspective 3 credits
This course introduces students to the field of gerontology. As our population ages, we continue to have a need to have service providers who are informed, trained and educated around the issues facing seniors. Students will learn skills that will assist them in working with elders and their families. Students will be introduced to the various service settings as well as the needs of special populations. Spirituality and alternative forms of care will also be explored.

HS 150 Personal Effectiveness for Human Service Workers.....3 credits
This course is designed to help students create greater success in college, and in their professional lives, while simultaneously building a supportive learning environment for students in the General Human Services Program. The course utilizes individual and small group exercises to explore human service careers, and issues relevant to being an effective human service professional. Students will learn about setting boundaries, stress management, and burn-out prevention as well as other field-oriented skills. Students will be introduced to strategies for providing trauma informed services from a strength-based perspective.

HS 155 Interviewing Theory and Techniques 3 credits
Students will be introduced to the theoretical knowledge and interviewing skills required of human service workers in a variety of work settings. Students will learn the basic processes used for information gathering, problem solving, and information or advice giving. They will learn and practice skills associated with conducting an effective interview. Students will be sensitized to the issues common to interviewing people of differing cultural backgrounds. This class is accepted by ACCBO to meet certification requirements for alcohol and drug counselors.

HS 201 Introduction to Human Services..... 3 credits
Students will be introduced to a wide array of social and personal problems that are addressed by the field of human services. Students will explore the way economics and history shape current social welfare programs and policies. The philosophical foundation of the human service movement as well as career opportunities in the field will be examined. Trends and intervention strategies for a number of service systems will be introduced. The impact of culture and diversity on human services will be explored.

HS 205 Youth Addiction..... 3 credits
Knowledge, concepts, and skills of substance abusing and addicted adolescents and their families will be acquired. The student will develop a working knowledge of adolescent development and behavior as related to chemical dependency. Students will learn about various juvenile justice and substance abuse treatment approaches. Cultural, ethnic, and racial issues will be discussed.

HS 206 Counseling the Criminal Addict..... 3 credits
An overview of the complex relationship between drug abuse, dependency and criminality will be discussed. The criminal mind and how psychopharmacological, familial, socio-economic, gender, and cultural factors affect criminal development will be examined. The general functioning of the criminal justice and corrections systems will be studied.

HS 209 Crisis Intervention and Prevention..... 3 credits
This course will introduce human service and correctional personnel to crisis intervention and prevention that emphasizes crisis counseling and non-physical methods for preventing or controlling disruptive behavior before it escalates. Students will be taught effective non-violent intervention for a wide range of crisis situations. Content of this course will provide students with hands-on practical approaches to crisis management.

HS 211 Family Interventions: Children..... 4 credits
This is the first class in a three-course sequence on treatment interventions. This class focuses on issues involving mental health, chemical dependency and a variety of other problem behaviors of infancy and childhood. Topics will be examined from a developmental and family focused perspective. Methods of engaging children, and their families in the best practices of treatment will be explored. This course is designed to provide students with "hands on" experience. Throughout the course, students will be analyzing actual and simulated cases. Course content will be presented through reading actual course studies, viewing simulations, producing student presentations and active role-playing.

HS 212 Family Interventions: Adolescents..... 4 credits
This is the second class in a three-course sequence on treatment interventions. This class focuses on issues involving mental health, chemical dependency and a variety of other problem behaviors of adolescence. Topics will be examined from a developmental and family focused perspective. Methods of engaging adolescents, and their families in best practices of treatment will be explored. This course is designed to provide students with "hands on" experience. Throughout the course, students will be analyzing actual and simulated cases. Course content will be presented through reading actual case studies, viewing simulations, producing student presentations, and active role-playing.

HS 213 Family Interventions: Adults..... 4 credits
This is the third course in a three-course sequence on treatment interventions. This class focuses on issues involving mental health, chemical dependency and a variety of other problem behaviors of adults. Topics will be examined from a developmental and family focused perspective. Methods of engaging adults, and their families in the best practices of treatment will be explored. This course is designed to provide students with "hands on" experience. Throughout the course, students will be analyzing actual and simulated cases. Course content will be presented through reading actual case studies, viewing simulations, producing student presentations and active role-playing.

HS 220 Prevention 1: Preventing Substance Abuse & Other Social Problems..... 3 credits
Prerequisite: College level reading and writing skills. Students will be introduced to prevention philosophy and program interventions aimed at addressing social problems and reinforcing healthy behavior and lifestyles. Risk factors, protective processes and resiliency factors will be explored. Students will have an opportunity to

examine effective prevention programs that address the needs of different cultures and diverse populations.

HS 224 Group Counseling Skills..... 3 credits
Introduction to describing, selecting, and appropriately using strategies from accepted and culturally appropriate models for group counseling with clients with a variety of disorders including substance abuse. This class is accepted by ACCBO to meet certification requirements for alcohol and drug counselors.

HS 226 Ethics and Law..... 3 credits
Introduction to the established professional codes of ethics that define the professional context within which the addiction counselor and human services provider works. Students will become knowledgeable about federal and state laws and regulations that apply in the field of substance abuse treatment and other human services. This class is accepted by ACCBO to meet certification requirements for alcohol and drug counselors.

HS 228 HIV/AIDS and other Infectious Diseases: Risk Assessment and Intervention..... 2 credits
Introduces the epidemiology of HIV/AIDS, hepatitis, tuberculosis and sexually transmitted diseases that frequently infect people who use drugs or who are chemically dependent. Students will examine treatment options and prevention strategies. The legal and policy issues that impact infected individuals as well as the larger community will be explored. This class is accepted by ACCBO to meet certification requirements for alcohol and drug counselors.

HS 229 Grief and Loss Across Life Span..... 3 credits
This course will introduce students to the issues and impact of learning to live with, and manage, losses. Students will explore the emotional, cultural, developmental, spiritual and behavioral factors that shape an individual's reaction to loss, including the reactions of helpers who are working with people experiencing personal loss and grief. Material will address losses of individuals, and their significant others, when confronted by chronic disability, illness, or other life-altering events associated with aging as well as death. Students will investigate specific therapeutic methods to respond compassionately and help individuals develop emotional resilience to loss. This class will combine lecture, small and large group discussions, journaling and art projects that focus on personal experience as one way to grasp the reality of griefwork.

HS 231 Advanced Interviewing and Counseling..... 3 credits
Prerequisite: HS 155. This class will provide an introduction to the theory and principles of motivational interviewing. Motivational interviewing is a client-centered approach to helping clients make behavioral changes and encouraging the client to explore and resolve their ambivalence about changing their behaviors. Students will learn the theoretical basis of this evidence based practice. Students will learn about stages of change and strategies for intervening effectively at each stage of the change process.

HS 232 Cognitive-Behavioral Strategies..... 3 credits
Prerequisite: HS 155. This course will introduce students to the theory and methods of cognitive-behavioral approaches to counseling. These approaches rest upon the premise that psychological distress and maladaptive behavior is the result of faulty thinking. Cognitive-behavioral approaches are based on a psycho-educational model and focus on changing cognitions in order to change feelings and behavior.

HS 235 The Aging Mind: Understanding and Adapting to Change..... 3 credits
All older persons experience normal changes in cognitive functioning as they age. Some older persons, as well as younger persons, experience pathological changes in cognitive functioning often associated with growing older. This course will address the common myths and fears related to cognitive aging, will provide current information about the capability of the brain to continue to learn and remember, will identify coping skills for successfully adapting to both normal and pathological changes in cognition, and will build skills for developing successful helping relationships with older persons. Instructional practices will include guest speakers, media presentations, role plays, case studies, reading assignments, and lectures.

HS 265 Casework Interviewing..... 3 credits
Prerequisite: HS 155. Students will learn the theoretical knowledge and skills needed to work effectively as case managers with clients in human service organizations. Students will be introduced to

solution-focused, and client directed interviewing skills that emphasize client strengths and goals.

HS 266 Case Management 3 credits
Prerequisite: HS 155 or HS265. Students will be introduced to the theory and practice of case management. Methods of delivering accessible, integrated, coordinated, and accountable case management services will be presented. Students will learn how to maintain professional records, including documenting assessments, treatment plans, chart notes and other relevant agency records. Cross-cultural issues to designing and delivering case management services will be explored.

HS 267 Cultural Competence in Human Services 3 credits
Diverse cultures and philosophies will be studied. How the human service practitioner can become culturally competent, will be the focus. Major ethnic and cultural groups will be studied as well as major cultural assumptions and patterns and their impact on identity and mental health.

Humanities

For information, contact the Social Science Division, Center Bldg./Rm. 403, 541.463.5427.

HUM 100 Humanities Through the Arts 4 credits
The Humanities through the Arts offers an exploratory approach to the humanities, focusing on the special role of the arts. Examining the relation of the humanities to values, objects and events important to people, is central to this course. A major goal of the course is to provide a means of studying values as revealed in the arts, all the while keeping in mind the important question "What Is Art?". This course is intended to provide the necessary tools for students to think critically when exploring the arts and the other humanities. Online mediums are used to enrich and enhance the topics covered. Offered online only.

Internet—See Business and Computers: Introduction/Information Systems/Computer Science

Internships/Work Experiences—See Cooperative Education

Journalism

Also see Photography

For information, contact the Art and Applied Design Department, Bldg. 11/Rm. 101, 541.463.5409.

J 134 Photojournalism 3 credits
This course is designed to work within the field of content. Content is not only the first step in good photojournalism, but also the first step in good art-making. The course will explore how you see an image, choose to share that image, and the message your images carry. Other topics include the history of photojournalism and the cross-over from documentary photography to the world of art.

J 216 Newswriting 1 3 credits
The study and practice of newsgathering and writing objective news stories. Discussions center on concept of news and news values, ethics, interviewing and traditional journalism methods, and standards as practiced by established American newspapers.

J 234 Photojournalism 2 4 credits
Prerequisite: J 134. A continuation of Photojournalism with the continued discussion of content and ethics of the field. Students learn how to create editorials, identify the differences between news and human interest, develop funding for non-mainstream stories, and self-promote in the competitive field of photojournalism. Students prepare their work through editorial processing and presentation.

J 280 Co-op Ed: Journalism 3-12 credits
Prerequisite: J216 for reporters and ART 221 or ART 222 or ART 223 for graphic artists, exceptions only with instructor consent. This course provides work experience in reporting, design and photography. Students will have the opportunity to integrate classroom theory with practical experience. Students may develop skills, explore career options and network with professionals and employers while earning credit toward a degree.

Landscaping—See Construction

Language Studies

For information, contact the Language, Literature and Communication Division, Center Bldg./Rm. 457, 541.463.5419.

AIL 101 American Indian Languages 4 credits
This course is the first course of a three-term sequence of study of the American Indian language, Chinuk Wawa, at the first-year college level. Students will achieve beginning listening, oral, cultural, and literacy competency. Determination of competency and instruction will conform to tribal, state, and college criteria. Language instruction will include activities, dialogue, and text analysis. Objectives: Students will (1) learn the sound system of Chinuk Wawa to be able to (2) converse in a variety of common everyday settings using vocabulary and structures presented in class. Emphasis is placed on daily speaking, writing, reading, and listening of Chinuk Wawa and learning about the cultures of the people who spoke and still speak the language. May be offered as a live interactive courses.

AIL 102 American Indian Languages 4 credits
Prerequisite: AIL101 or consent of instructor. This course is the second course of a three-term sequence of study of the American Indian language, Chinuk Wawa, at the first-year college level. Students will achieve beginning listening, oral, cultural, and literacy competency. Determination of competency and instruction will conform to tribal, state, and college criteria. Language instruction will include activities, dialogue, and text analysis. Objectives: Students will (1) continue to become proficient in the sound system of Chinuk Wawa to be able to (2) converse in a variety of common everyday setting using basic sentences and structures presented in class. Emphasis is placed on daily speaking, writing, reading, and listening of Chinuk Wawa and learning about the cultures of the people who spoke and still speak the language. May be offered as a live interactive courses.

AIL 103 American Indian Languages 4 credits
Prerequisite: AIL 102 or consent of instructor. This course is the third course of a three-term sequence of study of the American Indian language, Chinuk Wawa, at the first-year college level. Students will achieve beginning listening, oral, cultural, and literacy competency. Determination of competency and instruction will conform to tribal, state, and college criteria. Language instruction will include activities, dialogue, and text analysis. Objectives: Students will (1) become proficient in the sound system of Chinuk Wawa to be able to (2) converse in a variety of common everyday settings using sentences, questions, and structures presented in class. Emphasis is placed on daily speaking, more complex writing, reading and listening of Chinuk Wawa and learning about the cultures of the people who spoke and still speak the language. May be offered as a live interactive courses.

AIL 201 Chinuk Wawa 4 credits
Prerequisite: AIL 103 or consent of the instructor. This course is the first course of a three-term sequence to ensure students achieve competency in Chinuk Wawa at the second year college level. Competency is defined by benchmarks set by the Tribes, by the state of Oregon and in accordance with Oregon's SB 690 of 2001, and by Lane's language standards. Objectives: Students will (1) learn the culture and history of the Grand Ronde people; (2) converse in a variety of common everyday settings; (3) learn to use more advanced verb structures; (4) learn to work (with a linguistic emphasis) with texts. Emphasis is placed on daily speaking, writing, reading, and listening of Chinuk Wawa and learning about the cultures of the people who spoke and still speak the language. May be offered as a live interactive courses.

AIL 202 Chinuk Wawa 4 credits
Prerequisite: AIL 201 or consent of the instructor. This course is the second course of a three-term sequence to ensure students achieve competency in Chinuk Wawa at the second year college level. Competency is defined by benchmarks set by the Tribes, by the state of Oregon and in accordance with Oregon's SB 690 of 2001, and by Lane's language standards. Objectives: Students will (1) learn and discuss the culture and history of the Grand Ronde people; (2) converse in a variety of settings; (3) learn to use more advanced verb structures; (4) learn to work (with a linguistic emphasis) with texts. Emphasis is placed on daily speaking, writing, reading, and listening of Chinuk Wawa and understanding the cultures of the people who spoke and still speak the language. May be offered as a live interactive courses.

AIL 203 Chinuk Wawa 4 credits

Prerequisite: AIL 202 or consent of the instructor. This course is the third course of a three-term sequence to ensure students achieve competency in Chinuk Wawa at the second year college level. Competency is defined by benchmarks set by the Tribes, by the state of Oregon and in accordance with Oregon's SB 690 of 2001, and by Lane's language standards. Objectives: Students will (1) learn and discuss the culture and history of the Grand Ronde people; (2) converse in a variety settings; (3) learn to use more advanced grammatical structures; (4) work (with linguistic emphasis) on texts. Emphasis is placed on daily speaking, writing, reading, and listening of Chinuk Wawa and understanding the cultures of the people who spoke and still speak the language. May be offered as a live interactive courses.

AIL 280 Co-op Ed: American Indian Language 3-12 credits

Prerequisite: Instructor approval. This internship is for students who already have some background in American Indian Languages. Students work at a site related to American Indian languages and, under the guidance of a professional, will gain further exposure/understanding of culture/language issues, especially challenges/opportunities associated with learning American Indian languages.

FL 280IW Co-op Ed: International Work Experience 1-12 credits

Prerequisite: Instructor approval. This is a structured program for international work experience through LCC and IE3 Global Internships. Living and working in another country, students gain career and intercultural skills essential in a global society. Application and other details are on the web at <http://ie3global.ous.edu/>.

FR 099 French Conversation (Learning Laboratory: French) 1 credits

This course offers conversational practice in French vocabulary and structure that the students have already acquired or are currently learning. Students will become more aware of cultural differences as well as of current events in the francophone world. It is divided into one section for second-year students and one section for first-year students. The grade is based on an P or NP scale. No textbook is required. Preference to students currently enrolled in French classes.

FR 101 First-Year French 5 credits

The first of a three-term sequence designed for students with no prior language study. Introduction to French in the context of French-speaking cultures, with an emphasis on oral communication (listening and speaking) and some reading and writing practice. Students learn basic grammar structures, vocabulary, and cultural information. Computer lab work is required.

FR 102 First-Year French 5 credits

Prerequisite: FR 101 with a passing grade of C-or above, or equivalent. The second of a three-term sequence designed for students with no prior language study. Continuation of beginning French in the context of French-speaking cultures, with emphasis on oral communication (listening and speaking) and some reading and writing. Students continue to learn basic grammar structures, vocabulary, and cultural information. Computer lab work is required.

FR 103 First-Year French 5 credits

Prerequisite: FR 102 with a passing grade of C-or above, or equivalent. The third of a three-term sequence designed for students with no prior language study. Continuation of beginning French in the context of French-speaking cultures, with an emphasis on oral communication (listening and speaking) and some reading and writing. Students learn basic grammar structures, vocabulary, and cultural information. Computer lab work required.

FR 150 First-Year French 7 credits

First term in a two-term "semi-intensive," accelerated sequence. Introduction to French in the context of French-speaking cultures, with an emphasis on oral communication (listening and speaking) and some reading and writing. Students learn basic grammar structures, vocabulary, and cultural information. No experience in French required, but some prior language study highly recommended. Computer lab work required.

FR 151 First-Year French 7 credits

Prerequisite: FR 101 or FR 150 with a passing grade of C-or above, or equivalent. The second in a two-term "semi-intensive," accelerated sequence. Continuation of beginning French in the context of French-speaking cultures, with an emphasis on oral communication (listening and speaking) and some reading and writing. Students complete learning basic grammar structures, vocabulary, and cul-

tural information. No experience in French required, but some prior language study highly recommended. Computer lab work required.

FR 201 Second-Year French 5 credits

Prerequisite: FR 103 or FR 151 with a passing grade of C-or above, or equivalent. First in a three-term sequence of Intermediate French. French 201, 202, 203 are intermediate five-skills courses with an emphasis on oral communication (listening comprehension and speaking). Students continue to develop their writing and reading skills, review and learn new vocabulary and grammatical structures, and deepen their understanding of French-speaking cultures. Computer lab work is required.

FR 202 Second-Year French 5 credits

Prerequisite: FR 201 with a passing grade of C-or above, or equivalent. Second in a three-term sequence of Intermediate French. French 201, 202, 203 are intermediate five-skills courses with an emphasis on oral communication (listening comprehension and speaking). Students will continue to develop their writing and reading skills, review and learn new vocabulary and grammatical structures, and deepen their understanding of French-speaking cultures. Computer lab work is required.

FR 203 Second-Year French 5 credits

Prerequisite: FR 202 with a passing grade of C-or above, or equivalent. Third in a three-term sequence of Intermediate French. French 201, 202, 203 are intermediate five-skills courses with an emphasis on oral communication (listening comprehension and speaking). Students will continue to develop their writing and reading skills, review and learn new vocabulary and grammatical structures, and deepen their understanding of French-speaking cultures. Computer lab work is required.

FR 211 Conversational French 2 credits

Prerequisite: FR 103, FR 151, or equivalent. May be taken concurrently with FR 103, FR 151 or any 200 level French Course. Conversational French classes are designed to allow students to improve their competence in oral communication skills. This is accomplished through introduction and expansion of vocabulary and expressions in various functional and cultural contexts. Students have the opportunity to share experiences and ideas, and to learn communication skills useful in daily activities in French-speaking cultures. They also become aware of different levels of conversation, from informal to formal. This course is offered in the spring as an immersion weekend and may be offered in the summer under a different format.

FR 212 Conversational French 2 credits

Prerequisite: FR 103, FR 151, or equivalent. May be taken concurrently with FR 103, FR 151 or any 200 level French Course. Conversational French sequence are designed to allow students to improve their competence in oral communication skills. This is accomplished through introduction and expansion of vocabulary and expressions in various functional and cultural contexts. Students have the opportunity to share experiences and ideas, and to learn communication skills useful in daily activities in French-speaking cultures. Students also become aware of different levels of conversation, from informal to formal.

FR 213 Conversational French Through Film 2 credits

Prerequisite: FR 102 or equivalent. A film-based conversation class wherein students improve their oral communication skills. We use French and Francophone films to introduce and expand on vocabulary in authentic cultural contexts, with a focus on functional language. Students also share opinions and exchange ideas as they explore different Francophone cultures and social contexts.

FR 280 Co-op Ed: French 3-12 credits

Students who are fluent in French will practice and polish their language skills in a work setting. Students primarily work as tutors in language labs with a limited number of off campus opportunities in local schools. Meet with the French co-op coordinator the term before (if possible) to set up the internship.

JPN 280 Co-op Ed: Japanese 3-12 credits

Students fluent in Japanese will practice and polish their language skills in a work setting. Meet with the Japanese co-op coordinator the term before (if possible) to set up the internship.

SPAN 101 Spanish, First-Year 5 credits

Spanish 101 is the first course in a three course sequence designed to provide one full year of college level transfer courses at the beginning language level. Each course is conducted in Spanish and they

must be taken in sequence. The sequence emphasizes the development of the skills of listening, speaking, reading, writing, and culture. In Spanish 101, students will learn to converse in a variety of common everyday settings using the vocabulary and structures presented in class. Emphasis is also placed on daily writing, reading, listening, and learning about Hispanic cultures.

SPAN 102 Spanish, First-Year 5 credits
Prerequisite: SPAN 101 with a passing grade of C-or above, or placement by instructor. Spanish 102 is the second course in a three course sequence designed to provide one full year of college level transfer courses at the beginning language level. Each course is conducted in Spanish and they must be taken in sequence. This sequence emphasizes the development of the skills of listening, speaking, reading, writing, and culture. In Spanish 102, students will learn to converse in a variety of common everyday settings using the vocabulary and structures presented in class as well as those covered in Spanish 101. Emphasis is also placed on daily writing, reading, listening, and learning about Hispanic cultures.

SPAN 103 Spanish, First-Year 5 credits
Prerequisite: SPAN 102 with a passing grade of C-or above, or placement by instructor. Spanish 103 is the third course in a three course sequence designed to provide one full year of college level transfer courses at the beginning language level. Each course is conducted in Spanish and they must be taken in sequence. This sequence emphasizes the development of the skills of listening, speaking, reading, writing, and culture. In Spanish 103, students will learn to converse in a variety of common everyday settings using the vocabulary and structures presented in class as well as those covered in Spanish 101 and 102. Emphasis is also placed on daily writing, reading, listening, and learning about Hispanic cultures. Tests are administered outside of class hours.

SPAN 201 Spanish, Second-Year 5 credits
Prerequisite: Credit level SPAN 103 minimum grade of C-, or an equivalent. SPAN 201 is the first course of a three-term sequence (SPAN 201-202-203) designed to provide one full year of college transfer courses at the intermediate (second year) level. Each course is conducted in Spanish and they must be taken in sequence. SPAN 201-202-203 builds on Spanish language skills acquired through the beginning, first year sequence (SPAN 101-102-103) and expands upon them to develop student skills at an intermediate language level. These courses are five skill courses with emphasis on daily reading, writing, listening and speaking of Spanish, and on learning about Spanish-speaking cultures. Tests are administered outside of class hours. The text for this course includes an online workbook component.

SPAN 202 Spanish, Second-Year 5 credits
Prerequisite: Credit level SPAN 201 minimum grade of C-, or an equivalent. SPAN 202 is the second course of a three-term sequence (SPAN 201-202-203) designed to provide one full year of college transfer courses at the intermediate (second year) level. Each course is conducted in Spanish and they must be taken in sequence. SPAN 202 continues the development of and expands upon the five language skills practiced in SPAN 201 (see course description) through emphasis on daily reading, writing, listening, and speaking of Spanish, and on learning about Spanish-speaking cultures. Tests are administered outside of class hours. The text for this course includes an online workbook component.

SPAN 203 Spanish, Second-Year 5 credits
Prerequisite: Credit level SPAN 202 minimum grade of C-, or an equivalent. SPAN 203 is the third course of a three-term sequence (SPAN 201-202-203) designed to provide one full year of college transfer courses at the intermediate (second year) level. Each course is conducted in Spanish and they must be taken in sequence. SPAN 203 continues the development of and expands upon the five language skills practiced through emphasis on daily reading, writing, listening, and speaking of Spanish, and on learning about Spanish-speaking cultures. Tests are administered outside of class hours. The text for this course includes an online workbook component.

SPAN 211B Conversational Spanish Intermediate 3 credits
Prerequisite: Credit Level SPAN 103 or equivalent with min. grade of C-or first year language competence. May be taken concurrently with any 200 level Spanish course. Spanish 211B is an Intermediate Spanish course in oral communication. The student has an opportunity for intensive practice in both speaking and listening skills to

help improve oral/aural skills in spoken Spanish. Meaningful communication is accomplished through the expansion of vocabulary and expressions, and through interactive activities that permit the exchange of experiences and ideas in various areas of interest. The main themes developed in the course content are expanded through the incorporation of authentic readings and materials chosen from the internet and from literary and nonliterary texts. This course is conducted in Spanish.

SPAN 212B Conversational Spanish Intermediate 3 credits
Prerequisite: Credit Level SPAN 103 or equivalent with min. grade of C-or first year language competence. May be taken concurrently with any 200 level Spanish course. Spanish 212B is an Intermediate Spanish course in oral communication. The student has an opportunity for intensive practice in both speaking and listening skills to help improve oral/aural skills in spoken Spanish. Meaningful communication is accomplished through the expansion of vocabulary and expressions, and through interactive activities that permit the exchange of experiences and ideas in various areas of interest. The main themes developed in the course content are expanded through the incorporation of authentic readings and materials chosen from the internet and from literary and nonliterary texts. This course is conducted in Spanish

SPAN 280 Co-op Ed: Spanish 3-12 credits
Students fluent in Spanish will practice and polish their language skills in a work setting. Students may work in a limited number of K-12 school settings or in community organizations, usually as translators and/or interpreters. Meet with the Spanish co-op coordinator the term before (if possible) to set up the internship.

Legal Assistant

For information, contact the Business and Computer Information Technology Division, Bldg. 19/Rm. 137, 541.463.5221.

BA 280L Co-op Ed: Legal Assistant 3-12 credits
Completion of BT 195 is highly recommended. In this internship course students will gain administrative support work experience in the legal field. Students will integrate theory and practice, develop skills and expand career knowledge while earning credit toward a degree. Meet with Business Co-op Coordinator the term before starting your internship if possible.

LA 100 Legal Procedures 4 credits
This course is an introduction to the roles and duties of legal support personnel and administrative procedures specific to law offices. Students will explore legal office careers, learn legal terminology, and learn about the attorney/client relationship. Introductory preparation of legal pleadings, correspondence, and documents including contracts, wills and trusts. Extensive coverage of written and oral communications needed for law practice, law office procedures, ethics, legal terminology, the court system, the law library, and notary public duties. Instructor enforced prerequisites: Working knowledge of MS Word, accurate keyboarding speed of 45 wpm, placement test scores into WR 121 and MTH 065 or instructor permission. Note: LA 100 was formerly numbered LGL 201. A student who has taken this class under the previous number may not take it again under this new number and receive duplicate credit. May be offered online.

LA 101 Introduction to Paralegal Studies 3 credits
Prerequisite: LA 100, or instructor consent. An introduction to the role and duties of the paralegal including such topics as regulations of the legal profession, law office management, human relations skills, legal terminology, techniques of interviewing, and methods of discovery. Preparation for assisting in the legal environment by drafting legal pleadings and case briefing. Reviewing local, trial, and state court laws. May be offered online.

LA 102 Legal Terminology 3 credits
In-depth course covering legal terminology used in a typical law office. Students will read and understand legal terminology, and they will correctly spell, define, pronounce, and apply legal terms. Practice in use of legal dictionary and thesaurus. May be offered online.

LA 105 Civil Litigation 3 credits
Prerequisite: LA 101 and LA 128, (formerly LGL 202) or instructor consent. This course will focus on the various stages of the civil litigation process. This will include the initial client interview, the process leading to the filing of a civil lawsuit, its resolution by

settlement or trial, and a brief review of the appellate process. The course emphasis will be on the actual preparation of the documents, with a major focus on the discovery phase of the civil litigation process. This course will demonstrate how each stage of civil litigation builds, relates, and is dependent upon the others. May be offered online. Note: LA 105 was formerly numbered LGL 203. A student who has taken this class under the previous number may not take it again under this new number and receive duplicate credit.

LA 128 Legal Procedures 2 4 credits
Prerequisite: LA 100 (formerly LGL 201), BT 108 (formerly BT 180), and LA 102, or instructor consent. Students will work on legal office projects designed to utilize a project-based approach to completing legal office activities that involve legal document preparation, layout, formatting, internet research, and transcription. Students will depict a law office setting for the projects where the student is to serve as a floating legal assistant for a number of diverse individuals practicing various types of law. May be offered online.

LA 132 Ethics for the Legal Professional 3 credits
Prerequisite: LA 101, or instructor consent. Covers the study of ethics as it relates to the legal profession. Study the concept of "ethics" and "being ethical." Explore the differences between morality and rules of ethics. Introduce the rules of professional responsibility as they pertain to paralegals (and lawyers). Engage in discussions and opinions of ethical issues in real-world situations. Introduce and enhance legal vocabulary as is used in ethics. Introduce and study the Oregon Rules of Ethics and the practical application. May be offered online.

Library/Information Research

For information, contact the Library, Center Bldg./2nd Floor, 541.463.5770.

LIB 127A Basic Research 1 credits
Students will develop critical thinking skills needed to locate, evaluate and cite information applicable to specific research needs. The course develops research skills and confidence that contribute to success in other college courses and life experiences. May be offered online. LIB 127a is a condensed version of LIB 127. Students cannot get credit for both LIB 127 and LIB 127a.

Literature

For information, contact the Language, Literature and Communication Division, Center Bldg./Rm. 457, 541.463.5419.

ENG 100 Children's Literature 4 credits
College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success. Children's Literature is a wide-ranging introductory course, including a history of both British and American literature for children and a continuing discussion of the ways our culture and history have defined and created what children may or may not be and what they may or may not read, enjoy or understand. The class reads a variety of material including fairy tales, picture books, and young adult novels. Students will develop criteria for the selection and evaluation of literature for children at different developmental stages. Students will explore current debates in and around children's literature, scholarship, classroom use and publishing. This course features multi-cultural materials and touches on a variety of media, including film, cartoons, television, and print. Though many students who take the course are, or will be, working with children, the course also addresses children's literature from a literary perspective, discussing the texts from theoretical as well as a pedagogical framework. A major aim of the class is to introduce students to recent and emerging authors to broaden familiarity with current material available to young people.

ENG 104 Introduction to Literature: Fiction 4 credits
College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success. This course will present to the student a wide range of fiction from various time periods and cultures. Course work will involve students in critical analysis, basic literary terminology, and concepts which will enhance appreciation of fiction. The course may include the short story and the novel or novella. May be offered online.

ENG 105 Introduction to Literature: Drama 4 credits
College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success.

This course will introduce the student to a wide variety of world plays which may include classical Greek drama, Shakespeare, and modern works of today. Students will engage in reading, writing, and discussion of the plays they read. May be offered online.

ENG 106 Introduction to Literature: Poetry 4 credits
College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success. This course will present to the student a wide range of poetry from various time periods and cultures. Course work will involve students in the consideration of poetic technique and expression. Theme, structure, and style will be emphasized, as well as the elements of poetry. At the discretion of the Instructor, students may also be required to participate in creative writing assignments to gain insight into the nature of poetry. May be offered online.

ENG 107 Survey of World Literature 4 credits
College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success. Survey of World Literature is a two-term sequence to acquaint students with representative works of important world writers, literary forms, and significant currents of thought. The class is intended primarily for students who aspire to a broad education and who want to expand their reading experience and interpretive skills. The material for fall term comes from the ancient and medieval eras.

ENG 109 Survey of World Literature 4 credits
College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success. Survey of World Literature is a two-term sequence to acquaint students with representative works of important world writers, literary forms, and significant currents of thought. The class is intended primarily for students who aspire to a broad education and who want to expand their reading experience and interpretive skills. The material for spring term comes from the nineteenth century until the present day.

ENG 121 Detective Fiction 4 credits
College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success. Detective fiction will provide students with a broad introduction to both early and recent British and American writers with some emphasis on novels and short stories translated into TV programs and film. The course will examine the origins of detective fiction and how the original models have been followed and altered in the roles of the amateur sleuth, the professional investigator (PI), the police, and local citizens as clients. The literature will include hard-boiled male and female detectives, as well as African American and Native American detectives, and will be read from the viewpoint of different literary theories, including historical and social viewpoints and addressing issues of gender, race/ethnicity, class, sexuality, and nationality.

ENG 151 Black American Literature 4 credits
College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success. This course will offer students an intense examination and exploration of black authors. Students will analyze and respond to a wide variety of issues, critical questions, and perspectives regarding how to interpret and define the journey of African Americans and where this path might eventually lead. Novels, short stories, poems, biographies, and critical essays will be studied.

ENG 194 Literature of Comedy 4 credits
College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. Literature of Comedy is a one-term course to acquaint students with representative works of literature defined by tradition as comedy, including essays, poems, plays, short fiction, film, and novels. The class is intended for students who aspire to pursuing a broad education and who want to expand their reading experience, interpretive skills, and their understanding of the literary genre of comedy as works which affirm community, explore love, and portray restoration in human life, even as they make us laugh.

ENG 195 Introduction to Film Studies 0-4 credits
College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. ENG 195 is the first course of a year-long sequence focusing on the history, art, and social contexts of film as an art form. A primary objective of the course is to enhance students' enjoyment

and appreciation of film by developing their cinematic literacy. Students are introduced to the basic elements of film language, including cinematography, mise-en-scène, editing, and sound. While American films are emphasized, the sequence also focuses at times on international cinema, looking at all films in the context of time, culture, and ideological effects. Weekly campus screenings are required, and clips of films are used in class for close analysis of aural and visual elements. A variety of assignments and activities develop and test students "ways of seeing." ENG 195 focuses on the formal elements of the shot: cinematography, mise en scène, blocking, and movement.

ENG 196 Introduction to Film Studies 0-4 credits
College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. ENG 196 is the second course of a year-long sequence focusing on the history, art, and social contexts of film as an art form. A primary objective of the course is to enhance students' enjoyment and appreciation of film by developing their cinematic literacy. Students are introduced to the basic elements of film language, including cinematography, mise-en-scène, editing, and sound. While American films are emphasized, the sequence also focuses at times on international cinema, looking at all films in the context of time, culture, and ideological effects. Weekly campus screenings are required, and clips of films are used in class for close analysis of aural and visual elements. A variety of assignments and activities develop and test student's "ways of seeing." ENG 196 reviews the elements of film style relating to the individual film shot, but it emphasizes the formal means by which shots are built into the larger structures of scene, segment, and finished film: editing, sound, screenwriting, and narrative structure (e.g., editing style-sequence shots, continuity editing, montage and editing techniques-on the types and uses of film: Foley, dialogue, theme music, etc.).

ENG 197 Introduction to Film Studies 0-4 credits
College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. ENG 197 is the third course of a year-long sequence focusing on the history, art, and social contexts of film as an art form. A primary objective of the course is to enhance students' enjoyment and appreciation of film by developing their cinematic literacy. Students are introduced to the basic elements of film language, including cinematography, mise-en-scène, editing, and sound. While American films are emphasized, the sequence also focuses at times on international cinema, looking at all films in the context of time, culture, and ideological effects. Weekly campus screenings are required, and clips of films are used in class for close analysis of aural and visual elements. A variety of assignments and activities develop and test students "ways of seeing." ENG 197 centers on films chosen around a theme, topic or director. Recent themes include "Film and the American Dream" or "American Independent Cinema." Providing an overview of film language, the course explores the style of the featured films and/or director and looks at their historical contexts and ideological effects relating to such contested areas of social experience as race, class, gender, sexuality, and nation.

ENG 201 Shakespeare.....4 credits
College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. One scholar suggests that Shakespeare's works "remain the outward limit of human achievement"; they fascinate us because we "cannot catch up to them." Nevertheless, we will have fun running after them. This survey explores the works of Shakespeare, covering 3-5 plays and at least one sonnet each term. Instructors might divide the plays by theme, genre, or chronology. ENG 201 may include *Romeo and Juliet*.

ENG 203 Shakespeare.....4 credits
College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. One scholar suggests that Shakespeare's works "remain the outward limit of human achievement"; they fascinate us because we "cannot catch up to them." Nevertheless, we will have fun running after them. This survey explores the works of Shakespeare, covering 3-5 plays and at least one sonnet each term. Instructors might divide the plays by theme, genre, or chronology. ENG 203 may include *Hamlet* and/or *King Lear*.

ENG 204 Survey of British Literature 4 credits
College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. Survey of British Literature is a two-term sequence to acquaint students with representative works of important British writers, literary forms, and significant currents of thought. The material for the first term comes from the Anglo-Saxon era, the Middle English period, and the Renaissance, through Milton. Each course may introduce students to different methodological perspectives/lenses through which to read and interpret literary texts, and may include developing an understanding of the social, political and cultural contexts in which texts are produced and interpreted. Primary emphasis is on reading and engaging with the literary materials.

ENG 205 Survey of British Literature 4 credits
College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. Survey of British Literature is a two-term sequence to acquaint students with representative works of important British writers, literary forms, and significant currents of thought. The second term includes British literature of the late 17th century through the modern period. Each course may introduce students to different methodological perspectives/lenses through which to read and interpret literary texts, and may include developing an understanding of the social, political and cultural contexts in which texts are produced and interpreted. Primary emphasis is on reading and engaging with the literary materials.

ENG 213 Survey of Asian Literature.....4 credits
College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. This course features a selection of classical and pre-modern literature and historical documents that will serve as a basis to examine important cultural values of India, China, and Japan, and to trace their development into contemporary life and literature.

ENG 215 Latino/a Literature 4 credits
College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. This is an introductory course to Latino/a literature that will examine some of the major issues that have influenced its development beginning with the contact between European and pre-Columbian cultures. Students will also read some of the major voices in Latin American literature in order to examine how their work anticipates many of the issues facing contemporary Latino/a writers in the United States.

ENG 222 Literature and Gender.....4 credits
College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. This course will examine representations and/or investigations of gender in literature. While some literature chosen for the course may thematically focus readers on the gender roles assigned to people at different points in time in relation to a given culture, other literature will explore the ways in which gender is a socially constructed identity. Critical thinking will play a role as students consider concepts such as social norm, gender construction, subject position, self-other paradigms, and ideology. Feminist models of literary criticism may be considered.

ENG 232 Native American Literature 4 credits
College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. This course provides an introduction to the oral traditional and formal written literature of Native American cultures through a wide variety of texts from different countries, tribes, regions, and individuals. Students will examine the worldview expressed in the literature, the major thematic currents of oral and written Native American literature, the characteristics of Native American forms and traditions, and the characteristics they share among themselves.

ENG 240 Nature Literature 4 credits
College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. People have always explained themselves and their world according to how they define and perceive their relationship with nature. The Nature Literature course will examine how literature reflects mythological, theological, philosophical, and scientific views toward nature. Readings will include fiction, poems,

non-fiction, and personal essays that project a variety of attitudes toward nature. Students will keep regular journals in response to their readings and experiences, and will also do their own pieces of "nature writing".

ENG 243 Native American Autobiography 4 credits
College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. This course will introduce students to a new way of seeing the world they live in as they read the lives of Native Americans written by themselves. Autobiographies studied will range from early historical works narrated and translated by anthropologists to modern works by Linda Hogan and N. Scott Momaday. These texts will be studied in their historical contexts, as well as their cultural contexts. Speakers and films will play an important role in this course. The goal of the class is to present a fuller picture of the voices and visions of Native Americans.

ENG 244 Asian American Literature 4 credits
College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. The course will familiarize students with the literature written by American writers of Asian ancestry. The course may also engage students in materials written by American writers of Pacific Islander ancestry. Students will consider such literature in its aesthetic, historical, cultural, political, and social contexts. The class will also examine recurring themes regarding the development of attitudes, values, and identities as expressed within the body of literature.

ENG 250 Introduction to Folklore and Mythology 4 credits
College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. The nature and formal principles of studying folklore and myth will be introduced and illustrated through a variety of texts, folk artifacts, and thematic ideas, including world-wide examples that extend beyond Western cultures. Students will examine folkloric elements in their own and each other's backgrounds, as well as textbook examples of folklore and folk life from regional, ethnic, age, gender, or work groups. Students will consider how myth informs their own and each other's backgrounds, as well as examine textbook examples of myth and mythic themes, motifs, and archetypes from regional, ethnic, age, gender, or work groups. The course will introduce students to formal approaches to a variety of folklore and myths, and explore the relationship between myth, culture, and society. Folklore and myth will also be considered from a cross-cultural perspective.

ENG 253 Survey of American Literature 4 credits
College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. Survey of American Literature is a two-term sequence to acquaint students with representative works of important American writers, literary forms, and significant currents of thought. Primary emphasis is on reading and engaging with the literary materials, with an introduction to practices of literary interpretations. Questions of genre, authorship, aesthetics, and literary movements may be examined in their relationships to social, political, and intellectual movements in the United States. The first term will draw on material from colonial settlement in the Americas through the Civil War period.

ENG 254 Survey of American Literature 4 credits
College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. Survey of American Literature is a two-term sequence to acquaint students with representative works of important American writers, literary forms, and significant currents of thought. Primary emphasis is on reading and engaging with the literary materials, with an introduction to practices of literary interpretations. Questions of genre, authorship, aesthetics, and literary movements may be examined in their relationships to social, political, and intellectual movements of the United States. The second term will include literature from the end of the 19th century to the present.

ENG 257 The American Working Class in Fiction and Non-Fiction 4 credits
College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. Using the concept of the "American Dream" to examine

work, class, and social mobility, students can appreciate the power of class to shape our individual lives and our culture. A prevailing belief in America is that we are a "classless" society. However, this literature course includes fiction, non-fiction, autobiography, poetry, and documentaries that explore ways that the inequalities of class, ethnicity, race, and gender interrelate to sustain the power and interests of economic elites.

ENG 259 African American Poetry, Plays and Film 4 credits
College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. This course creates several perspectives through which to explore the African American experience: Drama, Poetry, and Film Studies. This course is designed to allow students to utilize textual materials, dramatic presentations, films, and documentaries to chart, research, examine, and evaluate the interconnectedness of black plays, poetry, and film representations. Students will have at their disposal a variety of resources to aid them in understanding the themes, techniques, and critical theories underlying the foundations that black playwrights, poets, film historians, and filmmakers/actors have developed and refined over the years. This course will guide students to a clearer yet more comprehensive understanding of the collaborative aspect of these artistic expressions in the African American world and their continuing influence on the larger American experience in Arts and Letters.

ENG 260 Introduction to Women Writers 4 credits
College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. This course will introduce students to the richness and variety of literary works written by women. Issues that concern women writers, the impact of stories, and how class, race, and gender work to construct the stories we live by will be central to the course. Students will consider fiction written by women writers in a global context historically to the present day. The course will include an introduction to feminist literary theory and will introduce students to a variety of literary genres and styles, including the slave novel, sentimental, realistic, and postmodern fiction. May be offered online.

ENG 261 Science Fiction 4 credits
College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. This course explores science fiction, fantasy and speculative futures through literary and popular fiction, film and guest authors. Discussions of content, styles, techniques and conventions of the genre will be central to the course.

ENG 270 Bob Dylan: American Poet 4 credits
College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. This course will focus primarily on the poetry and poetics of Bob Dylan's work. Textual analysis will lead to understanding of syntax, imagery, narrative tactics, and other poetic elements. Students will gain familiarity with the range of Dylan's poetic genres. As with any literature course, we will examine how meaning is produced through words and sound. Dylan's musical and literary sources, and his influence in our culture, will also be explored.

ENG 271 Film Genre: Horror 0-4 credits
College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. This course will examine the history of the horror film from the silent era to the present, focusing mainly on U.S. texts. The class will explore various theories of the horror genre, the history and social context of horror cycles, and the representation of class, gender, sexuality, nationality, and ethnicity as they relate to horror. Weekly campus screenings are required, and clips of films are used in class for close analysis of aural and visual elements.

ENG 272 Film Genre: Film Comedy 0-4 credits
College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. This course will focus on film comedy, a loosely defined genre that spans the silent era to the present. Starting with silent films, the course will focus on film comedy across the decades, and may include the following subgenres: slapstick, screwball comedy, farce, romantic comedy, black comedy, parody/satire, and/or gross-out comedy. Students will be introduced to various theories of the genre as well as historical, political, and social issues related to

representative texts. Weekly screenings are required, and clips of films are used for close analysis of aural and visual elements.

ENG 273 Film Genre: Film Noir 0-4 credits
College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. This course will focus on film noir—a type of film featuring hard-boiled detectives, dangerous urban landscapes, and mysterious, perhaps treacherous, dames—that flourished in the U.S. between 1948-1958. The class will concentrate on the question of definition: is noir a genre, a style, a mood, or a movement? Students will read various theories about noir and examine classical and contemporary films, measuring them against competing definitions of the genre. The course will also focus on the historical and social context of noir as well as issues of gender, race/ethnicity, class, sexuality, and nationality as they relate to noir. Weekly campus screenings are required, and clips of films are used in class for close analysis of aural and visual elements.

FA 263 Film in the Fifties 0-4 credits
Prerequisite: College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. This course introduces students to the 1950s as a complex decade in American history through films from and about the era that epitomize the cultural tensions and darker historical currents that define it, demythologizing the fifties as a golden age of innocence and simplicity. Historical and critical readings supplement the screening of classic films and provide direction for class discussion, exams, and critical essays that help students develop critical skills and cineliteracy. Weekly campus screenings are required, and clips of films are used in class for close analysis of aural and visual elements.

FA 264 Women Make Movies 0-4 credits
Prerequisite: College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. This course focuses on women directors around the world and the contributions they have made to film (and video). Students will be introduced to the historical and economic context of film production as well as to a formalist film vocabulary. They will explore readings in feminist scholarship and analyze women-authored cinema—narrative, experimental and documentary—in the context of race, ethnicity, gender, sexuality, class, and nationality. Films will span the silent period to the present. Weekly campus screenings are required, and clips of films are used in class for close analysis of aural and visual elements.

Machine Shop, Machine Tools—See Manufacturing

Management—See Business and Hospitality Management

Manufacturing

For information, contact the Advanced Technology Division, Bldg. 15/Rm. 201, 541.463.5380.

ENGR 280M Co-op Ed: Manufacturing Technology 3-12 credits
This course provides students with manufacturing-related learning in businesses and industrial sites. Students integrate theory and practice gained in the classroom with practical experience in the professional world. Students may develop skills, explore career options and network with professionals and employers while earning credit toward a degree.

MFG 197 Manufacturing Technology 1-6 credits
Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. MFG 197 covers theory, setup and operation of conventional (manual) machine tools and related tooling. Course includes materials, speeds and feeds, measuring tools, cutting tool geometry and selection. Develop competencies in troubleshooting setups, shop math and blue print reading. Completed machining projects become student tools. Manufacturing Technology MFG 197 is an open-entry/open-exit variable credit course. It is suggested that majors NOT schedule less than 6 credits of MFG 197 per term (instructor approval is required to schedule less than 6 credits). It is recommended that six terms be the target maximum for completion of MFG 197, 12 credits/term 1-8 lecture, 3-12 lab hrs/wk. Upon satisfactory completion of 66 credits (528 lecture, 792 lab hrs) the student has completed MFG 197.

MFG 201 CNC Mill 1-6 credits
Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Development of the skills required to program, operate, and produce parts on the computer numerical control (CNC) 3 axis mill. Topics include: history of NC/CNC, computer to machine interface including feedback and adaptive control, understanding the G-code language required to efficiently program the machine tool from a part drawing, modern cutting tools and part fixtures for CNC operations, set-up and operation of CNC milling machines including machining centers with automatic tool changers. This course will be presented by lectures, demonstrations, and hands-on experience.

MFG 202 CNC Lathe 1-6 credits
Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Development of the skills required to program, operate, and produce parts on the computer numerical control (CNC) lathe. Topics include: history of NC/CNC, computer to machine interface including feedback and adaptive control, understanding the G-code language required to efficiently program the machine tool from a part drawing, modern cutting tools and part fixtures for CNC operations, set-up and operation of CNC lathes including turning centers with automatic tool changers. This course will be presented by lectures, demonstrations, and hands-on experience.

MFG 208 CNC Special Projects 1-9 credits
Prerequisite: MFG 201 and MFG 202. Overview of advanced uses of computers in manufacturing including rapid prototyping systems, flexible manufacturing systems, and computer integrated manufacturing. Students will utilize the skills developed in MFG 201 and MFG 202 to create individualized projects demonstrating initial product design concepts, process planning, CNC code generation, and product production on the LCC CNC machines. This course will be presented by lectures, demonstrations, and hands-on experience.

MFG 210 CAM 1 3 credits
Prerequisite: MFG 201 and MFG 202, Or instructor consent. Introduction to Computer Aided Manufacturing CAM, and its application in modern industry. Development of the basic skills required to use Mastercam software for CNC Milling. Primary emphasis is on CAM for 3 axis CNC machining centers. Topics include: geometry creation, importing CAD drawings, assigning work planes, determining correct cutting tools and tool paths, solid model machining simulation, and creating CNC code. Introduction to multi-work plane 4 axis milling. Demonstration of the CAD/CAM/CNC process workflow using Mastercam software to create machine code for the LCC machining center. This course will be presented by means of lectures, demonstrations, and hands-on experience.

MFG 211 CAM 2 3 credits
Prerequisite: MFG 210 OR instructor consent. Utilization of the basic Mastercam software skills learned in MFG 210 applied to programming CNC lathes. Primary emphasis is on 2 axis turning centers. Introduction to CAM for multiple spindle, multiple axis turning centers. Orientation to CAM for milling complex 3D surfaces and mold cavities which will be further developed in MFG 212. Demonstration of the CAD/CAM/CNC process workflow using Mastercam software to create machine code for the LCC machining center. This course will be presented by means of lectures, demonstrations, and hands-on experience.

RTEC 100 Basic Career Technical Skills 2-6 credits
This course explores the basic skills for entering technical careers such as mechanics, manufacturing, aviation, electronics, etc. The course includes; safety, math, tools, basic electricity, basic hydraulics, employability skills, rigging, blue prints, and communication. Students may not receive credit for both RTEC 100 and APPR 101.

Mathematics: Self-Paced Format

Students wishing to take a variable credit, self-paced format math course must obtain instructor permission. This permission is obtained after an orientation in the Math Resource Center (MRC) in Bldg. 16/Rm. 169 on one of the first two days of the term. Orientation times: Mon./Tu. 9 a.m., 11 a.m., 1 p.m., and Tu. 6 p.m.

For more information contact the Math Resource Center, Bldg. 16/Rm. 169, 541.463.5399. lanec.edu/math/mrc

MTH 020 Math Renewal 3 credits
Prerequisite: MTH 010A, MTH 010T or equivalent courses with a grade of "C-" or better, or pass a placement test through Testing Services. Prerequisite grades or test scores must have been completed within the past four terms. If you have taken a higher level math

course than this and passed the course with a "C-" or better, you may not use this course for your degree/certificate requirements. This course begins with a review of whole number, fraction, and decimal arithmetic that includes rounding, estimation, order of operations, averages, and the solving of one-step equations. This review is followed by an introduction to ratios, proportions, percent, measurement, and basic geometry in a problem-solving context, with the earlier review skills integrated throughout. Some applications for technical careers will be incorporated for students in professional technical programs. Scientific Calculator is required. Please refer to the Calculator Recommendation Chart on lanec.edu/math.

MTH 025 Basic Mathematics Applications 3 credits
Prerequisite: Three credits of MTH 020 or equivalent courses with a grade of "C-" or better, or pass a placement test through the Testing Office. Prerequisite grades or test scores must have been completed within the past four terms. If you have taken a higher level math course than this and passed the course with a "C-" or higher, you may not use this course for your degree/certificate requirements. Basic skills in fractions, decimals, percents and ratios will be assumed. MTH 025 is a course in the application of basic mathematics to everyday situations. Topics include applications involving budget and retirement, simple and compound interest, mortgage and charge options, household and garden, health formulas, food preparation, measurement systems, markup and discounts. The course will focus on group work, skill maintenance, investigations and projects. Scientific Calculator is required. Please refer to the Calculator Recommendation Chart on lanec.edu/math.

MTH 058 Word Problems in Algebra 1 credits
Prerequisite: MTH 060 and above or equivalent courses with a grade of "C-" or better or pass a placement test through the Testing Office. Prerequisite grades or test scores must have been completed within the past four terms. A self-paced course under the supervision of an instructor. This course requires some beginning algebra skills. It covers methods for solving standard word problems using basic algebra skills.

MTH 060 Beginning Algebra 1-4 credits
Prerequisite: MTH 020 or equivalent courses with a grade of "C-" or better or pass a placement test through the Testing Office. Prerequisite grades or test scores must have been completed within the past four terms. If you have taken a higher level math course than this and passed the course with a "C-" or better, you may not use this course for your degree/certificate requirements. This is the first term of a two-term sequence in introductory algebra. Topics include a selective review of arithmetic, tables and graphs, signed numbers, problem solving, linear equations, ratio and proportion, and unit analysis. MTH 060 prepares students for Elementary Algebra, MTH 065. MTH 060 and MTH 065 provide a two-term sequence preparatory to Intermediate Algebra, MTH 095. Scientific Calculator is required. Please refer to the Calculator Recommendation Chart on lanec.edu/math.

MTH 065 Elementary Algebra 1-4 credits
Prerequisite: MTH 060 or equivalent courses with a grade of "C-" or better, or pass a placement test through the testing office. Prerequisite grades must have been completed within the past four terms. If you have taken a higher level math course than this and passed the course with a "C-" or better, you may not use this course for your degree/certificate requirements. This is the second term of a two-term sequence in introductory algebra. Students having successfully completed MTH 060 should continue with this course in preparation for taking Intermediate Algebra (MTH 095). Topics include systems of linear equations, polynomials, factoring, quadratic equations, rational expressions, exponents, and radicals. Scientific Calculator is required. Please refer to the Calculator Recommendation Chart on lanec.edu/math.

MTH 071 Informal Geometry 1 2 credits
Prerequisite: Four credits of MTH 060 or five credits of MTH 070 or equivalent courses with a grade of "C-" or better or pass a placement test through the Testing Office. Prerequisite grades or test scores must have been completed within the past four terms. Instructor permission required. A self-paced course under the supervision of an instructor. This informal course in geometry requires elementary algebra skills. Topics include angles, parallel and perpendicular lines, polygons, polyhedra, transformations, triangles, congruence, quadrilaterals, and the coordinate plane. Basic vocabulary and elementary relationships are stressed. Suitable for students with

little background in geometry and who want new concepts introduced one at a time. MTH 071 and MTH 072 do not satisfy the geometry prerequisites for Trigonometry MTH 112 or Calculus 1 MTH 251.

MTH 072 Informal Geometry 2 2 credits
Prerequisite: MTH 071 with a grade of "C-" or better. Prerequisite grade must have been completed within the past four terms. Instructor permission required. A self-paced course under the supervision of an instructor. This course includes concepts and computation of perimeter, area, surface area, and volume; applications of similar figures; the Pythagorean Theorem, and elementary trigonometric ratios; attributes and measurement of circles, prisms, pyramids, cones, and cylinders; and transformations related to coordinate geometry. MTH 071 and MTH 072 do not satisfy the geometry prerequisites for Trigonometry MTH 112 or Calculus 1 MTH 251.

MTH 095 Intermediate Algebra 1-5 credits
Prerequisite: MTH 065 or MTH 070 or equivalent courses with a grade of "C-" or better, or pass a placement test through the Testing Office. Prerequisite grades or test scores must have been completed within the past four terms. MTH 095 is a 5 credit course with 4 credits earned through lecture format and 1 earned through participation in the Math Resource Center's tutoring and additional instruction. If you have taken a higher level math course than this and passed the course with a "C-" or better, you may not use this course for your degree/certificate requirements. Topics include equations, function notation, polynomials, coordinate graphing, rational equations, radical equations, exponents, quadratic functions, exponential and logarithmic functions, inequalities and problem solving methods. Scientific Calculator is required. Please refer to the Calculator Recommendation Chart on lanec.edu/math. This course provides a foundation for MTH 097, MTH 105, MTH 111, or MTH 211 or MTH 213.

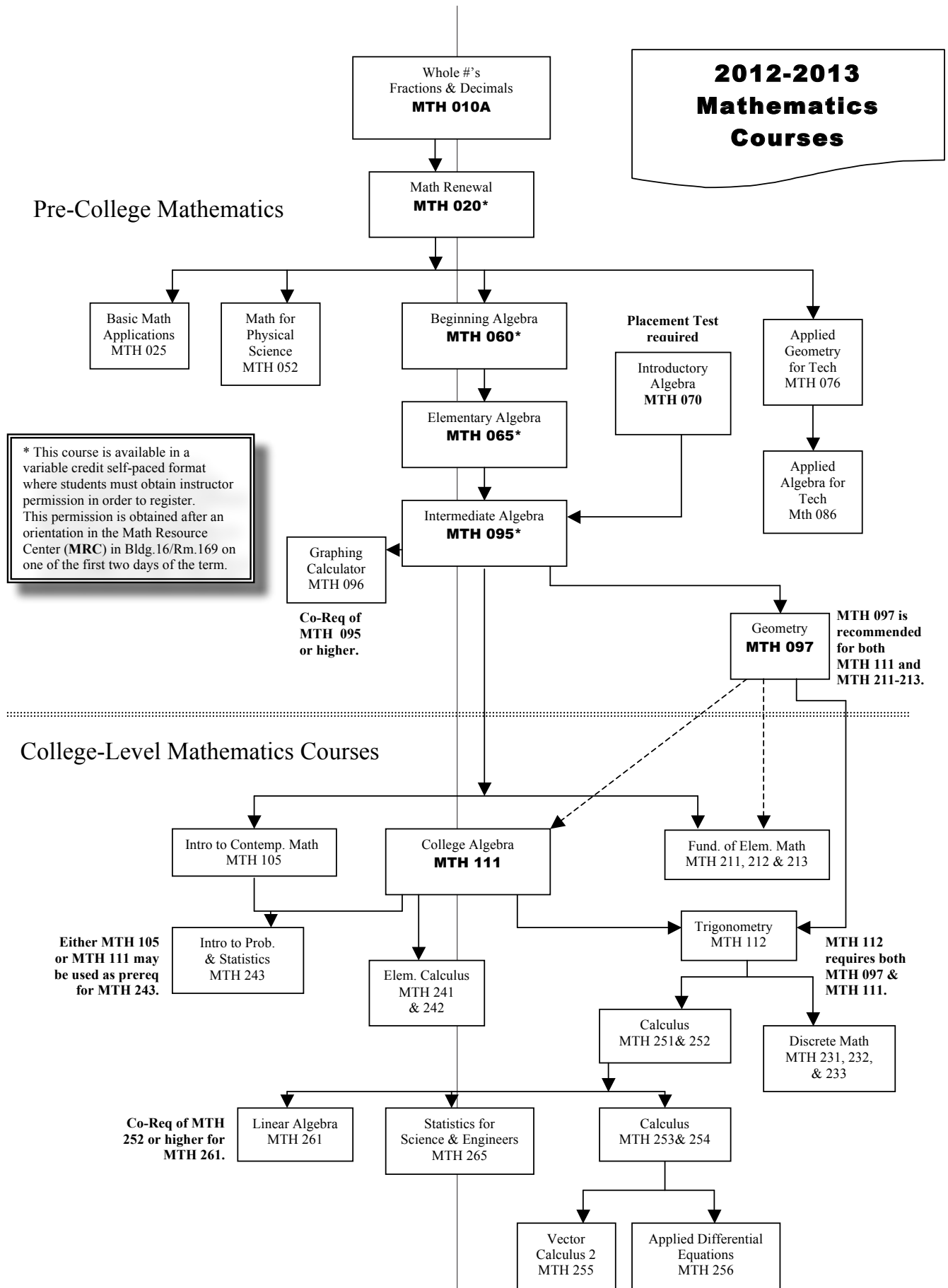
Mathematics: Traditional Instructor-Led Format

For information, contact the Mathematics Division, Bldg. 16/Rm. 166, 541.463.5392.

MTH 010A Whole Numbers, Fractions, and Decimals 3 credits
Prerequisite: Placement by the LCC math test or consent of the instructor. Students will review whole number skills and learn to compute with fractions and decimals. Universal math concepts will be integrated into the curriculum to increase students' abilities and to extend their understanding of basic math principles in preparation for higher level math courses. Effective math study strategies and math anxiety issues will be discussed to increase students' confidence in their abilities to succeed in math classes and to use math in daily life. MTH 010A is intended for students who need to strengthen their basic math skills before moving on to MTH 020.

MTH 020 Math Renewal 3 credits
Prerequisite: MTH 010A, MTH 010T or equivalent courses with a grade of "C-" or better, or pass a placement test through Testing Services. Prerequisite grades or test scores must have been completed within the past four terms. If you have taken a higher level math course than this and passed the course with a "C-" or better, you may not use this course for your degree/certificate requirements. This course begins with a review of whole number, fraction, and decimal arithmetic that includes rounding, estimation, order of operations, averages, and the solving of one-step equations. This review is followed by an introduction to ratios, proportions, percent, measurement, and basic geometry in a problem-solving context, with the earlier review skills integrated throughout. Some applications for technical careers will be incorporated for students in professional technical programs. Scientific Calculator is required. Please refer to the Calculator Recommendation Chart on lanec.edu/math. This course is available in a self-paced format. See Mathematics: Self-Paced format.

MTH 025 Basic Mathematics Applications 3 credits
Prerequisite: Three credits of MTH 020 or equivalent courses with a grade of "C-" or better, or pass a placement test through the Testing Office. Prerequisite grades or test scores must have been completed within the past four terms. If you have taken a higher level math course than this and passed the course with a "C-" or higher, you may not use this course for your degree/certificate requirements. Basic skills in fractions, decimals, percents and ratios will be assumed. MTH 025 is a course in the application of basic mathematics to everyday situations. Topics include applications involving



Note: For each Math course, enrollment requires passing either the prerequisite course with a "C-" or better, or passing a placement test within the past 4 terms.

budget and retirement, simple and compound interest, mortgage and charge options, household and garden, health formulas, food preparation, measurement systems, markup and discounts. The course will focus on group work, skill maintenance, investigations and projects. Scientific Calculator is required. Please refer to the Calculator Recommendation Chart on lanecc.edu/math.

MTH 052 Math for Introductory Physical Science 4 credits
Prerequisite: MTH 020 or equivalent content with a grade of "C-" or better or pass a placement test through the Testing Office. Pre-requisite grades or test scores must have been completed within the past four terms. If you have taken a higher level math course than this and passed the course with a "C-" or better, you may not use this course for your degree/certificate requirements. This is a pre-algebra level course in professional-technical mathematics used in chemistry, dosage computation, and other science-related courses. Topics include unit conversions, metrics, scientific notation, significant figures, rates, proportions, percent applications, graphs, algebra of units, and logarithms for pH. May be offered online. Scientific Calculator is required. Please refer to the Calculator Recommendation Chart on lanecc.edu/math.

MTH 060 Beginning Algebra 4 credits
Prerequisite: MTH 020 or equivalent courses with a grade of "C-" or better or pass a placement test through the Testing Office. Pre-requisite grades or test scores must have been completed within the past four terms. If you have taken a higher level math course than this and passed the course with a "C-" or better, you may not use this course for your degree/certificate requirements. This is the first term of a two-term sequence in introductory algebra. Topics include a selective review of arithmetic, tables and graphs, signed numbers, problem solving, linear equations, ratio and proportion, and unit analysis. MTH 060 prepares students for Elementary Algebra, MTH 065. MTH 060 and MTH 065 provide a two-term sequence preparatory to Intermediate Algebra, MTH 095. Scientific Calculator is required. Please refer to the Calculator Recommendation Chart on lanecc.edu/math. See Mathematics: Self-Paced format.

MTH 065 Elementary Algebra 4 credits
Prerequisite: MTH 060 or equivalent courses with a grade of "C-" or better, or pass a placement test through the testing office. Prerequisite grades must have been completed within the past four terms. If you have taken a higher level math course than this and passed the course with a "C-" or better, you may not use this course for your degree/certificate requirements. This is the second term of a two-term sequence in introductory algebra. Students having successfully completed MTH 060 should continue with this course in preparation for taking Intermediate Algebra (MTH 095). Topics include systems of linear equations, polynomials, factoring, quadratic equations, rational expressions, exponents, and radicals. Scientific Calculator is required. Please refer to the Calculator Recommendation Chart on lanecc.edu/math. See Mathematics: Self-Paced format.

MTH 070 Introductory Algebra 5 credits
Prerequisite: Placement into MTH 070 through the placement testing office within the past four terms. If you have taken a higher level math course than this and passed the course with a "C-" or better, you may not use this course for your degree/certificate requirements. MTH 070 is a fast paced review of algebra for students with recent algebra experience. For students without recent algebra experience, MTH 060 and MTH 065 provide a more relaxed and thorough introduction to the subject. (Students who are unsure whether to take MTH 070 or MTH 060 should seek the advice of a Counselor or Advisor.) MTH 070 prepares students for Intermediate Algebra, MTH 095. Topics include a selective review of arithmetic, tables and graphs, signed numbers, problem solving, linear equations, ratio and proportion, unit analysis, systems of linear equations, polynomials, factoring, quadratic equations, rational expressions, exponents, and radicals. Scientific Calculator is required. Please refer to the Calculator Recommendation Chart on lanecc.edu/math.

MTH 076 Applied Geometry for Technicians 4 credits
Prerequisite: MTH 020 with a grade of "C-" or better or pass a placement test through the Testing Office. Prerequisite grades or test scores must have been completed within the past four terms. MTH 076 Applied Geometry includes the following: angle measure, properties of systems with parallel, perpendicular, and oblique lines; perimeter and area of polygons and circles; surface area and volume of solid figures such as prisms and pyramids; similarity, ratio, and proportion; right triangle trigonometry; linear, square, and

cubic units; and dimensional analysis in metric and US customary measures. Algebra will be introduced as needed to work with proportions and formulas. The course will emphasize applications encountered in technical-professional programs and clear communication of mathematical results. Scientific Calculator is required. Please refer to the Calculator Recommendation Chart on lanecc.edu/math.

MTH 086 Applied Algebra for Technicians 4 credits
Prerequisite: MTH 076 with a grade of "C-" or better, or instructor permission. Prerequisite grades must have been completed within the past four terms. MTH 086 Applied Algebra is a first course in algebraic skills needed for technical mathematics, including the following: signed numbers, positive and negative exponents, scientific notation, the Cartesian coordinate system, linear equations and their graphs, linear systems and their graphs, quadratic equations and their graphs, forming expressions and equations from real situations. Oblique triangle trigonometry is an optional topic. Fraction skills will be reviewed as needed. Geometric topics from MTH 076 will be integrated throughout. The course will emphasize clear communication of mathematical results. Scientific Calculator is required. Please refer to the Calculator Recommendation Chart on lanecc.edu/math.

MTH 095 Intermediate Algebra 5 credits
Prerequisite: MTH 065 or MTH 070 or equivalent courses with a grade of "C-" or better, or pass a placement test through the Testing Office. Prerequisite grades or test scores must have been completed within the past four terms. MTH 095 is a 5 credit course with 4 credits earned through lecture format and 1 earned through participation in the Math Resource Center's tutoring and additional instruction. If you have taken a higher level math course than this and passed the course with a "C-" or better, you may not use this course for your degree/certificate requirements. Topics include equations, function notation, polynomials, coordinate graphing, rational equations, radical equations, exponents, quadratic functions, exponential and logarithmic functions, inequalities and problem solving methods. Scientific Calculator is required. Please refer to the Calculator Recommendation Chart on lanecc.edu/math. This course provides a foundation for MTH 097, MTH 105, MTH 111, or MTH 211 or MTH 213. This course is available in a variable credit self-paced format where students must obtain instructor permission in order to register. This permission is obtained after an orientation in the Math Resource Center (MRC) in Bldg.16/Rm.169 on one of the first two days of the term.

MTH 096 Using the Scientific Graphing Calculator 1 credits
Prerequisite: Co-requisite of MTH 095 or higher. This course is an introduction to the graphing calculator, emphasizing skills necessary for success in MTH 111. No graphing calculator skills are required. Topics include: evaluating expressions, graphing functions, solving equations graphically, and effective use of tools offered by the graphing calculator to solve mathematical problems. Graphing Calculator is required. Please refer to the Calculator Recommendation Chart on lanecc.edu/math.

MTH 097 Geometry 4 credits
Prerequisite: MTH 095 or MTH 111 or equivalent courses with a grade of "C-" or better or pass a placement test through the Testing Office. Prerequisite grades or test scores must have been completed within the past four terms. A course in informal geometry covering the study of lines, planes, polygons, circles, solids, area, perimeter, volume, surface area, Pythagorean Theorem, congruence, and similar figures. Applications and exploration of geometry topics rather than proofs will be stressed. This course is the geometry prerequisite for MTH 112, and 251. MTH 097 is strongly recommended for MTH 111 and MTH 211. Scientific calculator required. Please refer to the Calculator Recommendation Chart on lanecc.edu/math.

MTH 105 Introduction to Contemporary Mathematics 4 credits
Prerequisite: MTH 095 or equivalent courses with a grade of "C-" or better or pass a placement test through the Testing Office. Prerequisite grades or test scores must have been completed within the past four terms. Survey of Applications of Mathematics for non-science majors including probability, statistics, finance and exponential modeling. (Also available online). Note: MTH 105 will not meet any Science/Math/Computer Science degree requirements if taken after MTH 243; however, MTH 105 can be used as an elective if taken after MTH 243. Scientific Calculator or Graphing Calculator

is required. Please refer to the Calculator Recommendation Chart on lanec.edu/math.

MTH 106 Introduction to Contemporary Math 2 4 credits
Prerequisite: MTH 105 with a grade of "C-" or better completed within the past four terms. College Now offering only. The second of a two term sequence involving problem solving with a variety of applications of mathematics. These applications include elementary probability and at least two of the following topics: history and uses of geometry, matrices and linear systems, Markov chains, game theory, graph theory involving routing and networks, mathematics of voting and apportionment, or other topics approved by the Mathematics Division.

MTH 111 College Algebra 5 credits
Prerequisite: MTH 095 or equivalent courses with a grade of "C-" or better, or pass a placement test through the Testing Office. Prerequisite grades or test scores must have been completed within the past four terms. MTH 097 is strongly recommended. College Algebra is the study of basic functions and their applications. This includes polynomial, rational, exponential, and logarithmic functions and their inverses. Other topics include an introduction to sequences and non-linear systems of equations. In accordance with national recommendations, this course emphasizes skill building, problem solving, modeling, reasoning, communication, connections with other disciplines, and the appropriate use of technology. Graphing Calculator is required. Please refer to the Calculator Recommendation Chart on lanec.edu/math. However, students will be held accountable for many skills without a calculator.

MTH 112 Trigonometry 4 credits
Prerequisite: MTH 097 and MTH 111 or equivalent courses with a grade of "C-" or better or pass placement tests through the Testing Office. Prerequisite grades or test scores must have been completed within the past four terms. Trigonometry has wide applications in the world around us. It is a vital tool in construction, physics, and engineering. Trigonometry is preparatory for Calculus 1 (Differential Calculus, MTH 251). The major topics covered include radian measure, circular functions and their graphs, right triangle ratios and related trigonometric functions, identities, solving trigonometric equations, law of sines, law of cosines, and applications. Other topics include polar coordinates, parametric equations, vectors, and conic sections. Graphing Calculator is required. Please refer to the Calculator Recommendation Chart on lanec.edu/math.

MTH 211 Fundamentals of Elementary Mathematics 1 4 credits
Prerequisite: MTH 095 or equivalent courses completed with a grade of "C-" or better, or pass a placement test through the Testing Office. Prerequisite grades or test scores must have been completed within the past four terms. Geometry, MTH 097, is strongly recommended. Course includes a survey of mathematical topics for those interested in the presentation of mathematics at the K-9 levels. A variety of manipulative and heuristic problem solving strategies are used. Emphasis is on problem solving, patterns, sequences, set theory, an introduction to logic, using elementary algebra (use of variables, equation solving, relations and functions), numeration systems, number bases, arithmetic operations with whole numbers and integers. Scientific Calculator is required. Please refer to the Calculator Recommendation Chart on lanec.edu/math.

MTH 212 Fundamentals of Elementary Mathematics 2 4 credits
Prerequisite: MTH 211, with a grade of "C-" or better completed within the past four terms. Geometry, MTH 097, is strongly recommended. Surveys mathematical topics for those interested in the presentation of mathematics at the K-9 levels. A variety of manipulative and heuristic problem strategies are used. Emphasis is on problem solving, number theory, rational numbers (as fractions and decimals), irrational and real numbers, proportional reasoning, percent, and an introduction to probability. Scientific Calculator is required. Please refer to the Calculator Recommendation Chart on lanec.edu/math.

MTH 213 Fundamentals of Elementary Mathematics 3 4 credits
Prerequisite: MTH 211 or MTH 212, with a grade of "C-" or better completed within the past four terms. Geometry, MTH 097, is strongly recommended. A Survey of mathematical topics for those interested in the presentation of mathematics at the K-9 levels. A variety of manipulative and heuristic problem solving strategies are used. Emphasis on problem solving, elementary statistics, introductory geometry (basic definitions/vocabulary, polygons, angles, 2-3

dimensional geometry, congruence, constructions, similarity), transformational geometry, and measurement systems. Scientific Calculator is required. Please refer to the Calculator Recommendation Chart on lanec.edu/math.

MTH 231 Discrete Mathematics 1 4 credits
Prerequisite: MTH 112 or equivalent courses with a grade of "C-" or better or pass a placement test through the Testing Office. Prerequisite grades or test scores must have been completed within the past four terms. First course in three-term sequence fulfilling the Discrete Mathematics requirement for enrolling in upper division Computer Science courses at the University of Oregon and Oregon State University. Topics include formal logic, methods of proof, sequences, recursion and mathematical induction. The order of the topics may vary with instructor and text. Scientific Calculator may be required. Please refer to the Calculator Recommendation Chart on lanec.edu/math.

MTH 232 Discrete Mathematics 2 4 credits
Prerequisite: MTH 231 with a grade of "C-" or better completed within the past four terms. Second course in three-term sequence fulfilling the Discrete Mathematics requirement for enrolling in upper division Computer Science courses at the University of Oregon and Oregon State University. Topics include set theory, combinatorics, counting techniques, functions, relations and probability. The order of the topics may vary with instructor and text. Scientific Calculator may be required. Please refer to the Calculator Recommendation Chart on lanec.edu/math.

MTH 233 Discrete Mathematics 3 4 credits
Prerequisite: MTH 232 with a grade of "C-" or better completed within the past four terms. Third course in three-term sequence fulfilling the Discrete Mathematics requirement for enrolling in upper division Computer Science courses at the University of Oregon and Oregon State University. Topics include Boolean Algebra, relations, modular arithmetic, group theory, graphs and trees. The order of the topics may vary with instructor and text. Scientific Calculator may be required. Please refer to the Calculator Recommendation Chart on lanec.edu/math.

MTH 241 Elementary Calculus 1 4 credits
Prerequisite: MTH 111 or equivalent courses with a grade of "C-" or better or pass a placement test through the Testing Office. Prerequisite grades or test scores must have been completed within the past four terms. Differential calculus (without Trigonometry) for business and social sciences. Some review of algebraic techniques. Major emphasis is on limits; continuity; derivatives with applications; and exponential and logarithmic functions, their derivatives and applications. Graphing Calculator may be required. Please refer to the Calculator Recommendation Chart on lanec.edu/math.

MTH 242 Elementary Calculus 2 4 credits
Prerequisite: MTH 241 with a grade of "C-" or better completed within the past four terms. Integral calculus (without Trigonometry) for business and social sciences. Integration and applications for single variable functions, techniques of integration, partial differentiation methods for multivariate functions and their relative extrema. Graphing Calculator may be required. Please refer to the Calculator Recommendation Chart on lanec.edu/math.

MTH 243 Introduction to Probability and Statistics 4 credits
Prerequisite: MTH 105 or MTH 111 or equivalent courses with a grade of "C-" or better or pass a placement test through the Testing Office. Prerequisite grades or test scores must have been completed within the past four terms. Discrete and continuous probability, data description and analysis, measures of central tendency and variability, sampling distributions, and basic concepts of statistical inference, including confidence intervals, hypothesis testing, correlation, and regression. Graphing Calculator is required. Please refer to the Calculator Recommendation Chart on lanec.edu/math. Note: MTH 105 is not an alternative to the MTH 111 prerequisite for MTH 241. Students planning to study calculus should take MTH 111 instead of MTH 105. Students planning to take MTH 105 and MTH 243 must take MTH 105 first in order to apply the Mth 105 credits towards Science/Math/Computer Science degree requirements.

MTH 251 Calculus 1 (Differential Calculus) 5 credits
Prerequisite: MTH 112 (Trigonometry) or equivalent course(s) with a grade of "C-" or better, or pass placement tests through the Testing Office. Prerequisite course(s) or placement testing must have been completed within the past four terms. MTH 251 is a first-term

calculus course that includes a selective review of precalculus followed by development of the derivative from the perspective of rates of change, slopes of tangent lines, and numerical and graphical limits of difference quotients. The limit of the difference quotient is used as a basis for formulating analytical methods that include the power, product, and quotient rules. The chain rule and the technique of implicit differentiation are developed. Procedures for differentiating polynomial, exponential, logarithmic, and trigonometric functions are formulated. Analytical, graphical, and numerical methods are used to support one another in developing the course material. Opportunities are provided for students to work in groups, verbalize concepts with one another, and explore concepts and applications using technology. Graphing Calculator is required. Please refer to the Calculator Recommendation Chart on lanecc.edu/math.

MTH 252 Calculus 2 (Integral Calculus) 5 credits
Prerequisite: MTH 251 (Calculus 1) or equivalent course(s) with a grade of "C-" or better completed within the past four terms. MTH 252 is a second-term calculus course covering definite and indefinite integrals. Specific topics include conceptual development of the definite integral, properties of the definite integral, the first and second Fundamental Theorems of Calculus, constructing anti-derivatives, techniques of indefinite integration, approximating definite integrals, and applications. Analytical, graphical, and numerical methods are used to support one another in developing the course material. Opportunities are provided for students to work in groups, verbalize concepts with one another, and explore concepts and applications using technology. Graphing Calculator is required. Please refer to the Calculator Recommendation Chart on lanecc.edu/math.

MTH 253 Calculus 3 (Infinite Series and Sequences) 5 credits
Prerequisite: MTH 252 with a grade of "C-" or better. Prerequisite grade must have been completed within the past four terms. This is the third term of a six-term sequence. Topics include: Indeterminate forms and improper integrals. Parametric and polar equations and conics. Sequences and series. Investigation of the convergence of series. Taylor series and power series. Graphing Calculator is required. Please refer to the Calculator Recommendation Chart on lanecc.edu/math.

MTH 254 Vector Calculus 1 (Introduction to Vectors and Multidimensions) 4 credits
Prerequisite: MTH 253 with a grade of "C-" or better completed within the past four terms. This is the fourth term of a six-term sequence. Major emphasis is on three-dimensional vectors and differential calculus of several variables. Graphing Calculator is required. Please refer to the Calculator Recommendation Chart on lanecc.edu/math.

MTH 255 Vector Calculus 2 (Introduction to Vector Analysis) 4 credits
Prerequisite: MTH 254 with a grade of "C-" or better completed within the past four terms. This is the fifth term of a six-term sequence. Major emphasis is on multiple integration, vector fields, and applications. Graphing Calculator is required. Please refer to the Calculator Recommendation Chart on lanecc.edu/math.

MTH 256 Applied Differential Equations 4 credits
Prerequisite: MTH 254 with a grade of "C-" or better completed within the past four terms. This is the last of a six-term sequence. The course covers methods of solving ordinary differential equations and includes elementary methods, convergent power series and numerical methods, with applications to physical engineering science. Graphing Calculator is required. Please refer to the Calculator Recommendation Chart on lanecc.edu/math.

MTH 261 Introduction to Linear Algebra 2 credits
Corequisite: MTH 252. If the co-requisite has already been completed, then one of the following must either be taken concurrently with MTH 261, or must have been completed with a "C-" or better within the past four terms: MTH 252, MTH 253, MTH 254, MTH 255 or MTH 256. The course covers systems of linear equations, vectors in a geometric setting, real vector spaces, matrices, operations on matrices, inversion of matrices, determinants, linear transformations, dot product and cross product, and eigenvalues and eigenvectors. Graphing Calculator is required. Please refer to the Calculator Recommendation Chart on lanecc.edu/math.

MTH 265 Statistics for Scientists and Engineers 4 credits
Prerequisite: MTH252 completed with a grade of "C-" or better within the past 4 terms. A calculus-based introduction to probability

and statistics with applications to science and engineering disciplines. Topics include: data description and analysis, discrete and continuous probability theory, common probability distributions, sampling distributions, estimation, hypothesis testing, control charts, regression analysis, and experimental design. Graphing Calculator is required. Please refer to the Calculator Recommendation Chart on lanecc.edu/math.

MTH 280 Co-op Ed: Mathematics 1-12 credits
This internship course offers a work experience as a math tutor on a Lane campus or in an area K-12 school. Students devote a prearranged number of hours each week to classroom observation and possible assistance to the instructor, as well as direct student contact in a one-to-one or group situation.

Mechanics—See Automotive, Aviation, Diesel

Media Arts

For information about classes with course numbers that begin with:

FA—Contact the Art and Applied Design Department, Bldg. 11/Rm. 101, 541.463.5409.

ART 151A Media Graphics 3 credits
Introduces and provides a foundation in the essential skills needed to use Flash software. Flash is used to create all kinds of content such as website front-ends, interactive games, animated cartoons, movie trailers, and PDA interfaces. At the end of the course you will understand how components of a Flash movie fit together, have used all the key tools, and have integrated all of your learning in a series of detailed creative exercises.

ART 288 Introduction to Web Design 2 credits
Prerequisite or Co-requisite: CS 195. Introduction to design and communication principles as they apply to web design. Students also investigate the unique challenges involved in web site design. This course may be offered online, traditional classroom instruction, or as a hybrid course.

ART 290 Design Concepts for the Web 3 credits
Prerequisite: ART 216 or MUL 212, and ART 289. An intermediate study of web site design with an emphasis on informational architecture including strategy, planning, usability, and design of integrated web sites. This course covers business practices as they relate to graphic and web design.

AUD 120 Audio Production 4 credits
Basic theories and practices of audio production for video and multimedia. Includes the use of microphones, mini disc recorders, mixing consoles, and digital audio workstations for a variety of sound collection and processing applications.

ENG 195 Introduction to Film Studies 0-4 credits
College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. ENG 195 is the first course of a year-long sequence focusing on the history, art, and social contexts of film as an art form. A primary objective of the course is to enhance students' enjoyment and appreciation of film by developing their cinematic literacy. Students are introduced to the basic elements of film language, including cinematography, mise-en-scène, editing, and sound. While American films are emphasized, the sequence also focuses at times on international cinema, looking at all films in the context of time, culture, and ideological effects. Weekly campus screenings are required, and clips of films are used in class for close analysis of aural and visual elements. A variety of assignments and activities develop and test students "ways of seeing." ENG 195 focuses on the formal elements of the shot: cinematography, mise en scv@ne, blocking, and movement.

ENG 196 Introduction to Film Studies 0-4 credits
College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. ENG 196 is the second course of a year-long sequence focusing on the history, art, and social contexts of film as an art form. A primary objective of the course is to enhance students' enjoyment and appreciation of film by developing their cinematic literacy. Students are introduced to the basic elements of film language, including cinematography, mise-en-scène, editing, and sound. While American films are emphasized, the sequence also focuses at times on international cinema, looking at all films

in the context of time, culture, and ideological effects. Weekly campus screenings are required, and clips of films are used in class for close analysis of aural and visual elements. A variety of assignments and activities develop and test student's "ways of seeing." ENG 196 reviews the elements of film style relating to the individual film shot, but it emphasizes the formal means by which shots are built into the larger structures of scene, segment, and finished film: editing, sound, screenwriting, and narrative structure (e.g., editing style—sequence shots, continuity editing, montage and editing techniques—on the types and uses of film: Foley, dialogue, theme music, etc.).

ENG 197 Introduction to Film Studies 0-4 credits
College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. ENG 197 is the third course of a year-long sequence focusing on the history, art, and social contexts of film as an art form. A primary objective of the course is to enhance students' enjoyment and appreciation of film by developing their cinematic literacy. Students are introduced to the basic elements of film language, including cinematography, mise-en-scène, editing, and sound. While American films are emphasized, the sequence also focuses at times on international cinema, looking at all films in the context of time, culture, and ideological effects. Weekly campus screenings are required, and clips of films are used in class for close analysis of aural and visual elements. A variety of assignments and activities develop and test students "ways of seeing." ENG 197 centers on films chosen around a theme, topic or director. Recent themes include "Film and the American Dream" or "American Independent Cinema." Providing an overview of film language, the course explores the style of the featured films and/or director and looks at their historical contexts and ideological effects relating to such contested areas of social experience as race, class, gender, sexuality, and nation.

FA 221 Computer Animation 3 credits
Historical beginnings of animation from flipbooks to film and video. Students explore the uses of animation from business presentations to entertainment. This project-oriented, hands-on course gives students the opportunity to script, design, and produce animation projects on the computer. The course will emphasize two-dimensional animation techniques and tools and introduce 3-D modeling and animation.

FA 222 Computer Animation 2 3 credits
Prerequisite: FA 221. A comprehensive exploration of three-dimensional computer animation arts: Three-dimensional space and form, model creation, texturing, lighting, scene composition, animation and rendering strategies.

FA 231 Multimedia Authoring 3 credits
Prerequisite: MUL 210. Authoring techniques as they pertain to multimedia production. Students develop authoring skills using Macromedia Director and the Lingo authoring language. Not about programming, this course is about applying multimedia design to an authoring language framework to solve implementation problems, and to enhance non-linear content presentation. Activities will focus primarily on completed multimedia projects and their effectiveness.

FA 250 Concepts of Visual Literacy 3 credits
Prerequisite: WR 115, or WR 121, or WR 122, or WR 123. Introduction to elementary concepts of visual literacy, including theories of representation and design. Includes the role of composition, color, time, motion, lighting, and sound in the design of moving images for film, television, and computer imaging. Students learn to incorporate these design elements into visual projects and learn how to critically evaluate visually mediated messages.

FA 254 Fundamentals of Lighting 3 credits
Exploration of a comprehensive mix of lighting techniques, tools and theory that can be applied to media production including video, photography, and production design. Students learn the fundamental properties of light, as well as practical advice, tips, and tricks for improving production values from the studio or location to the screen. Students gain an understanding of image manipulation through demonstrations, practical hands-on exercises, and design assignments.

FA 255 Understanding Movies: American Cinema 3 credits
An introductory film studies course designed to bring Hollywood film making into clear focus as an art form, economic force, and a system of representation and communication. It explores how

Hollywood films work technically, artistically, and culturally. Students probe the deeper meaning of American movies, the hidden messages of genres, the social and psychological effects of Hollywood film styles, and the mutual influence of society and popular culture through encounters with the work of directors such as John Ford, Howard Hawks, and Martin Scorsese. May be offered as a telecourse.

FA 261 Writing and Interactive Design 3 credits
Prerequisite: WR 121. An introduction to basic principles in scripting for interactive media. Focuses on writing techniques which foster interactivity, and explores the role of authoring tools in the design of multimedia projects. It defines the stages involved in the development of multimedia projects and addresses the skills necessary to write a proposal, develop a flow chart, and storyboard a short multimedia project involving text, graphics, illustrations, animation, video, sound, links, and search mechanisms. May be offered online.

FA 263 Film in the Fifties 0-4 credits
Prerequisite: College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. This course introduces students to the 1950s as a complex decade in American history through films from and about the era that epitomize the cultural tensions and darker historical currents that define it, demythologizing the fifties as a golden age of innocence and simplicity. Historical and critical readings supplement the screening of classic films and provide direction for class discussion, exams, and critical essays that help students develop critical skills and cineliteracy. Weekly campus screenings are required, and clips of films are used in class for close analysis of aural and visual elements.

FA 264 Women Make Movies 0-4 credits
Prerequisite: College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. This course focuses on women directors around the world and the contributions they have made to film (and video). Students will be introduced to the historical and economic context of film production as well as to a formalist film vocabulary. They will explore readings in feminist scholarship and analyze women-authored cinema—narrative, experimental and documentary—in the context of race, ethnicity, gender, sexuality, class, and nationality. Films will span the silent period to the present. Weekly campus screenings are required, and clips of films are used in class for close analysis of aural and visual elements.

MDP 246 Multimedia Production 1 4 credits
Prerequisite: FA 250, FA 231, VP 151, AUD 120, ART 151A, MUL 210, and CIS 140B. A practicum course giving students the opportunity to apply technical knowledge and skills learned in the first year classes to actual basic production situations with an emphasis in multimedia productions. Students can volunteer for production positions based on their own career interests and experience.

MDP 247 Multimedia Production 2 4 credits
Prerequisite: MDP 246, FA 261, VP 152, MUL 212, and CG 203. A practicum course giving students the opportunity to apply technical knowledge and skills learned in the first year to actual intermediate production situations with an emphasis in multimedia productions. Class members can volunteer for production positions based on their own career interests and experience. Introduces current topics such as media issues, professional production techniques, changing media technology, and job market information.

MDP 248 Multimedia Production 3 4 credits
Prerequisite: MDP 247. A practicum course that gives students the opportunity to apply technical knowledge and skills learned in the first year to actual intermediate production situations with an emphasis in multimedia productions. Class members may be able to volunteer for production positions based on their own career interests and experience. A component of the course will permit the introduction of current topics such as media issues, professional production techniques, changing media technology, and job market information.

MDP 280 Co-op Ed: Multimedia 3-12 credits
Prerequisite: Instructor approval. Co-op offers students on-the-job work experience in a multimedia-related business. Students integrate theory and practice gained in the classroom with practical experience in the professional world. Students develop skills, explore

career options and network with professionals and employers while earning credit toward a degree.

MUL 120 Multimedia Design 3 credits
Prerequisite: Art 261 and AUD 120 (pre-or co-requisite.) Students design and produce computer multimedia programs using digital production techniques in imaging, sound, and animation. Emphasis is on design implementation and human factors, user analysis, interface and interaction considerations, project management, and understanding client needs.

MUL 212 Digital Imaging 3 credits
Basic computer literacy required. Introduction to the use of Adobe Photoshop for digital compositing, typography, image repair, and construction of photographic images and digital artworks. This course covers basic concepts, processes, and aesthetic interpretation of making digital imagery.

MUL 216 Multimedia for the Web 3 credits
Prerequisites: CS 195 and ART 289. Explores the basics of working in the World-Wide Web environment with an emphasis on integrating video, web graphics, animation, and other types of dynamic multimedia into web site design. Students investigate various site design models used in personal and commercial web sites and design web pages and web sites utilizing a variety of multimedia techniques and tools. Students who complete the one-year certificate are prepared for entry-level positions in many areas of web-related businesses as page and site designers, multimedia and graphic designers, information designers, and web animators.

MUL 218 Business Practices for Media Arts 2 credits
An exploration of common business practices in the graphic, multimedia, and web design fields. Students are exposed to the skills necessary to successfully manage an art design department or to run a freelance business. Provides students with a working knowledge of project management from initial client contact through completion, including an understanding of how to establish and maintain timelines, budgets, and workflow. Throughout the curriculum, students are exposed to the role of ethics in the design profession.

VP 151 Video Production 1: Camera 3 credits
Prerequisite: ART 261, AUD 120 and FA 250. Introduces elementary concepts of video production including digital video camera operation, digital non-linear editing, and pre-production planning. Students are taught basic camera techniques, pre-production, and production practices through hands-on learning to develop basic field video production skills. Focus is on individual creativity, as well as the importance of teamwork and deadlines. Projects are produced in the context of learning the theory and practice of pictorial continuity as it applies to multimedia productions.

VP 152 Video Production 2: Editing 3 credits
Prerequisite: VP 151. Advanced concepts and skills in digital video production and non-linear editing. The theory and practice of digital non-linear editing is emphasized. Students receive hands-on opportunities to learn advanced camera techniques, pre-production, and production practices, combined with individual creativity and the importance of teamwork and deadlines. Projects are produced in the context of learning the theory and practice of video production and computerized video editing combined with the application of multimedia programs.

Medical Office Assisting

For information, contact the Health Professions Division, Bldg. 4/Rm. 222, 541.463.5617. You must be accepted into the Medical Office Assisting program to take some these classes.

MA 110 Clinical Assistant 1 3 credits
Prerequisite: Admission to the Medical Office Assistant program and Mth 052 with a grade of C or higher and previous completion of or concurrent enrollment in all fall term Medical Office Assistant courses. Introduction to clinical assisting in the ambulatory care setting. Includes learning aseptic technique, sterilization of instruments, exam room techniques, vital signs, taking a patient history, proper handling of patient medical record and documentation requirements.

MA 120 Clinical Assistant 2 3 credits
Prerequisites: HO150, HO110, MTH 052. Continuation of Clinical Assistant 1 MA 110. Includes identification, care and use of clinical instruments. Preparation for assisting physician with office

procedures and surgeries. Introduction to basic pharmacology and drug identification. Identification of injection sites, introduction to preparation of injectables; instruction in mixing and administering ID, SQ, and IM injections; application of bandages and dressings. ECG instruction.

MA 130 Clinical Assistant 3 3 credits
Prerequisites: Successful completion of MA 120, MA 150, HO 150, HO 152, and HO 220. Continuation of Clinical Assistant 2 MA 120. This course includes ordering and scheduling diagnostic testing per doctor's instructions, assisting patients with special needs, and procedures for office emergencies. Review of human diseases and specialties, such as obstetrics, pediatrics, and imaging. Students learn office procedures such as audiograms, ear lavage, remove casts and help patients with ambulatory assisting devices. May be offered as a live interactive courses.

MA 150 Laboratory Orientation 3 credits
Prerequisites: Admission to the Medical Office Assistant program, successful completion of MA 110, MTH 052 and HO 150 with a grade of C-or better plus consent of instructor. Study of various office laboratory procedures and, in most instances, how to do them; hematology, urinalysis, immunology and phlebotomy.

MA 206 Co-op Ed: Medical Office Assistant Seminar 2 credits
Prerequisites: MA120, MA150, HO220, HO114, HO112, HO152 with a grade of C or better. Students will increase understanding and expectations of the medical profession, learn effective resume writing, interviewing techniques and job search skills. Students will practice presenting themselves to employers in a competent professional manner. Emphasis is to help graduates find employment upon earning their certificate. May be offered as a live interactive courses.

MA 280 Co-op Ed: Medical Office Assistant 3-12 credits
Prerequisite: MA120, MA150, HO152, and HO220 with grade of C or higher. In this required internship course students gain on-the-job work experience in local medical facilities in both clinical and administrative office settings. Students learn to identify and use additional medical equipment as well as have opportunities to integrate theory and practice introduced in the classroom with practical experiences in the professional field.

Microbiology—See Anatomy/Physiology/Microbiology

Multimedia Design—See Media Arts

Music

For information, contact the Music, Dance and Theatre Arts Department, Bldg. 6/ Rm. 204, 541.463.5209.

MUS 101 Music Fundamentals 3 credits
This course provides the student an opportunity to develop a working knowledge of the elements of music. Students learn the basic skills needed to read, write, analyze, and compose simple music. Students may find it helpful to take Group Piano MUS 131 at the same time. This course prepares one for Music Theory MUS 111.

MUS 102 Jazz Fundamentals 3 credits
Prerequisite: MUS 101 This class is an introduction to jazz studies for music students who want to continue on to Jazz Theory, Jazz History, and the Jazz Improvisation classes. This class is also open to all music students or any LCC student who wants an introduction to the world of jazz. Jazz theory, history, piano chord voicings, and major figures will all be studied. Prerequisite: MUS 101 Music Fundamentals, past or present placement in an LCC music Theory Class or instructor approval. Students must have basic music reading ability,

MUS 103 Songwriting Techniques and Analysis 1 3 credits
Prerequisite: MUS 101 or instructor consent. Songwriting Techniques and Analysis is a class for students to explore the art and craft of songwriting. Students will analyze popular songs from a variety of sources including British Invasion, Rock, Country, Reggae, Rap, and Blues. Analysis will include keys, harmonies, song forms, melodic construction, phrasing, settings of lyrics. Recordings and scores will be used as reference materials for all analysis projects. Using the techniques and concepts gleaned through this analysis, the students will then create their own songs or develop more refined song analysis techniques.

MUS 107 Audio Engineering 1 3 credits
Prerequisite: MUS 101 and MUS 119. Audio Engineering is available

for students who are seeking the tools to work and function as a recording engineer in a recording environment i.e., recording studio or live concert recording. Students will meet with the instructor in the recording studio where the following topics, among others, will be addressed and demonstrated: sound and hearing, studio acoustics, microphones choices and positioning, mixing board, recording technology, tracking, audio editing, signal processing, monitoring, mixing, mastering, work flow, and professionalism.

MUS 108 Music in World Cultures..... 4 credits

This one-term basic survey explores selected musical cultures of the major continental regions of the globe, including Native Americans, Africa, Eastern Europe, India, Asia, and Latin America. Focus is placed in both (1) the nature of the music for a given people on its own terms and (2) the ways in which this music is located within its own cultural context. Approaching this music is accomplished by recorded music listening and analysis. Venues include in-class and outside-classroom experiences of music and, to a limited degree, in-class music making. Previously numbered MUS 209 and cannot be repeated for Degree Requirements.

MUS 109 Audio Engineering 2..... 4 credits

Prerequisite: MUS 107. This course is available for students who are seeking the tools to work and function as recording engineers in a recording environment (recording studio or live concert recording). Students will meet with the instructor in the recording studio where the following topics, among others, will be addressed and demonstrated, and hands-on assignments, using the recording studio equipment, will begin taking place: operation of outboard mic pre amps and signal processors, signal flow and setting up various signal paths within the control room, microphone placement and basic multitrack recording of various instruments, using the mixing console, tracking to different mediums, etc.

MUS 110 Audio Engineering 3..... 4 credits

Prerequisite: MUS109. Audio Engineering 3 is the third course in the Audio Engineering sequence, which is designed to train students seeking the tools to work and function as recording engineers in a recording environment. Students will meet with the instructor in the Recording Studio. The following topics, among others, will be addressed and demonstrated as students work on a large-scale recording project: Studio Etiquette, Studio Preparation, Selecting a Recording Format, Rehearsal Sessions, Console Logistics, Initial Tracking, Overdubbing, Compression Techniques, EQ Techniques, Signal Processing, Console Automation, Mixing, and Mastering.

MUS 111 Music Theory 1 (First Term)..... 4 credits

Theory placement test required. MUS 111, 112, 113 must be taken in sequence. Thorough review of the fundamentals of music followed by their application to melody, harmony, and rhythm through analysis and composition. Emphasis of MUS 111 is on fluency of key signatures, scales, rhythm, intervals, triads and 7th chords, individually and in context, as well as 1st species modal and tonal counterpoint. This course is designed to be taken in conjunction with MUS114 and MUS127 concurrently.

MUS 112 Music Theory 1 (Second Term)..... 4 credits

Prerequisite: MUS 111. Must be taken in sequence. Emphasis of MUS112 is on tonal species counter point and tonal music in 4 part context. Includes tonal functional harmony involving tonic and dominant harmonies, non-harmonic tones, scoring, figured bass and introduction of cadences. This course is designed to be taken in conjunction with MUS115 and MUS128 concurrently.

MUS 113 Music Theory 1 (Third Term)..... 4 credits

Prerequisite: MUS 112. Must be taken in sequence. Emphasis of MUS113 is in concepts of prolongation and contextual analysis. Includes all diatonic chords, cadences, embellishing chords, melodic analysis, sequences, and secondary dominants. This course is designed to be taken in conjunction with MUS116 and MUS129 concurrently.

MUS 114 Sight-reading and Ear Training (First Term)..... 2 credits

Prerequisite: Theory placement test required. In this three term sequence of courses, one develops the skills necessary to read melodies at sight and to notate melodies one hears. It includes study of rhythm and meter, tonality and modality (solfeggio) scales, triads and seventh chords, cadences, and conducting patterns. This course is designed to be taken in conjunction with MUS111 and MUS127 concurrently.

MUS 115 Sight-reading and Ear Training (Second Term)..... 2 credits

Prerequisite: MUS 114. Second in three term sequence of courses developing the skills necessary to read melodies at sight and to notate melodies one hears. It includes study of rhythm and meter, tonality and modality (solfeggio) scales, triads and seventh chords, cadences, and conducting patterns. Students are encouraged to take MUS112 and MUS128 concurrently. This course is designed to be taken in conjunction with MUS112 and MUS128 concurrently.

MUS 116 Sight-reading and Ear Training (Third Term)..... 2 credits

Prerequisite: MUS 115. Third in three-term sequence of courses developing the skills necessary to read melodies at sight and to notate melodies one hears. It includes study of rhythm and meter, tonality and modality (solfeggio) scales, triads and seventh chords, cadences, and conducting patterns. This course is designed to be taken in conjunction with MUS113 and MUS129 concurrently.

MUS 118 Music Technology MIDI/Audio 1..... 4 credits

This course provides the student with an opportunity, through group instruction and hands-on experience, to study current applications of music technology in a comprehensive MIDI/audio studio. Students will learn to use various music production tools, using MIDI sequencing, patch editing, digital audio recording, MIDI networking, digital effects devices and plug-ins, and both digital and analog mixing systems. Each student is assigned to one of the 20 MIDI/audio studios, where they will complete creative lab assignments. Students will work in the studios a minimum of 3 hours per week outside of class.

MUS 119 Music Technology MIDI/Audio 2..... 4 credits

Prerequisite: MUS 118. This course provides the student with an opportunity, through group instruction and hands-on experience, to study advanced techniques in the field of music technology in a comprehensive MIDI/audio studio. Students will learn advanced applications of synthesizers, professional sound recording/editing software, MIDI networking, MIDI sequencing, digital effects and both analog, digital mixing, and mastering. In addition, students will gain experience in syncing sound and music to digital videos. Students will also have the opportunity to work with many audio formats such as AIFF, WAV, MP3, and surround sound as they work on their sound event projects. Students will work in the studio a minimum of 3 hours per week outside of class.

MUS 127 Keyboard Skills 1 (First Term)..... 2 credits

Prerequisites: Theory placement test required. This course is part of a 6-term sequence. It is designed to develop piano skills essential for all music majors: performance of rhythmic patterns, scales & arpeggios, intervals, chord progressions (including cadences) with correct voice leading and resolution, harmonization, transposition, improvisation, realization of figured bass, sight-reading of 2-part piano texture. This course is designed to be taken in conjunction with MUS111 and MUS114 concurrently.

MUS 128 Keyboard Skills 1 (Second Term)..... 2 credits

Prerequisites: MUS127 This course is part of a 6-term sequence. It is designed to develop piano skills essential for all music majors: performance of rhythmic patterns, scales & arpeggios, intervals, chord progressions (including cadences) with correct voice leading and resolution, harmonization, transposition, improvisation, realization of figured bass, sight-reading of 2-part piano texture. This course is designed to be taken in conjunction with MUS112 and MUS115 concurrently.

MUS 129 Keyboard Skills 1 (Third Term)..... 2 credits

Prerequisites: MUS128 Co-requisites: MUS113 & MUS116 This course is part of a 6-term sequence. It is designed to develop piano skills essential for all music majors: performance of rhythmic patterns, scales & arpeggios, intervals, chord progressions (including cadences) with correct voice leading and resolution, harmonization, transposition, improvisation, realization of figured bass, sight-reading of 2-part piano texture. This course is designed to be taken in conjunction with MUS113 and MUS116 concurrently.

MUS 131 Group Piano..... 2 credits

This course is for students who are not music majors who are interested in learning to play piano or continuing their keyboard studies. The course provides group instruction covering principles of piano playing. May be repeated up to 6 credits. May be applied to transfer associate's degrees. See advisor for details.

MUS 134 Group Voice..... 2 credits
This class is designed to help students develop their voices for singing. They will be instructed individually and as a group in vocal techniques that will improve the quality of their voices. They will learn about diction, phrasing, dynamics, expression, posture, breath-control, and vocal resonance as well as the basic anatomy of singing. They will also learn how to cope with the fear of singing in front of others. No musical background is needed to take this class. May be repeated up to 6 credits. May be applied to transfer associate's degrees.

MUS 135 Group Voice 2..... 2 credits
Prerequisite: MUS 134 Group Voice 2 is designed to help students develop their voices further for singing. Students will be instructed individually and as a group in vocal techniques that will improve the quality of their voices. They will continue to refine basic techniques of diction, phrasing, dynamics, expression, posture, breath control and vocal resonance. We will address issues related to performance anxiety. Focus will be on solo singing and individual development of technique. Repeatable for up to six credits.

MUS 137 Group Guitar 2 credits
The student must have access to an acoustical guitar. Group Guitar provides a basic orientation to guitar techniques that encompass accompaniment and solo skills. Students will learn to read standard musical notation. A variety of strumming and finger-picking are taught to accompany singing.

MUS 138 Group Guitar 2 2 credits
Group Guitar will involve an intermediate level orientation to guitar techniques, including reading the whole neck above the fourth fret, that will encompass accompaniment and solo skills in a variety of styles. Intermediate level standard music reading will be covered.

MUS 161 Jazz Improvisation: Instrumental 2 credits
Students will study elements of jazz harmony, jazz standards and classic recordings of jazz artists to build background and a platform for development of skills in jazz improvisation. Students should have considerable skill on their instrument and knowledge of major key signatures and major scales. MUS 101-Music Fundamentals or instructor approval required.

MUS 185 Instrumental Performance 1 credits
Instrumental performance is designed for instrumental students at MUP 100 or above who are taking individual lessons and are declared pre-music or music majors. This class focuses on the art of performance and how to deal with performance anxiety. May be repeated up to 6 credits. May be applied to transfer associate's degrees.

MUS 186 Vocal Performance..... 1 credits
Vocal Performance is designed for vocal students at MUP100 or above who are taking individual lessons and are declared pre-music or music majors. This class focuses on performance of classical literature and how to deal with performance anxiety. May be repeated up to 6 credits. May be applied to transfer associate's degrees.

MUS 201 Introduction to Music and Its Literature 3 credits
This class covers the development of Western Music from its beginnings through modern times. It is an overview of styles and practices with a focus on what to listen for in music. A brief opening section on ethnomusicology helps define the thread that connects the music of world cultures.

MUS 202 Introduction to Music and Its Literature 3 credits
Second course in sequence. See sequence information under course description for MUS 201.

MUS 203 Introduction to Music and Its Literature 3 credits
Third course in sequence. See sequence information under course description for MUS 201.

MUS 205 Introduction to Jazz History 3 credits
This course provides the student with listening skills and a historical overview of jazz from its origins to the present. Emphasis is on in-class listening and discussion of the music. No musical background is needed to take this class. Satisfies arts and letters and ethnic/gender/cultural diversity requirements.

MUS 211 Music Theory 2: (First Term) 3 credits
Prerequisite: MUS 113. This 3-term sequence is a continuation of Music Theory I (MUS111, 112, 113) with further studies of compositional techniques in tonal harmony. Emphasis of MUS 211 is on

chromaticism and analysis. Includes altered chords (N6 and augmented sixths chords), modal mixture and diatonic modulation. This course is designed to be taken in conjunction with MUS224 and MUS214 concurrently.

MUS 212 Music Theory 2 (Second Term)..... 3 credits
Prerequisite: MUS 211. Continuation of MUS 211, with chromatic elaboration and enharmonic modulation using fully diminished seventh chords, augmented 6ths and Mm 7ths. Emphasis of MUS 212 is on form and analysis including binary, ternary, rondo, variations, art song, and sonata form. This course is designed to be taken in conjunction with MUS225 and MUS215 concurrently.

MUS 213 Music Theory 2 (Third Term)..... 3 credits
Prerequisite: MUS 212 Emphasis for MUS 213 is on musical language of the 20th century, including modes, atonality, serialism, set theory, new forms and new organizations of rhythm and meter. This course is designed to be taken in conjunction with MUS226 and MUS216 concurrently.

MUS 214 Keyboard Skills 2 (First Term) 1 credits
Prerequisites: MUS129 This course is part of a 6-term sequence. It is designed to develop piano skills essential for all music majors. Keyboard skills II focuses on chromatic harmony. Skills include the performance of scales & arpeggios, chord progressions with modulations (including altered chords) with correct voice leading and resolution, harmonization, transposition, improvisation, realization of figured bass, sight-reading of 2-part piano texture. This course is designed to be taken in conjunction with MUS211 and MUS 224 concurrently.

MUS 215 Keyboard Skills 2(Second Term) 1 credits
Prerequisites: MUS214 or proficiency test. This course is part of a 6-term sequence. It is designed to develop piano skills essential for all music majors. Keyboard skills II focuses on chromatic harmony. Skills include the performance of scales & arpeggios, chord progressions with modulations (including altered chords) with correct voice leading and resolution, harmonization, transposition, improvisation, realization of figured bass, sight-reading of 2-part piano texture. This course is designed to be taken in conjunction with MUS212 and MUS225 concurrently.

MUS 216 Keyboard Skills 2(Third Term) 1 credits
Prerequisites: MUS215 This course is part of a 6-term sequence. It is designed to develop piano skills essential for all music majors. Keyboard skills II focuses on chromatic harmony. Skills include the performance of scales & arpeggios, chord progressions with modulations (including altered chords) with correct voice leading and resolution, harmonization, transposition, improvisation, realization of figured bass, sight-reading of 2-part piano texture. This course is designed to be taken in conjunction with MUS213 and MUS226 concurrently.

MUS 224 Sight-reading and Ear Training (First Term) 2 credits
Prerequisite: MUS 116. Continues development of student's perception, knowledge, and skills needed to notate melodies, 2 and 4 part harmonies. This course is designed to be taken in conjunction with MUS211 and MUS214 concurrently.

MUS 225 Sight-reading and Ear Training (Second Term)..... 2 credits
Prerequisite: MUS 224. Continues development of student's perception, knowledge, and skills needed to read and write music. This course is designed to be taken in conjunction with MUS212 and MUS215 concurrently.

MUS 226 Sight-reading and Ear Training (Third Term) 2 credits
Prerequisite: MUS 225. Continues development of student's perception, knowledge, and skills needed to read and write music. This course is designed to be taken in conjunction with MUS213 and MUS216 concurrently.

MUS 261 Music History 4 credits
Prerequisite: MUS 111, MUS112. History is a survey of the music, lives, and times of composers and other musicians that influenced the course of Western Music. Fall term covers basic stylistic concepts, Greek and Roman legacies, Medieval and Renaissance time periods (900 AD-1600AD).

MUS 262 Music History 4 credits
Prerequisite: MUS 111, MUS 112. Music History is a survey of the music, lives, and times of composers and other musicians that influenced the course of Western music. Winter term covers the

Baroque, Pre-Classic and Classic eras, including early Beethoven. (c.1600-1825)

MUS 263 Music History 4 credits
Prerequisites: MUS 111, MUS 112. Music History is a survey of the music, lives, and times of composers and other musicians that influenced the course of Western Music. Spring term covers the Romantic era (including middle to late Beethoven) through twentieth-century to the present (c.1800-present).

MUS 264 History of Rock Music 1 4 credits
This course is designed to provide the student with an opportunity to explore the musical, social and cultural aspects of Rock music from its pre-Rock influences and its development through c.1963, while learning about important artists in this style.

MUS 265 History of Rock Music 2 4 credits
This course is designed to provide the student with an opportunity to explore the musical, social and cultural aspects of Rock music from its pre-Rock influences and its development through 1964-1975, while learning about important artists in this style.

MUS 266 History of Rock Music 3 4 credits
This course is designed to provide an opportunity to explore the musical, social and cultural aspects of rock music from c.1975 through 1995, while learning about important artists in this style.

MUS 270 Jazz Theory 3 credits
This one-term course in jazz theory will introduce the student to concepts of jazz harmony, melody, rhythm, form, timbre and instrumental performance practice. The focus will be on analyses of jazz compositions and improvisation techniques, as well as traditional concepts of music theory. Students must be able to read music.

MUS 280 Co-op Ed: Music 3-12 credits
Co-op offers students on-the-job work experience in a music-related site. Students integrate theory and practice gained in the classroom with practical experience in the professional world. Students develop skills, explore career options and network with professionals and employers while earning credit toward a degree. Please contact music cooperative education coordinator before attempting to register.

MUS 290 Gospel Choir 2 credits
Gospel choir provides a performance opportunity for the student who does not read music. The ensemble will primarily explore traditional African-American sacred music from the early spirituals to today's contemporary gospel sound. Emphasis will be placed on both group and personal expression which historically characterized the well-springs of this music, which is native to the United States. No audition required; open to all Lane students. Repeatable for up to 12 credits.

MUS 291 Chamber Choir 2 credits
This is a select vocal ensemble that rehearses and performs choral chamber music from the medieval period to the present. Audition during first week of class. Students need to be able to read music. May be repeated up to 12 credits. May be transferred.

MUS 292 Vocal Jazz Ensemble 2 credits
Audition required during first week of class, fall term and as needed thereafter. Read, rehearse, and perform music of the vocal jazz idiom including swing, blues, Latin, and ballad styles. Student must have the ability to learn music on his/her own, be at rehearsal prepared and on time, and have an enthusiasm for the music. Vocal jazz also requires a full-year commitment. May be repeated up to 12 credits. May be transferred.

MUS 293 Jazz Combos 2 credits
Music reading or concurrent enrollment in MUS 101 is recommended. This course is for instrumentalists wishing to study jazz styles in a small group (combo) setting. Students form several small ensembles of up to seven players to study jazz standards from the Real Book and other jazz "fake books". Emphasis is placed on performance styles as well as fundamentals/elements of jazz theory as they relate to harmonic form and improvisation and listening. No audition required. May be repeated up to 12 credits. May be transferred.

MUS 294 Jazz Ensemble 2 credits
Jazz Ensemble is a class for students who wish to study jazz music in a performance environment. The class is limited to six saxophones, five trumpets, five trombones, piano, bass, guitar, and trap set. Audition required. The Lane Jazz Ensemble performs formal concerts on and off campus throughout the year (Fall, Winter, Spring). May be repeated up to 12 credits. May be transferred.

MUS 295 Symphonic Band 2 credits
Symphonic Band provides an opportunity for woodwind, brass, and percussion students to study, rehearse, and perform all types of concert band literature. An audition is recommended for new members though not required. Returning members do not need to audition. High school or college ensemble experience is recommended. The Lane Symphonic band performs at least one formal concert at the end of fall, winter and spring term. May be repeated up to 12 credits. May be transferred.

MUS 296 Chamber Orchestra 2 credits
This course blends the talents of experienced community instrumentalists with student musicians creating an excellent orchestra experience for all. Chamber orchestra plays three programs each year. Audition only. Rehearsals are Wednesday evenings, 7-9:50 p.m. May be repeated up to 12 credits. May be transferred.

MUS 297 Concert Choir 2 credits
This class is open to anyone interested in singing in a large ensemble. No prior experience is required. Students develop their vocal skills and learn music of various periods and styles in preparation for at least one public performance each term. May be repeated up to 12 credits. May be transferred.

Music Lessons

For information, contact the Music, Dance and Theatre Arts Department, Bldg. 6/ Rm. 204, 541.463.5209.

MUP 100 Individual Lessons 1-2 credits
Individual instruction in technical and stylistic aspects of solo performance for pre-and non-majors. Students receive 10 45-min lessons each term in their major instrument. Instruction is offered in the following: voice, piano, flute, oboe, clarinet, saxophone, bassoon, violin, trumpet, French horn, trombone, baritone horn, tuba, string bass, cello, viola, electric bass guitar, jazz guitar, classical guitar, harp, and percussion. No more than six hours credit may be earned in MUP 100 singularly or combined.

MUP 171 Individual Lessons: Piano (First-year level) 2 credits
Prerequisite: Jury required to enter this level. Individual instruction in technical and stylistic aspects of solo performance. Each term students enroll for one 45-minute lesson each week. Regular practice outside of lessons is expected. Consult with instructor regarding expectations. A term jury is required.

MUP 174 Individual Lessons: Voice (First-year level) 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 171.

MUP 175 Individual Lessons: Violin (First-year level) 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 171.

MUP 178 Individual Lessons: Bass (First-year level) 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 171.

MUP 181 Individual Lessons: Flute (First-year level) 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 171.

MUP 183 Individual Lessons: Clarinet (First-year level) 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 171.

MUP 184 Individual Lessons: Saxophone (First-year level) 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 171.

MUP 186 Individual Lessons: Trumpet (First-year level) 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 171.

MUP 187 Individual Lessons: French Horn (First-year level) 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 171.

MUP 188 Individual Lessons: Trombone (First-year level) 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 171.

MUP 189 Individual Lessons: Baritone Horn

(First-year level) 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 171.

MUP 190 Individual Lessons: Tuba (First-year level) 2 credits

Prerequisite: Jury required to enter this level. See course description for MUP 171.

MUP 191 Individual Lessons: Percussion

(First-year level) 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 171.

MUP 192 Individual Lessons: Electric Bass

(First-year level) 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 171.

MUP 194 Individual Lessons: Guitar

(First-year level) 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 171.

MUP 271 Individual Lessons: Piano (Second-year level) 2 credits

Prerequisite: Jury required to enter this level. Individual instruction in technical and stylistic aspects of solo performance. Each term students enroll for one 45-minute lesson each week. Regular practice outside of lessons is expected. Consult with instructor regarding expectations.

MUP 274 Individual Lessons: Voice (Second-year level) 2 credits

Prerequisite: Jury required to enter this level. See course description for MUP 271.

MUP 275 Individual Lessons: Violin (Second-year level) 2 credits

Prerequisite: Jury required to enter this level. See course description for MUP 271.

MUP 281 Individual Lessons: Flute (Second-year level) 2 credits

Prerequisite: Jury required to enter this level. See course description for MUP 271.

MUP 283 Individual Lessons: Clarinet

(Second-year level) 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 271.

MUP 284 Individual Lessons: Saxophone

(Second-year level) 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 271.

MUP 286 Individual Lessons: Trumpet

(Second-year level) 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 271.

MUP 287 Individual Lessons: French Horn

(Second-year level) 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 271.

MUP 288 Individual Lessons: Trombone

(Second-year level) 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 271.

MUP 289 Individual Lessons: Baritone Horn

(Second-year level) 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 271.

MUP 291 Individual Lessons: Percussion

(Second-year level) 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 271.

MUP 292 Individual Lessons: Electric Bass

(Second-year level) 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 271.

MUP 294 Individual Lessons: Guitar

(Second-year level) 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 271.

Nursing

For information, contact the Health Professions Division, Bldg. 4/Rm. 222, 541.463.5617. You must be accepted into the Nursing program to take these classes.

EL 115H Effective Learning: Health Science Majors 3 credits

This course is designed for health occupation majors who wish to strengthen their study skills and strategies. Students will learn how to take notes from lectures and textbooks, study for tests, improve memory, read and study from textbooks, manage time effectively, and use the library. Course work requires college-level reading skills.

HO 090 Nursing Assistant 8 credits

This course is designed to prepare the student in a course of study of basic level nursing care and skills. The course curriculum is established by the Oregon State Board of Nursing. Individuals satisfactorily completing all requirements of this course are eligible to sit for the Oregon State Board of Nursing competency examinations. The course includes both didactic and clinical instruction and evaluation. A criminal background check is required for each student and fingerprinting may be required. Enrollment restricted to pre-nursing and pre-respiratory care students.

NRS 110A Foundations of Nursing-Health Promotion 4 credits

Prerequisite: Admission in Nursing Program. Corequisite: NRS 110B. This course introduces the learner to framework of the OCNE curriculum. The emphasis is on health promotion across the life span includes learning about self-health as well as client health practices. To support self and client health practices, students learn to access research evidence about healthy lifestyle patterns and risk factors for disease/illness, apply growth and development theory, interview clients in a culturally-sensitive manner, work as members of a multi-disciplinary team giving and receiving feedback about performance, and use reflective thinking about their practice as nursing students. The family experiencing a normal pregnancy is a major exemplar.

NRS 110B Foundations of Nursing-Health

Promotion Clinical Lab 5 credits
Clinical Lab required for NRS110A.

NRS 111A Foundations of Nursing in Chronic Illness 1 2 credits

This course introduces assessment and common interventions (including technical procedures) for clients with chronic illnesses common across the life span in major ethnic groups within Oregon. The client and family' "lived experience" of the illness, coupled with clinical practice guidelines and extant research evidence is used to guide clinical judgments in care to the chronically ill. Roles of multidisciplinary team in care of the chronically ill, and legal aspects of delegations are explored. Through case scenarios, cultural, ethical, health policy, and health care delivery system issues are explored in the context of the chronic illness care. Case exemplars include children with asthma, adolescent with a mood disorder, adult-onset diabetes, and older adults with dementia. (Concurrent with Pathophysiology 1 and Pharmacology 2). (Can follow Foundations of Nursing in Acute Care I).

NRS 111B Foundations of Nursing in

Chronic Illness 1-Clinical Lab 4 credits
Corequisite: NRS 111A. Clinical Lab required for NRS111A.

NRS 112A Foundations of Nursing in Acute Care 1 2 credits

Prerequisite: NRS 111A and NRS 111B and WR 123 or WR 227 and admission in the Nursing Program. Corequisite: NRS 112B. This course introduces the learner to assessment and common interventions (including relevant technical procedures) for care of patients across the life span who require acute care, including normal childbirth. (Disease/illness trajectories and their translation into clinical practice guidelines and/or standard procedures are considered in relation to their impact on providing culturally sensitive, client-centered care. Includes classroom and clinical learning experiences.

NRS 112B Foundations of Nursing in

Acute Care 1 Clinical Lab 4 credits
Corequisite: NRS 112A Clinical Lab required for NRS112A.

NRS 115A LPN Transition to OCNE 5 credits
Prerequisite: NRS 231 and NRS 233 This course introduces the learner to framework of the OCNE curriculum including the OCNE competencies and benchmarks and the clinical judgment model. The student is introduced to the role and practice of the registered nurse. Concepts and applicability of the ANA Code of Ethics will be emphasized. Students will be introduced to evidenced-based care including levels of evidence. Concepts of health promotion, chronicity and acuity as applied to nursing practice will be explored. Case studies will be used to provide students opportunities to demonstrate critical thinking in the provision of patient care. The course includes classroom, web-based, and independent learning experiences.

NRS 115B LPN Transition to OCNE-Lab 1 credits
Prerequisites: NRS 231 and NRS 233 Corequisite: NRS 115A In this course the learner employs the OCNE competencies, clinical judgment model, concepts introduced in NRS 115A, and previously acquired skills in simulation and laboratory experiences. The student is introduced to and will practice intentional learning and reflection related to the role and practice of the person preparing to be a registered nurse. Discussion and application of the ANA Code of Ethics will be emphasized. Evidence-based patient care will be emphasized. Concept Based Learning Activities may be employed. The course includes simulation and campus lab learning experiences including evaluation of certain clinical skills. Students will begin development of a portfolio of documentation of previous experience as an LPN, other previous work experiences, nursing education documentation, selected health information, professional licenses and certifications, etc.

NRS 221A Foundations of Nursing in Chronic Illness 2 and End of Life 4 credits
Prerequisite: NRS 112A and NRS 112B and admission in the Nursing Program. Corequisite: NRS 221B. This course builds on Foundations of Nursing in Chronic Illness I. The evidence base related to family care giving and symptom management is a major focus and basis for nursing interventions with patients and families. Ethical issues related to advocacy, self determination, and autonomy is explored. Complex skills associated with symptom management, negotiating in interdisciplinary teams, and the impact of individual and family development cultural beliefs are included in the context of client and family centered care. Exemplars include patients with chronic mental illness and well as other chronic conditions and disabilities affecting functional status and family relationships.

NRS 221B Foundations of Nursing in Chronic Illness 2 and End-of-Life Clinical Lab 5 credits
Corequisite: NRS 221A. Clinical Lab required for NRS221A.

NRS 222A Foundations of Nursing in Acute Care 2 & End-of-Life 4 credits
Prerequisite: Admission in Nursing Program. This course builds on Nursing in Acute Care I, focusing on more complex and/or unstable patient care situations, some of which require strong recognition skills, rapid decision making, and some of which may result in death. The evidence base supporting appropriate focused assessments, and effective efficient nursing interventions is explored. Life span and developmental factors, cultural variables, and legal aspects of care frame the ethical decision-making employed in patient choices for treatment or palliative care within the acute care setting. Case scenarios incorporate prioritizing care needs, delegation and supervision, family and patient teaching for discharge planning or end-of-life care. Exemplars include acute psychiatric disorders, pregnancy-related complications, as well as acute conditions affecting multiple body systems.

NRS 222B Foundations of Nursing in Acute Care 2 & End-of-Life Clinical Lab 5 credits
Corequisite: NRS 222A. Clinical Lab required for NRS222A.

NRS 224A Integrative Practicum 1 2 credits
Prerequisite: NRS 222A and NRS 222B and admission in the Nursing Program. Corequisite: NRS 224B. This course is designed to formalize the clinical judgments, knowledge and skills necessary in safe, registered nurse practice. The preceptor model provides a context that allows the student to experience the nursing work world in a selected setting, balancing the demands of job and life long learner. Faculty/preceptor/student analysis and reflection throughout the experience provide the student with evaluative criteria against

which they can judge their own performance and develop a practice framework. Required for AAS and eligibility for RN licensure.

NRS 224B Integrative Practicum 1 Lab 7 credits
Corequisite: NRS 224A. Clinical Lab required for NRS224A.

NRS 230 Clinical Pharmacology 1 3 credits
Prerequisite: Admission in the Nursing Program. This course introduces the theoretical background that enables students to provide safe and effective care related to drugs and natural products to persons throughout the lifespan. Students will learn to make selected clinical decisions regarding using current, reliable sources of information, monitoring and evaluating the effectiveness of drug therapy, teaching persons from diverse populations regarding safe and effective use of drugs and natural products, intervening to increase therapeutic benefits and reduce potential negative effects, and communicating appropriately with other health professionals regarding drug therapy. Drugs are studied by therapeutic or pharmacological class using an organized framework. May be offered as a live interactive courses.

NRS 231 Clinical Pharmacology 2 3 credits
Prerequisite: NRS 230 and admission in the Nursing Program. This sequel to Clinical Pharmacology I continues to provide the theoretical background that enables students to provide safe and effective care related to drugs and natural products to persons throughout the lifespan. Students will learn to make selected clinical decisions regarding using current, reliable sources of information, monitoring and evaluating the effectiveness of drug therapy, teaching persons from diverse populations regarding safe and effective use of drugs and natural products, intervening to increase therapeutic benefits and reduce potential negative effects, and communicating appropriately with other health professionals regarding drug therapy. The course addresses additional classes of drugs and related natural products not contained in Clinical Pharmacology 1. May be offered as a live interactive courses.

NRS 232 Pathophysiological Processes 1 3 credits
Prerequisite: BI 112 and BI 233 or BI 112 and BI 102G or BI 101F and BI 233 or BI 211 and BI 233 or BI 101K and BI 233 or BI 101K and BI 102G. Admission in Nursing Program. This course introduces pathophysiological processes that contribute to many different disease states across the lifespan and human responses to those processes. Students will learn to make selective clinical decisions regarding using current, reliable sources of pathophysiology information, selecting and interpreting focused assessments based on knowledge of pathophysiological processes, teaching persons from diverse populations regarding pathophysiological processes, and communicating with other health professionals regarding pathophysiological processes. Prerequisites: Anatomy and Physiology sequence; Microbiology. May be offered as a live interactive courses.

NRS 233 Pathophysiological Process 2 3 credits
Prerequisite: NRS 232 and admission in the Nursing Program. This sequel to Pathophysiological Processes I continues to explore pathophysiological processes that contribute to disease states across the lifespan and human responses to those processes. Students will learn to make selective clinical decisions regarding using current, reliable sources of pathophysiology information, selecting and interpreting focused assessments based on knowledge of pathophysiological processes, teaching persons from diverse populations regarding pathophysiological processes, and communicating with other health professionals regarding pathophysiological processes. The course addresses additional pathophysiological processes not contained in Pathophysiological Processes I. May be offered as a live interactive courses.

NRS 280 Co-op Ed: Nursing 2-12 credits
Prerequisite: Admission in Nursing Program. Cooperative education is a voluntary experience beyond the formal requirements of the Associate Degree Nursing Program. Nursing students in Cooperative Education are eligible to earn college credit for job related activities in professional medical settings.

PN 101A Practical Nursing 1 8 credits
Prerequisite: Admission in the Practical Nursing program. This course is the first of three terms in the Practical Nursing Program. Content covered in the classroom and lab will include: the role and accountability of the practical nurse, nursing process/critical thinking, Health Information Privacy Protection Act (HIPPA), therapeutic communication skills, physiological and psychological effects

of aging, loss and grief, documentation, nutrition, medical and surgical sepsis, pharmacology, and homeostasis and fluid and electrolyte balance. Skills taught during this course will include sterile technique, infection control, catheter care, pressure ulcer prevention and management, fall prevention, proper use of lifts and mobility devices, medication administration, oxygen administration, and physical assessment. Clinical application will take place in the nursing lab and in long-term care facilities. May be offered online.

PN 101B Practical Nursing 1 Lab..... 4 credits
Corequisite: PN 101A. Clinical Lab required for PN 101A.

PN 102A Practical Nursing 2..... 8 credits
Prerequisite: PN 101A and PN 101B. Corequisite: PN 102B. Classroom content continues the application of the nursing process and the practical nursing scope of practice in selected medical-surgical areas including care of patients with cardiovascular, endocrine, respiratory, gastrointestinal, and renal disorders, and care of the patient having surgery. Pain management and an introduction to mental health disorders are also included in this course. Skills taught this term include care of ostomies and nasogastric and small-bore feeding tubes, urinary catheter insertion, capillary blood sugar measurement, injectable and enteral medication administration, application of antithromboembolic devices, intravenous therapy (maintenance IVs--hanging and programming rates), care of surgical drains, and suture removal. Clinical application of theory content will take place in the Simulation lab and in the acute care setting.

PN 102B Practical Nursing 2 Lab..... 4 credits
Corequisite: PN 102A. Clinical Lab required for PN 102A.

PN 103A Practical Nursing 3..... 8 credits
Prerequisites: PN 102A and PN 102B. Corequisite: PN 103B. Course content this term integrates information taught in PN 101 and 102. Classroom content will be specific to care of persons with cancer and other hematological disorders, immune disorders, disorders of the musculoskeletal system, disorders of the neurological system, mental health disorders, and reproductive disorders. Caring for pediatric patients and obstetrical patients will be included as well. In addition, trends in practical nursing will be addressed in this course. Skills taught this term will include administration of intravenous medications and care of patients with tracheostomies, chest tubes, or on ventilators. Clinical application of theory content will take place in the Simulation lab and in the acute-care and clinic settings.

PN 103B Practical Nursing 3 Lab..... 4 credits
Corequisite: PN 103A. Clinical Lab required for PN 103A.

PN 104 Practical Nursing 4..... 1 credits
Prerequisite: PN 103A and PN 103B. Practical Nursing 4 is a clinical practicum experience designed to facilitate the transitional process from student practical nurse to beginning licensed practical nurse. By completing an individualized, concentrated clinical experience in an identified area of interest or where more solidification of competence has been deemed necessary by the student and instructors, students will be able to focus on clinical decision making skills demonstrating the ability to implement nursing actions that reinforce previous practical nursing didactic content within the organizing framework of the concepts of the individual, society, health and the nursing process. Nursing care provided by the student will take place primarily in the long term care, acute care, or community care setting during their experience working closely with a Clinical Teaching Associate (CTA).

PTA 280A Co-op Ed: First Clinical Affiliation..... 6 credits
Prerequisite: Admission in PTA Program Second year PTA students apply PT interventions under PT/PTA supervision at a contracted clinical site. Students progress toward entry-level PTA practice by demonstrating communication and critical thinking for the workplace. This is the first of three off-campus clinical learning experiences.

PTA 280B Co-op Ed: Second Clinical Affiliation..... 6 credits
Prerequisite: Admission in PTA Program Second year PTA students apply PT interventions under PT/PTA supervision at a contracted clinical site. Students progress toward entry-level PTA practice by demonstrating communication and critical thinking for the workplace. This is the second of three clinical learning experiences.

PTA 280C Co-op Ed: Third Clinical Affiliation..... 6 credits
Prerequisite: Admission in PTA Program Second year PTA students apply PT interventions under PT/PTA supervision at a contracted clinical site. Students progress toward entry-level PTA practice by

demonstrating communication and critical thinking for the workplace. This is the third and final of three off-campus clinical learning experiences.

Nutrition

For information, contact the Health Professions Division, Bldg. 4/Rm. 222, 541.463.5617.

FN 105 Nutrition for Foodservice Professionals..... 3 credits
As nutrients function, food sources and guidelines are discussed, issues concerning those nutrients and the sustainability of our food system will also be explored. Some of the other topics include digestion, food allergies, vegetarianism, eating disorders, and religious/spiritual eating traditions. May be offered online.

FN 110 Personal Nutrition..... 3 credits
Introductory class to develop skills for improving healthy eating choices. Students will evaluate media messages, food products and their own diet. They will learn healthy cooking techniques & share budget friendly recipes. Does NOT satisfy the nutrition requirement for health profession programs.

FN 190 Sports Nutrition..... 2 credits
This course presents the role of a variety of nutrients in maintaining a body that is healthy and that supports athletic performance. Skills are developed to create an eating and hydration plan to support athletic performance and to stay well-nourished. May be offered online.

FN 206 Co-op Ed: Dietary Manager Seminar..... 2 credits
Prerequisites or Corequisites: CA 175, CA 184 and HRTM 265. This course focuses on developing food service management skills within an institution. The content is designed to prepare students for their cooperative education experience, the dietary manager credentialing examination, and their professional careers. May be offered online.

FN 225 Nutrition..... 4 credits
Food sources, functions, and requirements of the major nutrients are discussed. Nutrient utilization, deficiencies, toxicities and their relationship to disease prevention will be covered. This course is designed for health profession majors. No chemistry prerequisite is required. May be offered online.

FN 230 Family Food and Nutrition..... 3 credits
This course focuses on how to prepare and offer a variety of nutrient dense foods to families in an environment that helps family members develop a positive approach to eating. Nutritional guidelines are discussed for infants and the younger and older child. Ideas for menu planning and recipes are given. May be offered online.

FN 240 Intro to nutrition & Metab..... 4 credits
Prerequisites: CH 112 or CH 221 This course will cover similar topics to FN225, but will go into more depth on the process of digestion, absorption, and metabolism of the major nutrients. This course is designed for health profession and dietetic majors who have a strong science background. General chemistry is a prerequisite.

FN 255 Medical Nutrition Therapy..... 3 credits
Prerequisite: FN 225 or FN 105. This course covers the fundamental principles of medical nutrition therapy for diseases including heart disease, diabetes, cancer, renal disease, and more. Class activities will discuss the purposes and procedures for culturally competent nutrition screening, documentation, education, and verbal communication. May be offered online.

FN 280 Co-op Ed: Dietary Manager..... 4 credits
Prerequisite: FN 206 and FN 255. This is a supervised internship to gain experience in food production, food service management, human resource management, sanitation and food safety, and nutritional care principles within clinical and community environments.

Occupational Skills

For information, contact the Cooperative Education Division, Bldg. 19/Rm. 231, 541.463.5203.

CSK 101 Career Skills Training..... 1-6 credits
Prerequisite: Instructor approval required. Co-requisite: Only available to students who have been referred by a Workers Compensation, State Vocational Rehabilitation, or a Veterans Administration counselor. This lab course follows a set curriculum in introductory workforce skills under the guidance of a cooperating employer in the students' chosen field.

GWE 180 Co-op Ed: General Work Experience.....3-12 credits
Prerequisite: Instructor approval. This course provides on-the-job learning experiences in community businesses and organizations. Students develop employability skills, explore career options and network with professionals and employers while earning college credit that may be applied toward a certificate or degree.

GWE 280 Co-op Ed: General Work Experience.....3-12 credits
Prerequisite: Instructor approval. This internship course provides on-the-job learning experiences in community businesses and organizations. Students will develop work place skills, explore career options and network with professionals and employers while earning credit toward a degree.

OST 280 Co-op Ed: Occupational Skills.....1-12 credits
Prerequisite: Instructor approval required. In this course students earn college credit for on-the-job work experience related to his or her educational and career goals. Students integrate theory and practice, develop skills, expand career knowledge and make contact for future employment. Twenty to 26 credits of co-op are required for the Occupational Skills certificate.

OST 280CE Co-op Ed:.....3-12 credits
Prerequisite: Instructor approval. This course provides relevant field experience that integrates theory and practice while providing opportunities to develop skills, explore career options and network with professionals and employers. Students engage in on-the-job learning experiences related to their course of study in community business, industry and/or governmental sites.

Office Assistant—See Administrative Support

Paramedic—See Emergency Medical/Paramedic

Parent Education—See Early Childhood Education

Philosophy and Religion

For information, contact the Social Science Division, Center Bldg./Rm. 403, 541.463.5427.

PHL 201 Ethics 4 credits
Ethics is the study of morality, including an analysis of the concepts of good and evil, right and wrong, justice and injustice, duty, responsibility, character, and successful living. Possible topics include whether morality is relative to culture or to the individual, the relationship between morality and religion, theories about what make particular actions right or wrong, moral skepticism, and eastern perspectives on right action. May be offered online.

PHL 202 Theories of Knowledge..... 4 credits
Theories of knowledge (epistemology) address such issues as the nature of knowledge, how it differs from mere opinion, and whether knowledge comes primarily through the senses, reason, intuition or revelation. Additional topics may include: modern theories about what justifies belief, the role of subjectivity in knowing, and whether there may be different kinds of knowledge or limits to what we can know. May be offered online or as a live telecourse.

PHL 203 Theories of Reality..... 4 credits
Theories of reality (metaphysics) is an attempt to discover and describe the underlying nature of existence. Possible topics include the nature of the self, the relationship between matter and consciousness, free will, the existence of God, death, and the meaning of life. These topics may be approached from the perspective of both Eastern and Western philosophy. May be offered online or as a live telecourse.

PHL 205 Contemporary Moral Issues 4 credits
This course focuses on ethical issues, which affect our daily lives in personal, social, and political spheres. Issues covered will vary by instructor, but may include our duties to animals and the environment; consumerism and materialism; issues in bioethics such as abortion, euthanasia, human cloning and genetic engineering; the proper size and scope of government; crime, including 'victimless' crimes such as drugs, pornography and prostitution; poverty, both in the U.S. and abroad; war; free speech and other personal liberties; and various forms of discrimination and prejudice. May be offered online. May be offered online or as a live telecourse.

PHL 205_H Contemporary Moral Issues..... 4 credits
This class is an honors option available to students prepared to

complete honors-level coursework. Honors options delve deeper into course topics and require a high level of student motivation; the pace may be faster than non-honors courses. WR 121-readiness (score of at least 96 on the sentence-skills placement test) recommended. Contact the instructor and visit lanec.edu/honors for more information. This course focuses on ethical issues, which affect our daily lives in personal, social, and political spheres. Issues covered will vary by instructor, but may include our duties to animals and the environment; consumerism and materialism; issues in bioethics such as abortion, euthanasia, human cloning and genetic engineering; 'victimless' crimes such as drugs, pornography and prostitution; poverty, both in the U.S. and abroad; war; free speech and other personal liberties; and various forms of discrimination and prejudice.

PHL 221 Critical Thinking..... 4 credits
This course is aimed at developing practical reasoning skills. Students will learn to analyze and evaluate arguments, detect fallacies, distinguish science from pseudo-science, recognize media bias, and better understand methods of deception employed by advertisers, political organizations and others. A central goal of this course is to develop an attitude of fair-mindedness and intellectual honesty while learning to avoid the pitfalls of defensiveness and rationalization.

REL 160 World Religions..... 4 credits
An interdisciplinary survey of world religions covering methodology in the study of religion and a brief overview of Indigenous Religions, Judaism, Christianity, Islam, Hinduism, Buddhism, Jainism, Daoism, Confucianism and new religions.

REL 201 Religions of India (Hinduism, Buddhism) 4 credits
This course introduces students to some of the major religious traditions of India, such as Hinduism, Buddhism, Sikhism and Jainism. The central beliefs and practices of these traditions may be approached historically, culturally, and/or through their essential wisdom teachings and how these apply to daily life. Emphasis will vary by instructor.

REL 202 Religions of China and Japan (Taoism, Confucianism, Buddhism, and Shinto) 4 credits
This course introduces students to some of the major religious traditions of China, Japan and other East Asian cultures, such as Buddhism, Confucianism, Taoism and Shinto. The central beliefs and practices of these traditions may be approached historically, culturally and/or through their essential wisdom teachings and how these apply to daily life. Emphasis will vary by instructor.

REL 203 Religions of the Middle East (Judaism, Christianity, and Islam) 4 credits
This course introduces students to three major religious traditions which emerged from and developed in the Middle East: Judaism, Christianity, and Islam. The central beliefs and practices of these traditions may be approached historically, culturally, and/or through their essential wisdom teachings and how these apply to daily life. Emphasis will vary by instructor. May be offered online or as a live telecourse.

REL 211 Introduction to the Bible..... 4 credits
This course reviews the history, content and organization of the Jewish and Christian scriptures that make up the canon of the Bible. Historical and critical analysis will be used to explore the authorship, worldviews, and values found in key texts of the Bible.

REL 230 Christian Beginnings 4 credits
This course traces Christianity from its days as a persecuted Jewish sect to its establishment as the official religion of the Roman Empire. Topics will include the quest for the historical Jesus, Christianity's Jewish roots, influences from Greco-Roman religion and philosophy, how the New Testament was compiled, and how official Christian doctrine was decided. A central focus of this course will be to discover to what extent the historical Jesus and early Christianity may differ from later institutional and modern expressions of Christian faith.

REL 243 Nature, Religion and Ecology 4 credits
This course explores how different religious traditions and the cultures influenced by them view nature and the place of humankind within the natural environment. Native, Asian, and Western traditions are examined, as are contemporary eco-spiritual thinkers and movements. Class discussion for the students to apply the material in current social and personal contexts will be an integral part of the course.

Photography

For information, contact the Art and Applied Design Department, Bldg. 11/Rm. 101, 541.463.5409.

ART 113 History of Photography 1: 1700-1910 3 credits

Explores photography from its origins in 18th century experiments to developments up to the beginning of the 20th century. Course modules examine the development of specific types of photography and how each type influenced worldviews. Photographs are examined in both cultural and critical terms, allowing students to think critically about photographs as well as their place in society. The course may be taught via distance learning. It requires the student to develop information literacy skills, as well as to improve basic research and writing skills.

ART 213 History of Photography 2: 1910-1950 3 credits

An exploration of the origins of photography from 1910 to 1950. Course modules explore the development of specific types of photography, and how they influenced the worldviews. Photographs are examined in cultural and critical terms, allowing students to think critically about photographs as well as their place in a society. The course may be taught via distance learning, and requires the student to develop information literacy skills, as well as to improve basic research and writing skills.

ART 220 Documentary Photography 3 credits

Explore the creation and historical impact of documentary photography. Lecture and discussion is based on the impact of images through history and how images of historical, cultural, and social significance are helping to shape our contemporary history and viewpoints. Students will create a still-photo documentary story during the term.

ART 261 Photography 1 3 credits

An introduction to the history and fundamentals of photography. Emphasis is on camera handling, manual exposure control, composition, and basic color theory. Includes a demonstration on the theory of black-and-white film processing and printing.

ART 262 Photography 2 3 credits

Prerequisite: ART 261. Hands-on experience in black-and-white film processing, printing, and image control in the darkroom. Medium format cameras and advanced shooting, composition, and camera-handling techniques are introduced through a variety of shooting assignments.

ART 264 Photography as Method:

Mixed Media Approaches with Photography 4 credits

Prerequisite: ART 131, or ART 261, or ART 115, or ART 115GD, or ART 288. Introduces students to analogue mixed media methods of working with photographic imagery. The course focuses on the introduction, discussion of, and experimentation with new analogue mixed-media based methods. Students will develop and create a focused body of work on a particular theme, topic, or media exploration. The first section of the course will focus on an introduction of and experimentation with new analogue mixed-media based methods. Methods introduced will include, but are not limited to: Photo transfer, photo collage and montage, over drawing, masking, hand coloring, and three-dimensional assemblage.

ART 265 Studies in Contemporary Photography 3 credits

Study of the major commercial and artistic trends in photography from 1960 to the present. Entails critical reviews of the relationship of photography to significant cultural, political, and artistic trends of the recent past.

ART 282 Landscape and Architectural Photography 4 credits

Combines the formal issues of photography with the specific subjects of photographing landscape and architecture. Through weekly assignments photographing in the field, students apply fundamental concepts and gain a critical understanding of the role of photography in architecture and landscape architecture. All camera types and skill levels appropriate for this course.

ART 283 Fine Art Black/White Photography and Printing 3 credits

Prerequisite: ART 262. A course in advanced darkroom and photographic printing techniques for aspiring professionals and artists. Focus is on black-and-white photography featuring medium and large format cameras. Content includes an introduction to platinum printing and assignments promoting development of skill necessary for artists and photographers. Repeatable up to 3 credits.

FA 256 Lighting for Photography 3 credits

An introduction to the basics in lighting for photography. Students learn how to work within a studio environment and on location. All students work with professional lighting equipment and learn the basics in setting up, metering, and shooting portraits and basic commercial products. Students also learn the basics in camera and lens variations, film stock, digital output, and editing.

J 134 Photojournalism 3 credits

This course is designed to work within the field of content. Content is not only the first step in good photojournalism, but also the first step in good art-making. The course will explore how you see an image, choose to share that image, and the message your images carry. Other topics include the history of photojournalism and the cross-over from documentary photography to the world of art.

J 234 Photojournalism 2 4 credits

Prerequisite: J 134. A continuation of Photojournalism with the continued discussion of content and ethics of the field. Students learn how to create editorials, identify the differences between news and human interest, develop funding for non-mainstream stories, and self-promote in the competitive field of photojournalism. Students prepare their work through editorial processing and presentation.

MUL 214 Digital Photography 3 credits

Prerequisite: ART 261. Overview of digital camera types, technologies, camera controls, managing file resolutions, formats, and backup strategies. Also covers migration of traditional photographic skills to a digital workflow, using photo editing software, practical sharing technologies (email, web and print), and anticipated trends in the industry. Software emphasis will be on iPhoto, Photoshop, and Aperture.

Physical Education

Also see Dance and Fitness Training

For information, contact the Health and PE Division, Bldg. 5/Rm. 205, 541.463.5545.

PE 181C Combination Aerobics 1 credits

This rhythmic aerobics class is designed to increase cardiovascular fitness and muscular endurance through a variety of exercise formats. Students participate in a variety of formats such as step aerobics, dance aerobics, circuit training, interval training and kick-boxing aerobics.

PE 181K Kickboxing Aerobics 1 credits

Martial arts-inspired movements are combined with classic sports drills to create a challenging and fun rhythmic workout. This course will allow students the opportunity to progressively enhance their fitness levels by offering various impact and intensity options.

PE 181SB Body Sculpt 1 credits

Body Sculpt is designed to increase muscular strength and endurance as well as enhance cardiovascular fitness. Participants utilize hand weights and resistance bands as well as their own body weight to develop muscle firmness and definition while burning fat.

PE 181SS Step and Sculpt 1 credits

Step & Sculpt is designed to increase muscular strength and endurance and strength as well as enhance cardiovascular endurance. Participants learn and execute both step aerobics combinations and resistance exercises to experience the benefits of both approaches.

PE 181Y Yogilates 1 credits

Yogilates incorporates the principles and methods of Pilates and Yoga to promote flexibility, balance, and core strength. Participants progress individually as exercises are taught at various levels to improve coordination, confidence, body awareness and body appreciation.

PE 182A Scuba Diving 1 credits

Initial course covering necessary skills and knowledge for students not yet certified in scuba diving. Diving skills like buoyancy control, equipment usage and diver safety will be covered, resulting in a PADI Open Water certification. Students are required to supply personal SCUBA mask and snorkel.

PE 182B Scuba Diving Advanced 1 credits

Students must already be SCUBA certified. Further develops scuba diving skills including night diving, navigation, and deep diving, resulting in a PADI Advanced certification. Students may opt for a

single specialty training instead. Students are required to supply personal SCUBA mask and snorkel.

PE 182C Rescue Diver 1 credits
Students must already be Advanced SCUBA certified. The course covers self-rescue, diver stress, first aid equipment, and diver tows among other subjects. Students must be CPR certified. This course results in a PADI Rescue Diver. Students are required to supply personal SCUBA mask and snorkel.

PE 182D Divemaster 1 1 credits
Students must already be Rescue SCUBA certified. The Divemaster 1 course covers diving management and control, supervising students, physics, physiology, and equipment. Upon completion of the Divemaster 1 curriculum, the candidate is eligible to participate in the Divemaster 2 program.

PE 182E Divemaster 2 1 credits
Prerequisite: PE 182D Students will provide assistance to new students enrolled in lower level scuba classes. The course is an internship format. Upon completion the candidate will have attained a PADI Divemaster rating and be eligible for instructor level training.

PE 183A Conditioning 1 credits
Various instructor-led activities utilize fitness equipment to enhance overall fitness. This progressive, cross-training approach is designed to improve strength, endurance, flexibility, and core stability. Nutrition and stress management concepts will be introduced.

PE 183B Exercise and Weight Control 1 credits
Designed for individuals who would like to alter their body composition and control their weight. Class offers instructor-led activities to gain benefits related to regular exercise, including enhanced fitness and improved confidence. Nutrition and stress management concepts will be introduced.

PE 183C Exercise Walking 1 credits
Emphasis is on a progressive walking program to develop, maintain and assess cardiovascular fitness, and muscle endurance. Instruction will include: joint flexibility, proper technique, training principles, workout attire, injury prevention and nutrition. A variety of routes will be used.

PE 183CG Group Cycling 1 credits
Designed to improve cardiovascular endurance, while enhancing cycling skills and mechanics. Instructor-led workouts are performed on stationary cycles using a variety of cycling specific body positions and drills. Options for intensity are provided. Supplemental muscular training methods are presented to enhance overall conditioning.

PE 183E Fitness Circuits 1 credits
This is an advanced fitness class that utilizes fitness circuits to improve overall endurance, strength, and flexibility. Circuit difficulty will progress throughout the quarter. Various exercise equipment will be used. Concepts on nutrition, stress management and weight control are introduced.

PE 183F Fitness Education: Introduction 1 credits
Students are guided in creating a balanced, personal fitness program in a supportive and noncompetitive environment. After completing a mandatory orientation (see PE 183FO), students attend exercise sessions to fulfill course requirements and meet personal fitness goals. All fitness levels welcome.

PE 183FO Fitness Education: Orientation 0 credits
Students registered for Fitness Education: Introduction must register for this one time, mandatory orientation. This orientation covers course policies, grading, and general fitness information. Assistance is provided in developing a personalized exercise program for the student.

PE 183G Fitness Education: Returning 1 credits
For students who have completed PE 183F and wish to continue their fitness program. Course opportunities include: personal training, fitness and health seminars, and fitness assessments. Students attend exercise sessions to fulfill course requirements and meet personal fitness goals.

PE 183J Jogging 1 credits
Emphasis is on a progressive jogging program to develop, maintain and assess cardiovascular fitness, and muscle endurance. Instruction will include: joint flexibility, proper technique, training principles,

workout attire, injury prevention and nutrition. A variety of routes will be used.

PE 183R Stability Ball Fitness 1 credits
Students perform exercises with a stability ball focusing on increasing core stability muscular strength, endurance, flexibility, balance, and coordination. Light weights, resistance bands and weighted balls will be used during workouts. Nutrition and stress management concepts will be introduced.

PE 183S Strength Training 1 credits
Emphasis on progressive resistance training using a variety of exercise modalities including barbells, dumbbells, resistance bands, body weight, and machines. Develop and assess strength, muscular size, muscle definition, toning, and improve general physical condition. Safe and proper technique, routines, programs, and nutrition will be discussed.

PE 183U Strength Training for Women 1 credits
Learn safe and correct techniques with free weights, machines, bands, stability balls and more, to tone and strengthen major muscles. Instruction in basic anatomy, terminology, nutrition, and exercise principles associated with resistance training. Open to women of all ages and experience levels.

PE 183W Fitness Through Corrective Exercise 1 credits
Students perform individualized or small group programs to improve fitness in both the injured and individuals with controlled diseases. Exercise programs may include: flexibility, strength, and cardiovascular endurance. Must be able to exercise independently with minimal supervision or assistance.

PE 184A Archery 1 credits
Beginning and experienced students will learn safety, use of equipment, basic rules, etiquette, terminology and skill techniques to shoot at different size targets at various distances. All equipment provided. If you have your own equipment, ask instructor if it is suitable for our range.

PE 184AI Archery Intermediate 1 credits
Designed for experienced archers to improve basic skills and develop more consistency in form, aiming, techniques and scoring at a variety of distances and targets. All equipment provided. If you have your own equipment, ask instructor if it is suitable for our range.

PE 184B Badminton 1 credits
Learn badminton and improve fitness through skill drills and game play. Footwork, grip, forehand and backhand shots, scoring, terminology, etiquette, singles and double play, game strategy and rules will be covered. Designed for all skill levels. Equipment provided, but may bring own racquet.

PE 184D Bowling 1 credits
Development and improvement of skills for a social and popular recreational lifetime activity. Fundamentals of spot bowling and line bowling techniques used for both straight and hook deliveries. Rules, scoring and etiquette will be covered. Designed for beginning bowlers.

PE 184F Fencing 1 credits
Instruction in basic foil fencing skills, including offensive and defensive skills, rules, etiquette, judging, and bout experience. Class includes warm-up and stretching skills.

PE 184FI Fencing Intermediate 1 credits
Prerequisite: PE 184F with a C- or better or instructor approval. Students will review the skills from Fencing and develop new technical and tactical skills. Expanded instruction in the rules and sportsmanship of fencing tournament play will be included. Class includes warm-up and stretching skills.

PE 184G Golf Beginning 1 credits
Beginning golf is an introduction to golf including short game, full swing and routines on the course. Rules and etiquette will also be introduced. Upon completion, the student will have enough working knowledge to start playing the game. Some rounds of golf are provided.

PE 184H Golf Intermediate 1 credits
Intermediate golf is a continuation of beginning golf with an emphasis on swing mechanics, trouble shots, strategy and more extensive application of rules. Previous playing experience recommended.

- PE 184K Karate** 1 credits
Basic skills of karate including blocks, punches, strikes, and kicks. Discussions include technique and power, history of karate, and the students' legal rights and responsibilities for self-defense in Oregon. This class includes sparring strategies.
- PE 184N Conditioning for Martial Arts** 1 credits
Specific fitness, flexibility and movement skills for martial arts. Includes cardio fitness and muscular endurance exercises. Develops core strength, limb strength, and improve flexibility. A variety of exercise modalities will be used including body weight resistance and resistance bands.
- PE 184P Personal Defense** 1 credits
Instruction in fundamental personal defense skills and prevention methods to improve one's safety. Students develop skills which promote self-assurance to reduce panic. The Legal rights and responsibilities in Oregon will also be presented.
- PE 184R Disc Golf** 1 credits
Basic skills of Disc Golf. This class will include discussion of rules, strategy and etiquette for organized play. Techniques learned in putting, throwing and footwork will prepare students for active game play. Students will be prepared for tournament play and enjoyment of this exciting, competitive sport.
- PE 184T Tennis** 1 credits
Learn and develop basic tennis skills including forehand, backhand, serve, return of serve and volley through drills, and game play. Learn and apply basic singles and doubles strategy, rules, etiquette and terminology.
- PE 185M Meditation** 1 credits
A survey of diverse meditation techniques to enable students to find the appropriate methods for use themselves. Includes discussion and practice.
- PE 185T Tai Chi Chuan** 1 credits
Beginning concepts of Yang style Tai Chi Chuan. Develop flexibility, relaxation and concentration. Improve balance, energy flow, breathing and coordination of body movement.
- PE 185U Tai Chi Chuan Intermediate** 1 credits
Prerequisite: PE 185T with a C-or better or instructor approval. Intermediate concepts of Yang Style Tai Chi Chuan. Use of body strength, flexibility and mental control skills. Coordination of eyes, movement, breathing, & internal energy. Relaxation, improved health & concentration, increased energy, flexibility and clarity of mind.
- PE 185Y Yoga** 1 credits
Basic knowledge of asanas (postures), pranayama (breathing techniques), relaxation and yogic philosophy will be introduced. Includes both discussion and practice.
- PE 185YG Gentle Yoga** 1 credits
Practice of gentle yoga postures, breathing and relaxation techniques. Designed for students who need modification of traditional practice due to limited mobility or other special needs. Includes discussion and practice.
- PE 185Z Yoga Intermediate** 1 credits
Designed for continuing students who have a basic knowledge of asanas (postures), pranayama (breathing techniques), relaxation and philosophy. Includes discussion and practice.
- PE 186D Downhill Skiing and Snowboarding** 1 credits
Instruction and practice in fundamental skills of snowboarding and downhill skiing. Instruction provided for beginner through advanced skill level. Classes held at an Oregon ski area. Fees cover transportation, lift ticket, and lessons. Equipments rentals not included.
- PE 186H Handguns and Personal Safety** 1 credits
A fast-moving course with a fundamental training approach to the physical skills necessary to become a safe and accurate handgun user. Legal and ethical issues pertaining to handgun use and ownership are included. Meets Oregon and Utah qualifications for concealed carry weapons permit.
- PE 186W Whitewater River Rafting** 2 credits
This course is designed to provide a foundation of basic river skills, with a focus on safety awareness and preparedness. Topics include: Rafting equipment and use, reading rapids, paddle-captaining skills, boat maneuvering, river safety & rescue, and low impact river use.
- PE 188B Basketball** 1 credits
Emphasis on the basic fundamentals of the game and individual skills. Daily play and skill work to include footwork, dribbling, passing, shooting, 1 on 1 skills, and team play. Students will experience 3 on 3, 4 on 4 and 5 on 5 game play.
- PE 188C Basketball Intermediate** 1 credits
Review and practice of fundamentals and individual skills in daily progressive drill work. Team play may include 3 on 3, 4 on 4 and 5 on 5 game play. Offensive and defensive strategies and techniques will be discussed throughout the term.
- PE 188F Flag Football** 1 credits
Fundamental skills, rules, and strategy taught through team play. Skill practice and repetition will include passing receiving, and running plays. 1 and 2 point conversions will be covered. Modified NFL Air It Out rules will be used.
- PE 188P Soccer** 1 credits
Instruction and practice in the fundamental soccer techniques, position play, offensive and defensive tactics, team formation and rules of the game. Team play may include 11 on 11 or mini-game play.
- PE 188Q Soccer-Indoor** 1 credits
Instruction and practice in the fundamental indoor soccer techniques including individual skill development, position play, offensive and defensive tactics, team formations and rules of the game.
- PE 188S Softball** 1 credits
This co-ed class is for students starting the game as well as those wanting to improve their skills for summer recreational play. Fundamentals such as catching, throwing, fielding, hitting and base running will be practiced. Outfield play, infield play and game strategy will be covered.
- PE 188U Ultimate Frisbee** 1 credits
This co-ed game combines the passing and scoring of football, the cutting and guarding of basketball, and the non-stop movement of soccer. Students will learn basic frisbee handling skills utilized in game play. Discussion of rules, strategy, and terminology will be included.
- PE 188V Volleyball** 1 credits
Includes the fundamentals, rules, and strategy of volleyball. Develops specific skills necessary for successful recreational and/or competitive experience in volleyball.
- PE 188W Volleyball Intermediate** 1 credits
This class will include a review of skills and techniques fundamental to the game. Additional strategies and techniques will be discussed. Previous competitive playing experience recommended.
- PE 191A Cross Country Conditioning 1** 1 credits
A conditioning class designed for students interested in participating in competitive cross-country running. Emphasis on conditioning and endurance. Previous cross country experience recommended. Ability level evaluated first week with 5k endurance test.
- PE 191B Cross Country Skills 1** 1 credits
Theory, analysis, advanced skills and techniques for skilled performers and individuals who are preparing for a competitive cross country experience. Course covers terminology, regulations, and healthy lifestyle choices. Previous cross country experience recommended. Ability level evaluated first week with 5k endurance test.
- PE 191C Cross Country Conditioning 2** 1 credits
Prerequisite: PE 191A or similar experience. An advanced conditioning class that is designed for students interested in competitive cross-country running at the elite level. Strong emphasis on conditioning and endurance. Previous competitive cross country running experience highly recommended. Ability level evaluated first week with 5k endurance test.
- PE 191D Cross Country Skills 2** 1 credits
Prerequisite: PE191B or similar cross country running experience highly recommended. Theory, analysis, advanced skills and techniques for skilled performers and individuals preparing for a competitive cross country experience at the elite level. Course covers terminology, regulations, and healthy lifestyle choices. Ability level evaluated first week with 5k endurance test.
- PE 192I Soccer Conditioning 1** 1 credits
A conditioning class designed for students with an interest in

participating in competitive soccer. Emphasis on conditioning, exercise principles, and the development of fundamentals. Previous competitive playing experience recommended.

PE 192J Soccer Conditioning 2 1 credits
Prerequisite: PE192I or similar experience. A highly advanced conditioning class that is designed for students interested in competitive soccer at the elite level. Strong emphasis on conditioning, exercise principles, and the development of fundamentals. Previous competitive playing experience highly recommended.

PE 192K Soccer Skills 1 1 credits
Theory, analysis, skills and techniques for students preparing for a competitive soccer experience. Course covers terminology, rules, strategy, conduct, sportsmanship and healthy lifestyle choices. Previous competitive playing experience recommended.

PE 192M Soccer Skills 2 1 credits
Prerequisite: PE192K or similar experience. Theory, advanced skills and techniques for students preparing for a competitive soccer experience at an elite level. Course covers terminology, rules, strategies, conduct, sportsmanship and healthy lifestyle choices. Previous competitive playing experience highly recommended.

PE 193A Basketball Conditioning 1: Men 1 credits
A conditioning class designed for students interested in participating in competitive basketball. Strong emphasis on conditioning, endurance and fundamentals. Previous competitive playing experience recommended.

PE 193B Basketball Skills-Mens Rules 1 1 credits
Theory, analysis, skills and techniques for students preparing for a competitive basketball experience. Covers terminology, rules, strategy, conduct, sportsmanship and healthy lifestyle choices. Men's ball and Men's NCAA rules. Previous competitive playing experience highly recommended.

PE 193C Basketball Conditioning 2: Men 1 credits
Prerequisite: PE193A or similar experience. Advanced conditioning class designed for students interested in participating in competitive basketball at an elite level. Strong emphasis on conditioning, endurance and fundamentals. Previous competitive playing experience highly recommended.

PE 193D Basketball Skills-Mens Rules 2 1 credits
Prerequisite: PE193B or similar experience. Theory, advanced skills and techniques for students preparing for a competitive basketball experience at an elite level. Covers terminology, rules, strategies, conduct, sportsmanship and healthy lifestyle choices. Men's ball and NCAA rules. Competitive playing experience highly recommended.

PE 195A Basketball Women's Conditioning 1 1 credits
A conditioning class designed for students interested in participating in competitive basketball. Strong emphasis on conditioning, endurance and fundamentals. Previous competitive playing experience recommended.

PE 195B Basketball Skills-Women's Rules 1 1 credits
Theory, analysis, skills and techniques for students preparing for a competitive basketball experience. Covers terminology, rules, strategy, conduct, sportsmanship and healthy lifestyle choices. Women's ball and Women's NCAA rules will be used. Previous competitive playing experience recommended.

PE 195C Basketball Women's Conditioning 2 1 credits
Prerequisite: PE195A or similar experience. Advanced conditioning class designed for students interested in participating in competitive basketball at an elite level. Strong emphasis on conditioning, endurance and fundamentals. Previous competitive playing experience highly recommended.

PE 195D Basketball Skills-Womens Rules 2 1 credits
Prerequisite: PE195B or similar experience. Theory, advanced skills and techniques for students preparing for a competitive basketball experience at an elite level. Covers terminology, rules, strategies, conduct, sportsmanship and healthy lifestyle choices. Women's ball and NCAA rules. Competitive playing experience highly recommended.

PE 196A Track & Field Conditioning 1 1 credits
A conditioning class designed for students interested in participating in competitive track and field. Emphasis on conditioning, develop-

ment of fundamentals and skills. Previous competitive track and field experience recommended.

PE 196B Track and Field Skills-Rules 1 1 credits
Theory, analysis, advanced skills and techniques for skilled performers and individuals who are preparing for a competitive track and field experience. Course covers terminology, regulations, and healthy lifestyle choices. Previous competitive track and field experience recommended.

PE 196D Track & Field Conditioning 2 1 credits
Prerequisite: PE196A or similar experience. Advanced conditioning class designed for students interested in participating in competitive track and field at an elite level. Emphasis on conditioning, development of fundamentals and skills. Previous competitive track and field experience highly recommended.

PE 196E Track and Field Skills-Rules 2 1 credits
Prerequisite: PE196B or similar experience. Advanced course that covers theory, analysis, skills and techniques for individuals who are preparing for a competitive track and field experience at an elite level. Covers terminology, regulations, and healthy lifestyle choices. Previous competitive track and field experience highly recommended.

PE 197A Baseball Conditioning 1 1 credits
A conditioning class designed for students interested in participating in competitive baseball. Emphasis on conditioning and development of fundamentals. Previous competitive playing experience recommended.

PE 197B Baseball Skills 1 1 credits
Theory, analysis, skills and techniques for skilled performers and individuals who are preparing for a competitive baseball experience. Course covers terminology, regulations, strategy, conduct, sportsmanship and healthy lifestyle choices. Previous competitive playing experience recommended.

PE 197C Baseball Conditioning 2 1 credits
Prerequisite: PE197A or similar experience. An advanced conditioning class designed for students interested in participating in competitive baseball at an elite level. Emphasis on conditioning and development of fundamentals. Previous competitive playing experience highly recommended.

PE 197D Baseball Skills 2 1 credits
Prerequisite: PE197B or similar experience. Advanced course in theory, analysis, skills and techniques for individuals who are preparing for a competitive baseball experience at an elite level. Covers terminology, regulations, strategy, conduct, sportsmanship and healthy lifestyle choices. Competitive playing experience highly recommended.

Physical Science—See Chemistry, Earth and Environmental Science, Physics

Physical Therapist

For information, contact the Health Professions Division, Bldg. 4/Rm. 222, 541.463.5617. You must be accepted into the Physical Therapist Assistant program to take these classes.

PTA 100 Introduction to Physical Therapy 3 credits
Prerequisite: Admission into the PTA program. This course introduces the roles and responsibilities of physical therapy providers. Topics include history, practice patterns, laws, professionalism, communication, and information literacy. May be offered online.

PTA 101 Introduction to Clinical Practice 1 5 credits
Prerequisite: Admission into the PTA program. This course introduces physical therapy practice patterns for acute and chronic soft tissue injuries. Students are introduced to principles of body mechanics, gross mobility training and positioning. May be offered online.

PTA 101L Introduction to Clinical Practice 1 Lab 2 credits
Prerequisite: Admission into PTA program Corequisite: PTA 101 This co-requisite lab to PTA 101 allows for practice of physical therapy interventions for pain and soft tissue injuries. Topics and skills include safe application of physical agents, exercise, gross mobility training, positioning, and effective communication/documentation. May be offered in a format with some online instruction.

PTA 103 Introduction to Clinical Practice 2.....5 credits
Prerequisites: PTA 101, PTA 101L, HO 152 or BI 233 Corequisite: PTA 103L The course is designed to assist PTA students in gaining a greater understanding of single organ dysfunction and subsequent effects on patient function. Anatomy, physiology, etiology, and theory are integrated with clinical considerations for effective physical therapy treatment. May be offered online.

PTA 103L Introduction to Clinical Practice 2 Lab.....2 credits
Prerequisite: PTA 101, PTA 101L Corequisite: PTA 103 This co-requisite lab to PTA 103 allows for students to practice clinical skills, tests, and measures for improving outcomes in patients/clients with single organ dysfunction. Students practice effective communication and treatment skills for multiple practice settings. May be offered in a format with some online instruction.

PTA 104 PT Interventions-Orthopedic Dysfunctions 5 credits
Prerequisite: PTA 103, PTA 132 Corequisite: PTA 104L This course designed to assist students in gaining a greater understanding of bone tissue disease and disorders, and their effects on function across the lifespan. Anatomy, physiology, etiology, and theory are integrated with clinical considerations for effective physical therapy treatment. May be offered online.

PTA 104L PT Interventions-Orthopedic Dysfunctions Lab 2 credits
Prerequisites: PTA 103, PTA 103L, PTA 132, and PTA 132L. Corequisite: PTA 104. This co-requisite lab for PTA 104 allows students to practice clinical skills, tests, and measures for improving outcomes in patients/clients with orthopedic conditions. May be offered in a format with some online instruction.

PTA 132 Applied Kinesiology 1 2 credits
Prerequisites: PTA 101, PTA 101L Corequisite: PTA 132L Students apply kinesiology for the lower body to clinical cases and conditions within the scope of physical therapy. Emphases on safe and effective clinical decision-making, therapeutic exercise selection and application, and injury prevention and clinical-management. May be offered online.

PTA 132L Applied Kinesiology 1 Lab 2 credits
Prerequisite: PTA 101, PTA 101L Corequisite: PTA 132 This co-requisite lab to PTA 132 allows for practice of physical therapy interventions and data collection based on principles of kinesiology for the lower quarter. Skills include documentation, palpation, goniometry, therapeutic exercise, manual muscle testing, gait and stretching. May be in a format with some online instruction.

PTA 133 Applied Kinesiology 2 2 credits
Prerequisite: PTA 132, PTA 132L Co-requisite: PTA 133L Students apply kinesiology for the upper body and spine to clinical cases and conditions within the scope of physical therapy. Emphases on safe and effective clinical decision-making, therapeutic exercise selection and application, and injury prevention and clinical-management. May be offered online.

PTA 133L Applied Kinesiology 2 Lab 2 credits
Prerequisite: PTA 132 and PTA 132L Corequisite: PTA 133 The co-requisite lab to PTA 133 allows for physical therapy skills practice and data collection based on principles of kinesiology for the upper quarter. Skills include palpation, goniometry, therapeutic exercise, manual muscle testing, posture analysis, and documentation. May be offered in a format with some online instruction.

PTA 200 Professionalism, Ethics, and Exam Preparation 4 credits
Prerequisite: Admission into PTA Program, second year student. Corequisite: PTA 203. This course is designed to prepare the student physical therapist assistant (SPTA) for ethical situations that are common in the clinical setting. The course prepares the SPTA for the licensing exam and entry into the workplace. May be offered online.

PTA 203 Contemporary Topics in Physical Therapy 2 credits
Prerequisite: Admission into PTA Program, second year student. Corequisite: PTA 200. This course explores contemporary issues affecting clinical and professional physical therapy practice and impacts on the PTA culminating in class presentation of service learning projects to the PTA Advisory Committee. May be offered online.

PTA 204 PT Interventions-Neurological Dysfunctions 5 credits
Prerequisite: Admission into PTA program, second year student.

Corequisite: PTA 204L. This course is designed to assist PTA students in gaining a greater understanding of the various neurological challenges, including mental health, that affect clients in the PT environment. May be offered online.

PTA 204L PT Interventions-Neurological Dysfunctions Lab 2 credits
Prerequisite: Admission into PTA program, second year student. Corequisite: PTA 204. This co-requisite lab for PTA 204 allows students to practice clinical skills, tests, and measures for improving outcomes in patients/clients with neurological conditions. May be offered in a format with some online instruction.

PTA 205 PT Interventions-Complex Medical Dysfunctions 4 credits
Prerequisite: Admission into PTA program, second year student. Corequisite: PTA 205L. This course investigates physiological anomalies, clinical presentation and physical therapy treatment approaches for patients with complex medical conditions. Students advance clinical decision-making using case studies, treatment models, and evidence-based literature. May be offered online.

PTA 205L PT Interventions-Complex Medical Dysfunctions Lab 2 credits
Prerequisite: Admission into PTA program, second year student. Corequisite: PTA 205 This co-requisite lab for PTA 205 allows students to practice clinical skills, tests, and measures for improving outcomes in patients/clients with complex medical/integument conditions. May be offered in a format with some online instruction.

PTA 280A Co-op Ed: First Clinical Affiliation 6 credits
Prerequisite: Admission in PTA Program Second year PTA students apply PT interventions under PT/PTA supervision at a contracted clinical site. Students progress toward entry-level PTA practice by demonstrating communication and critical thinking for the workplace. This is the first of three off-campus clinical learning experiences.

PTA 280B Co-op Ed: Second Clinical Affiliation 6 credits
Prerequisite: Admission in PTA Program Second year PTA students apply PT interventions under PT/PTA supervision at a contracted clinical site. Students progress toward entry-level PTA practice by demonstrating communication and critical thinking for the workplace. This is the second of three clinical learning experiences.

PTA 280C Co-op Ed: Third Clinical Affiliation 6 credits
Prerequisite: Admission in PTA Program Second year PTA students apply PT interventions under PT/PTA supervision at a contracted clinical site. Students progress toward entry-level PTA practice by demonstrating communication and critical thinking for the workplace. This is the third and final of three off-campus clinical learning experiences.

Physics

For information, contact the Science Division, Bldg. 16/Rm. 156, 541.463.5446.

ASTR 107 Survey of Astronomy 3-4 credits
Prerequisite: MTH 052 or above with grade of 'C' or better or pass placement test. This course provides a one-term survey the science of astronomy. The course introduces the science of the origin, characteristics and evolution of solar systems, stars, galaxies and the universe. It is offered in classroom and telecourse formats. Lab activities and lab credit are a fixed part of the 4-credit classroom format, and optional in the 3-4 credit telecourse format. May be offered as a telecourse.

ASTR 121 Astronomy of the Solar System 4 credits
Prerequisite: MTH 052 or above with grade of "C" or better or pass placement test. Some or all of the ASTR 121,2,3 can be taken in any order. The ASTR 121,2,3 sequence provides an in-depth and comprehensive introduction to the science of astronomy. The classes are designed to serve non-science majors, but also offer a good introduction for prospective science majors interested in astrophysics. The classes do not have a significant lab component. ASTR 121 focuses on the search for understanding through naked-eye astronomy and the science of astronomy focused on the solar system, particularly our solar system and comparative planetology, the Earth and its Moon, detailed consideration of the individual planets, solar system debris including comets and asteroids, and modeling the origin of our solar system.

ASTR 122 Stellar Astronomy 4 credits
Prerequisite: MTH 052 or above with grade of 'C-' or better or pass placement test. Some or all of the ASTR 121,2,3 can be taken in any order. ASTR 122 provides an introduction to astronomy as science and the fundamental physics concepts underlying our understanding of stars. Our Sun and its place in our Milky Way galaxy begins a comprehensive exploration of the nature of stars, from their birth to multiple paths to maturity and death, including super novae and stellar black holes. See information about the ASTR 121,2,3 sequence in the ASTR 121 course description.

ASTR 123 Cosmology and the Large-Scale

Structure of the Universe 4 credits
Prerequisite: MTH 052 or above with grade of 'C-' or better or pass placement test. Some or all of ASTR 121, 122, 123 can be taken in any order. ASTR 123 focuses on the search for understanding of the nature of the Milky Way galaxy, Normal Galaxies, Active Galaxies and Quasars, Life in the Universe, and Cosmology including the Big Band, the geometry of space-time, the cosmic background radiation, dark matter and dark energy. See information about the ASTR 121, 122, 123 sequence in the ASTR 121 course description.

GS 104 Physical Science 4 credits
Prerequisite: MTH 052 or above with grade of 'C-' or better or pass placement test. Some or all of the GS 104,5,6 sequence can be taken in any order. The GS 104,5,6 sequence is designed for non-science majors, providing a broad exploration and overview of basic principles that tie the physical sciences together. The focus of each term of GS 104,5,6 focuses on topics and lab experience from physics, chemistry, and geology plus astronomy, respectively. GS104 concerns selected topics in Newtonian mechanics, thermodynamics, electricity and magnetism, waves, light, and modern physics. The class environment includes labs, demonstrations, discussion, and individual and group activities.

PH 101 Fundamentals of Physics 4 credits
Prerequisite: MTH 052 or above with grade of 'C-' or better or pass placement test. Some or all of the PH 101,2,3 sequence can be taken in any order. The 'Fundamentals of Physics' courses provide an introduction to a broad range of fundamental physics concepts. PH 101,2,3 are recommended for anyone seeking a good basic level of physics literacy. The sequence is designed for non-science majors, but also serves prospective science majors who want to gain a better conceptual grounding before taking General Physics. The sequence also meets physics elective requirements for career-technical students, and provides physics transfer credit if needed. Emphasis is on everyday phenomena and conceptual understanding more than calculations. PH 101 focuses on the nature of science, data analysis, Newton's explanation of motion, momentum, energy, gravity, the atomic nature of matter, and properties of solids, liquids, gases, and plasmas. The class environment includes labs, demonstrations, discussion, and individual and group activities.

PH 102 Fundamentals of Physics 4 credits
Prerequisite: MTH 052 or above with grade of 'C-' or better or pass placement test. Some or all of the PH 101,2,3 sequence can be taken in any order. PH 102 focuses on the science of heat and thermodynamics, waves and sound, and electricity and magnetism. See information about the Fundamentals of Physics sequence in the PH 101 course description. The class environment includes labs, demonstrations, discussion, and individual and group activities.

PH 103 Fundamentals of Physics 4 credits
Prerequisite: MTH 052 or above with grade of 'C-' or better or pass placement test. Some or all of the PH 101,2,3 sequence can be taken in any order. PH 103 focuses on the science of light and color and many aspects of modern physics, including atomic physics, quantum mechanics, nuclear physics, special and general relativity, and astrophysics. See information about the Fundamentals of Physics sequence in the PH 101 course description. The class environment includes labs, demonstrations, discussion, and individual and group activities.

PH 201 General Physics 5 credits
Prerequisite: MTH 112 with grade of 'C-' or better or pass placement test. Algebra/trig-based General Physics sequence for science majors. Concepts include force, acceleration, work, energy and momentum of objects with mass in various kinds of motion. Emphasizes conceptual understanding, mathematical representations, problem solving, applications and science skills.

PH 202 General Physics 5 credits
Prerequisite: PH 201 with grade of 'C-' or better. Algebra/trig-based General Physics sequence for science majors. Concepts include rotational motion, sound, wave phenomena and optics. Emphasizes conceptual understanding, mathematical representations, problem solving, applications and science skills.

PH 203 General Physics 5 credits
Prerequisite: PH 202 with grade of 'C-' or better. Algebra/trig-based General Physics sequence for science majors. Concepts include electricity, magnetism, and selected topics from modern physics. Emphasizes conceptual understanding, mathematical representations, problem solving, applications and science skills.

PH 211 General Physics with Calculus 5 credits
Corequisite: MTH 251. PH 211,2,3 is a calculus-based, three-term sequence providing an introduction to fundamental physics concepts, analysis, exploration, calculation and problem-solving that are required for engineering and physics majors, and also readily meets any General Physics requirements for other health, mathematics and science majors. PH 211,2,3 require a concurrent study of calculus in Math 251,2,3, if calculus hasn't been studied previously. Concurrent study of calculus can be expected to be supported by the experience of these physics courses. These three courses all focus on conceptual understanding and exploration, visual and mathematical representation, calculation, and problem solving. PH 211 introduces the nature of science, Classical Newtonian Mechanics, energy, and momentum. The class environment includes labs, demonstrations, discussion, and individual and group activities.

PH 212 General Physics with Calculus 5 credits
Prerequisite: PH 211 and MTH 251 with grades of 'C-' or better; Corequisite: MTH 252. PH 212 introduces rotational motion, elementary fluid motion, Special Relativity, oscillatory motion, and fundamentals of waves and optics. See information about the General Physics with Calculus sequence in the PH 211 course description. The class environment includes labs, demonstrations, discussion, and individual and group activities.

PH 213 General Physics with Calculus 5 credits
Prerequisite: PH 212 and MTH 252 with grade of 'C-' or better; Corequisite: MTH 253. PH 213 is the last term of the calculus-based General Physics sequence and focuses primarily on electricity and magnetism. See information about the General Physics with Calculus sequence in the PH 211 course description. The class environment includes labs, demonstrations, discussion, and individual and group activities.

Political Science

For information, contact the Social Science Division, Center Bldg./Rm. 403, 541.463.5427.

PS 104 Problems in US Politics /Film 1 3 credits
This course is designed to incorporate commercial and documentary films and videos, speaker panels, a packet of readings and class discussion of political/public policy issues. Students will be expected to develop and apply critical analytical skills in addressing a wide range of political topics.

PS 105 Problems in US Politics/ Film 2 3 credits
While technically a continuation of PS 104, this is offered as a stand alone course which does not require taking PS 104 previously. Films, videos, readings, discussion, and speaker panels will be utilized to develop and apply critical analytical skills to address a variety of political and public policy issues.

PS 201 U.S. Government and Politics 3 credits
An introduction to U.S. Government and politics that includes consideration of the debates surrounding the formation of the Constitution, the theory and practice of American Federalism, American political economy, media and politics, the formation and impact of public opinion, and various forms of political participation including voting, political parties, campaigns, interest groups, and social movements.

PS 202 U.S. Government and Politics 3 credits
A continuation of U.S. Government and Politics that focuses on the institutions of American Government (the US Congress, the Presidency, the Federal Bureaucracy, and the Federal Court System), the history, formation, and implementation of civil rights and liber-

ties in United States, and the formation and implementation of U.S. economic and foreign policy.

PS 203 State and Local Government and Politics.....3 credits
This class completes the three-course sequence in U.S. Government and Politics. The course examines the place of state and local government and politics in the larger federal system. Topics will include federalism, electoral politics, institutions and actors in city, county, and state politics and government, taxation and economic development. This course will include both a comparative analysis of various states and communities as well as examples from Lane County and Oregon.

PS 204 Introduction to Comparative Politics.....3 credits
This course is a general introduction to the methods of comparing political systems, followed by contemporary case studies applying these methods to several countries in different stages of economic, social and political development.

PS 205 International Relations.....3 credits
This introductory course examines the system of relationships between states, including international organizations and non-governmental organizations. Global issues such as international trade, the environment, human rights, and organized violence are emphasized.

PS 208 Introduction to Political Theory.....4 credits
The course is designed to introduce students to modern political theory, with an emphasis on social contract theory. The course focuses on questions about why government is formed, the basis of individual obligations and rights in relation to the state, the meaning of democracy, and when actions by government give rise to the right and obligation to resist and rebel. To examine these questions, the course uses different frameworks for thinking about political rights and duties including the individualistic approach, the communitarian approach, and the pluralistic perspective. Readings are assigned from modern and contemporary works in political theory.

PS 211 Peace and Conflict Studies: Global.....4 credits
This course focuses on issues of peace and conflict at the global level. Based upon principles of social and economic justice, the course is designed to integrate theory with practice. Topics include the relationship of war and militarism to peace, violence embedded in the structures of the global economic system, conflicts resulting from environmental exploitation, feminist peace paradigms, and peace at the individual level as the foundation for global peace.

PS 212 Peace and Conflict Studies: National.....4 credits
This course focuses on issues of peace and conflict at the national level. Based upon principles of social and economic justice, the course is designed to integrate theory with practice. Theoretical ways of conceptualizing peace and conflict are used to examine important aspects of United States politics. Topics vary in order to focus on important contemporary issues. Examples include the impact of militarization on social programs, the concentration of media, economic inequality in the United States, the prison industrial complex, and a variety of social and environmental justice issues.

PS 213 Peace and Conflict Studies: Local.....4 credits
This course focuses on issues of peace and conflict at the local level. Based upon principles of social and economic justice, the course is designed to integrate theory with practice. The focus is on social justice issues at the local level. Topics vary in order to focus on important contemporary local issues. Local politicians and activists are invited to speak about their work and activism. Guests cover a wide variety of issues and perspective typically ranging from the mayor and the police chief, to activists involved in various social justice issues including anti-war activism, to anarchists.

PS 225 Political Ideology.....4 credits
Political Ideologies are comprehensive systems of political beliefs. More than particular opinions or suggestions for political programs, they contain interpretations of human nature, individual rights, and social life. They are oriented towards political action, containing particular programs for the structure of the state and authority, economic systems, and methods for solving political problems. This course focuses on the major ideologies of the modern era. These include liberalism, conservatism, fascism, Marxism, democratic socialism, anarchism, neo-liberalism, civil rights, feminism, and environmentalism. It examines the basic tenets of each ideology; the historical

circumstances giving rise to their development and implementation, and their relevance to current political and social discourse.

PS 275 Legal Processes Through Civil Rights and Liberties.....4 credits
This course introduces students to basic concepts of the legal system by focusing on the civil rights and liberties of American citizens. Among the legal principles covered are how the court system is organized, the differences between civil and criminal law, and how court cases are appealed. Fundamental civil rights and liberties covered include the issues of free speech, unreasonable search and seizure, the right to counsel, the impact of the Patriot Act on these rights, the right to privacy including a woman's right to control her own body, freedom of religion, the separation of church and state, and the equal protection of the laws dealing with discrimination in America.

PS 280 Co-op Ed: Political Science.....2-12 credits
Intern with governmental and political professionals. Work on political campaigns, assist federal/state/local legislators or work with grass roots organizations. Explore potential career options, enhance your academic and career resumes, develop workplace skills and earn academic credit. No prior experience required; a one term commitment is expected.

PS 280LW Co-op Ed: Pre Law.....2-12 credits
This internship is for students anticipating a legal career. Learn and work with lawyers, legal assistants and other legal professionals in areas of legal administration, research, working with clients and the courts. Previous legal experience or coursework not required; a one term commitment is expected.

PS 297 Environmental Politics.....4 credits
This course focuses on current environmental problems, alternative frameworks for understanding these problems, and appropriate political responses. Among the problems covered are overpopulation, economic globalization, ozone depletion, the greenhouse effect, bio-colonization, and the depletion of renewable and non-renewable resources. Alternative frameworks considered include the philosophical visions of Deep Ecology and Gaia. These frameworks are used to investigate possible ways to create sustainable economic, political and social systems. Finally, the course focuses on grass roots politics, including groups and social movements actively seeking to promote environmental and social justice.

PS 297_H Environmental Politics.....4 credits
This is an honors-level course open to any student prepared to complete honors-level coursework. Honors classes delve deeper into course topics and require a high level of student motivation; the pace may be faster than non-honors courses. WR 121-readiness (score of at least 96 on the sentence-skills placement test) recommended. See lanec.edu/honors for more information. This course focuses on current environmental problems, alternative frameworks for understanding these problems, and appropriate political responses. Among the problems covered are overpopulation, economic globalization, ozone depletion, the greenhouse effect, bio-colonization, and the depletion of renewable and non-renewable resources. Alternative frameworks considered include the philosophical visions of Deep Ecology and Gaia. These frameworks are used to investigate possible ways to create sustainable economic, political and social systems. Finally, the course focuses on grass roots politics, including groups and social movements actively seeking to promote environmental and social justice.

Psychology

For information, contact the Social Science Division, Center Bldg./Rm. 403, 541.463.5427.

CPSY 200 Understanding Addictive Behavior.....3 credits
Overview of addiction and the impact on individuals and society, introduces models and theories of addiction. The social and cultural environments of substance abuse and addictions will be explored. Students will be introduced to models of prevention and treatment. May be offered as a live interactive course.

PSY 110 Exploring Psychology.....3 credits
A basic introduction to psychology that encourages an appreciation and understanding of the scientific approach to the study of human behavior. The approach integrates several perspectives on human thought and behavior. Learning through video, textbook, and work-

book course materials. Also available as a telecourse Fall, Winter, Spring terms.

PSY 201 General Psychology 3 credits
Scientific principles related to psychology and psychological research including an introduction to statistical methodology, the human organism considering both developmental and structural aspects, neurobiology and neurochemistry, and anatomy of the brain, the senses and perceptual processes and how they are influenced by the internal and external environment, and states of consciousness. Basic principles and theories of behavior. Sophomore standing recommended. Also recommend that the PSY 201-202-203 courses be taken in sequence. May be offered online.

PSY 202 General Psychology 3 credits
The study of behavior as it is influenced by learning, remembering, forgetting, higher brain functions, motivation and emotions. Previous PSY 201 recommended. May be offered online.

PSY 203 General Psychology 3 credits
Individual differences and methods of measurement, personality dynamics, stress, abnormal, social, and applied psychology. Previous PSY 201 & PSY 202 recommended. May be offered online.

PSY 205 Applied Psychology 3 credits
Prerequisite: PSY 201 or PSY 203. Emphasizes psychological principles that can be readily applied to everyday life and work. Application of these principles will be illustrated by activities and practices that are easily transported to school, home, and job

PSY 212 Theoretical Principles of Learning 3 credits
Recommend at least one introductory psychology course before taking this course. Lectures, demonstrations, and review of experimental research in the areas of animal and human learning. Variables that influence learning will also be considered including stimulus-response connections, discrimination, chaining, verbal association, concept formation, and problem solving. Memory, transfer of learning, forgetting, insight and observational learning will also be covered.

PSY 213 Introduction to Physiological Psychology 3 credits
Prerequisite: PSY 201. An introduction to the physiological processes underlying behavior. The human organism is explored as a specific nervous system interacting with its environments. Topics may include basal nervous system functions, sensory processing, movement, sleep, reproductive behavior, emotion and stress, hunger, learning and memory, human communication, neurological disorder and mental disorder.

PSY 214 Introduction to Personality 3 credits
Recommend at least one introductory psychology course before taking this course. This course aims to familiarize students with the major theoretical viewpoints about personality within mainstream psychology. Methods of researching issues in personality, theories about how personality develops in individuals and how it is organized, procedures for personality assessment, and processes by which personality may be changed are discussed. Students relate theoretical concepts to personal awareness exercises.

PSY 215 Lifespan Developmental Psychology 3 credits
Prerequisite: PSY 201. An introduction to psychological aspects of human development from conception through old age. Topics covered include brain, perceptual, cognitive, memory, socio-emotional, and personality development. Theoretical and methodological issues pertaining to the study of development will also be covered. May be offered online.

PSY 216 Social Psychology 3 credits
Prerequisite: PSY 201 or PSY 203. The boundary field where sociology and psychology overlap. The influence of psychological process on groups, and the influence of culture, society, and groups on individuals. Topics: group dynamics, leadership, socialization, attitude change, and others. Emphasis is put on learning to use social psychological findings to explain real-life events.

PSY 217 Experimental Psychology 4 credits
Prerequisite: PSY 201. This course presents the basic principles of the modern scientific approach to the study of human behavior. It includes the study of the terminology, methods and values that support psychological research. The primary focus is on the understanding of common research designs and what conclusions can reasonably be drawn from the results of experiments using those

designs. Students will have an opportunity to conduct experiments of their own design.

PSY 218 Multicultural Psychology 4 credits
Prerequisite: PSY 202 and PSY 203. This course is designed to assist students in understanding the diversity of individual experiences. It is based on developing awareness, knowledge, and skills as they relate to the areas of worldview, identity, and acculturation with regard to the exploration of psychological issues. These topics will include cognition, sensation, perception, intelligence, emotion, motivation, development, disorders, and social psychology. In addition, we will explore the methodologies of cross-cultural research in psychology. We will explore and identify cultural assumptions about people different from ourselves via modeling, observations, readings, and experiential exercises.

PSY 231 Human Sexual Behavior 3 credits
Prerequisite: PSY 201. Explores human sexuality by examining the behavioral, psychological, and biological components that compose our sexuality. Topics include cross-cultural comparisons, learned and developmental origins, biological systems, variations in sexual behavior, and sexual difficulties. This course emphasizes the behavioral rather than the health issues in human sexuality.

PSY 235 Human Development 1 3 credits
Prerequisite: PSY 201. An introduction to human development from conception through adolescence. Areas covered include physical (especially brain), cognitive, social-emotional and personality development as well as theoretical and methodological issues. May be offered as a telecourse.

PSY 239 Introduction to Abnormal Psychology 3 credits
Recommend at least one introductory psychology course before taking this course. Introduction to Abnormal Psychology bridges the gap between mental health-related concepts touched upon in the General Psychology course and the more in-depth analysis of issues relating to emotional disturbance covered in the typical upper division class in Abnormal Psychology. Major topics to be covered will include the historical and current status of behavior disorders, introductory statistics regarding the incidence and classification of persons who are emotionally disturbed and a framework for understanding such phenomena. May be offered as a telecourse.

PSY 280 Co-op Ed: Psychology 3-12 credits
In this internship course students will gain psychology-related work experience in community organizations. Students may integrate theory and practice, develop skills, explore career options, and network with professional while earning college credit.

Radio—See Media Arts

Reading—See Study Skills and College Prep

Real Estate

For information about noncredit, state approved Real Estate classes, call 541.463.5252.

RE 280 Co-op Ed: Real Estate 3-12 credits
Completion of BT 195 is highly recommended. In this internship course students will gain real estate-related work experience in area businesses. Students will integrate theory and practice, develop skills and expand career knowledge while earning credit toward a degree. Meet with Business Co-op Coordinator the term before starting your internship if possible.

Religion—See Philosophy and Religion

Respiratory Care

For information, contact the Health Professions Division, Bldg. 4/Rm. 222, 541.463.5617. You must be accepted into the Respiratory Care program to take these classes.

EL 115H Effective Learning: Health Science Majors 3 credits
This course is designed for health occupation majors who wish to strengthen their study skills and strategies. Students will learn how to take notes from lectures and textbooks, study for tests, improve memory, read and study from textbooks, manage time effectively, and use the library. Course work requires college-level reading skills.

RT 110 Introduction to Mechanical Ventilation 3 credits
Prerequisite: RT 254 and RT 251 (minimum passing grade of C-), or consent of instructor. Introduction of concepts of mechanical ventilator support of the critically ill or ventilator dependent patient. Discussion includes ventilator settings, monitoring/assessment parameters, devices used for long-term mechanical ventilatory support. May be offered online. May be offered online.

RT 112 Respiratory Care Science 2 credits
Prerequisite: Acceptance into Respiratory Care Program or consent of instructor. This course provides instruction in pertinent principles of mathematics, physics and chemistry relating to the practice of respiratory care. Student must have previous educational experience in mathematics and chemistry as required by admission to the respiratory care program. May be offered online.

RT 114 Fundamentals of Respiratory Care 2 credits
Prerequisite: Acceptance into the Respiratory Care Program. Instruction in basic patient care skills relevant to the respiratory care practitioner. Topics include legal/ethical issues, patient positioning/safety, body mechanics, infection control, medical documentation/communication, medication administration. Skills demonstrated in laboratory setting.

RT 116 Basic Respiratory Assessment 2 credits
Prerequisites: RT 114 (minimum passing grade of C-), or consent of instructor. This course is designed to develop clinical assessment skills. Topics include presentations of clinical signs and symptoms associated with common cardiopulmonary disorders.

RT 126 Respiratory Care Case Review-Part 1 2 credits
Prerequisite: RT 127 (minimum passing grade of C-), or consent of instructor. First of a four-part sequence providing instruction in etiology, pathogenesis, pathophysiology of respiratory disorders, and their clinical manifestations. Case scenarios require assessment of data, and application of principles/procedures from program courses relevant to treatment of disorder. May be offered online.

RT 127 Respiratory Care Diseases and Medications 4 credits
Prerequisite: RT 112 and RT 114 (minimum passing grade of C-), or consent of instructor. Review of normal anatomic/physiologic components of the cardiopulmonary system, including causes/pathophysiology of cardiopulmonary disorders. Indications, contraindications, mechanisms of action and standard dosages of medications used in treatment of these disorders are included. May be offered online.

RT 136 Respiratory Care Case Review Part 2 4 credits
Prerequisite: RT 126 (minimum passing grade of C-) or consent of instructor. Second of a four-part sequence providing instruction in etiology, pathogenesis, pathophysiology of respiratory disorders, and their clinical manifestations. Case scenarios require assessment of data, and application of principles/procedures from program courses relevant to treatment of disorder. May be offered online.

RT 141 Principles of Respiratory Care Lab 1 credits
Co-Requisite: RT 144 Practice time is provided for medical gas delivery, humidity and aerosol therapy, medication delivery, breathing procedures, chest physiotherapy, hyperinflation therapy, and emergency resuscitation techniques.

RT 144 Principles of Respiratory Care 3 credits
Prerequisite: RT 112 and RT 114 (minimum passing grade of C-) or consent of instructor. Emphasis on basic therapeutic modalities encountered in the clinical setting. Patient monitoring, indications, contraindications, and hazards of therapies are presented. Physical principles of behavior of gases, and application of gas laws pertinent to respiratory care practice is included.

RT 146 Introduction to Clinical Respiratory Care 3 credits
Prerequisite: Acceptance into Respiratory Care Program or consent of instructor. Orientation to respiratory care profession and affiliated clinical sites. Topics include job requirements, professional credentialing, training for HIPAA, infection control, blood-borne pathogen, harassment, and general hospital policy/procedure. Observational rotations at clinical sites required.

RT 148 Advanced Placement Clinical Practice 1-8 credits
Prerequisite: Acceptance into Respiratory Care Program and consent of instructor. This course is designed to assess the clinical skills of candidates for advanced placement in the Respiratory Care program. Students will be observed performing all aspects of clinical

respiratory care to determine appropriate placement in the clinical practice courses of the program.

RT 216 Respiratory Care Case Review-Part 3 2 credits
Prerequisite: RT 136 (minimum passing grade of C-), or consent of instructor. Third of a four-part sequence providing instruction in etiology, pathogenesis, pathophysiology of respiratory disorders, and their clinical manifestations. Case scenarios require assessment of data, and application of principles/procedures from program courses relevant to treatment of disorder. May be offered online.

RT 236 Clinical Practice 1 8 credits
Prerequisite: RT 144 (minimum passing grade of C-), RT 146 (minimum grade of Pass) or consent of instructor. First in a sequence of four courses for development of skills in patient assessment and application of therapeutic modalities in the treatment of respiratory disorders; focus is on basic therapy, infection control, and development of professional attitudes/ behaviors in the clinical setting.

RT 241 Principles of Mechanical Ventilation Lab 1 credits
Co-requisite: RT 244 or consent of instructor. Emphasis is placed on analysis and understanding of functional mechanical ventilator characteristics, the assembly of patient circuits, ventilator monitoring, and weaning procedures. Also included is analysis of arterial blood gas parameters, respiratory patient assessment and airway management.

RT 244 Principles of Mechanical Ventilation 3 credits
Prerequisite: RT 110 (minimum passing grade C-) or consent of instructor. Emphasis is on the function of mechanical ventilation equipment. Content includes current indications, contraindications and hazards of modes of continuous mechanical ventilation. Advanced ventilator monitoring techniques, analysis of ventilator waveforms, and problem-solving algorithms presented. May be offered online.

RT 248 Clinical Practice 2 6 credits
Prerequisite: RT 236 (with a minimum grade of Pass) or consent of instructor. Second of four courses for continued development of skills in patient assessment and application of therapeutic modalities in the treatment of respiratory disorders, and professional attitudes/ behaviors in the clinical setting. Emphasis on diagnostic studies of pulmonary disorders.

RT 251 Pulmonary Diagnostics and Monitoring Lab 1 credits
Co-requisite: RT 254 Emphasis is placed on bedside patient assessment, laboratory investigation, pulmonary function testing techniques and interpretation of results, radiologic assessment and arterial blood gas interpretation. Topics include bronchoscopy assisting and assessment of sleep disorders.

RT 254 Pulmonary Diagnostics and Monitoring 3 credits
Prerequisites: RT 127 and RT 144 (minimum passing grade of C-), or consent of instructor. Emphasis is placed on diagnostic and monitoring principles used in the clinical evaluation and pulmonary management of patients. Cardiopulmonary assessment and related diagnostic procedures are presented for acute and chronic cardiopulmonary disease. May be offered online.

RT 256 Respiratory Care Case Review-Part 4 2 credits
Prerequisite: RT 216 (minimum passing grade of C-), or consent of instructor. Fourth of a four-part sequence providing instruction in etiology, pathogenesis, pathophysiology of respiratory disorders, and their clinical manifestations. Case scenarios require assessment of data, and application of principles/procedures from program courses relevant to treatment of disorder. May be offered online.

RT 258 Clinical Practice 3 8 credits
Prerequisite: RT 248 or consent of instructor. Third of four courses focuses on development of skills in patient assessment, application of therapeutic modalities with critical care patients, and professional attitudes/ behaviors in the clinical setting. Adult intensive care and initiation/monitoring of mechanical ventilators emphasized.

RT 262 Neonatal/Pediatric Respiratory Care 3 credits
Prerequisite: RT 244 (minimum grade of C-), or consent of instructor. Respiratory care of neonate/pediatric patients presented. Emphasis on physiology, pulmonary complications, and intensive care procedures. Transport and assessment of the sick newborn and child prepare student for training in Neonatal Resuscitation Protocol and Pediatric Advanced Life Support. May be offered online.

RT 266 Emergency and Critical Care-Part 1 3 credits
Prerequisite: RT 244 (minimum grade of C-), or consent of instructor

Presents information on techniques used with critical care patients; in depth discussion of electrocardiography, emergency response, and medical monitoring/management. Prepares student for training in Advanced Cardiac Life Support.

RT 268 Clinical Practice 4 8 credits
Prerequisites: RT 258 (with a minimum grade of Pass) or consent of instructor Fourth of four courses focuses on continued development of skills in critical care patient assessment, application of intensive care therapeutic modalities, and professional attitudes/behaviors in the clinical setting. Assignments include neonatal and pediatric respiratory care.

RT 270 Clinical Competency Assessment 1 credits
Prerequisite: RT 268 (minimum grade of Pass) or consent of instructor This course is designed to provide format for final evaluation of student competence in performance of skills taught in previous lab and clinical courses. Instructor will evaluate student performance of skills using performance evaluations that identify passing criteria for each skill.

RT 274 Credentialing Topics 2 credits
Prerequisite: RT 266 (minimum passing grade of C-), or consent of instructor. Preparation for credentialing examinations required for professional practice. Facilitates integration of recall, application and analysis levels of knowledge related to performance of respiratory care procedures. Examination matrices, scoring systems, question analysis, and practice exams included.

RT 276 Emergency and Critical Care-Part 2 2 credits
Prerequisite: RT 262 and RT 266 (minimum passing grade of C-) or consent of instructor This course builds on content presented in the prerequisite courses. Provides opportunity for certification in Advanced Cardiac Life Support, Pediatric Advanced Life Support, and training for Neonatal Resuscitation Protocol.

RT 280 Co-op Ed: Respiratory Therapy 1-12 credits
Prerequisite: Acceptance into the Respiratory Care Program and consent of instructor. Provides an opportunity to earn college credit while working in the field of respiratory care under supervision, supporting class work and future employment. May be taken as an optional elective. Required four credit course in final term of program as critical-care focused clinical practicum.

Robotics—See Electronics

Sales and Marketing—See Business

Science—See Anatomy/Physiology/Microbiology, Biology, Chemistry, Earth and Environmental Science, Energy Management, Engineering, Physics

Semiconductor Manufacturing—See Electronics

Social Science—See Anthropology, Criminal Justice, Economics, Geography, Ethnic Studies, History, Human Services, Humanities, Philosophy and Religion, Political Science, Psychology, Sociology, Women's Studies

Sociology

For information, contact the Social Science Division, Center Bldg./Rm. 403, 541.463.5427.

SOC 108A Selected Topics in Women's Studies, Women's Bodies, Women's Selves 3 credits
Throughout history, cultural views and practices regarding women's bodies have fundamentally affected women's experiences, position, and relative power in society. This class focuses on the embodied experiences of women, in what ways these experiences are socially constructed, and women's accommodation and resistance to those cultural constraints. Major areas of focus will include women's health, reproduction, sexuality, gendered violence, and body image, and will include cross-cultural information.

SOC 204 Introduction to Sociology 3 credits
Development and application of the sociological imagination, concepts, and perspectives concerning human groups, includes attention to socialization, culture, organization, stratification and societies. Examines fundamental concepts and research methodology. May be offered online or as a telecourse.

SOC 205 Social Stratification and Social Systems 3 credits
Explores patterns of social inequality, or stratification, using sociological research and theory. Focuses on race, class, and gender inequality. May be offered online or as a telecourse.

SOC 206 Institutions and Social Change 3 credits
Sociological study of dynamic organizational nature of society through analysis of social change and major social institutions such as family, education, religion, economy, and political systems. May be offered online or as a telecourse.

SOC 207 Women and Work 3 credits
Women perform nearly two-thirds of the world's work, receive one-tenth of the world's income, and own less than one-hundredth of the world's property. This class is an introduction to and analysis of the issues necessary to understand women's work experience and economic position, past and present. Focus areas will include the multi-cultural economic and labor history of women in the US, the family and women's work, welfare/workfare issues, and women's position in the global economy.

SOC 208 Sport and Society 3 credits
This course explores the relations between sport and society. While we use sociology to help make sense of sport, we also use sport to develop the ability to think sociologically about society. Subjects include sport and: values, socialization, deviance, social problems, social inequalities including class, race, and gender, social institutions including the economy, politics, mass media, and religion, and social change.

SOC 210 Marriage, Family, and Intimate Relations 3 credits
Love, sexuality, intimate partnerships, marriage, parenting, and family disruptions are analyzed in a social context. A sociological approach offers insights into our personal experiences and informs our perspectives on social policies that affect families and intimate relationships.

SOC 211 Social Deviance 3 credits
The study of behavior that departs from a group or society's norms. Topics include delinquency and crime; sexual, religious and lifestyle deviance; deviant sub-cultures; society's reaction to deviance; explanations of causes of deviance and the tracing of its effects on individuals and society.

SOC 213 Race and Ethnicity 3 credits
This course explores a comparative history of racial dynamics with particular emphases on the way in which race, ethnicity, and class, inform these histories. A comparative sociological approach will be used in order to explore the process of racial information. Throughout the course we will recuperate the histories of racialized groups and expose sites of oppression, struggle, and resistance.

SOC 215 Social Class 3 credits
Examines the centrality of social class in contemporary society. Topics include: conceptions of class, class structure, class consciousness, class inequality and social mobility, worker alienation and exploitation, ideology, the relations between class and culture, the role of money and power elites in politics, the role of transnational corporations in the world, and class-based social movements and revolutions.

SOC 216 Global Social Movements 3 credits
The twenty-first century has been marked with unprecedented social movement activity. Seattle, Chiapas, Genoa, South Africa, Argentina, and New Delhi, have become symbolic sites where social actors are forging global alliances to redefine, redirect, and resist the effects of globalization. This course examines the dynamic social, political, economic, and cultural, aspects of globalization through contemporary social movements that have developed in response to globalization. A comparative sociological approach will be used in order to explore globalization, international trade, labor, human and collective rights, and trans-national resistance movements.

SOC 218 Sociology of Gender 3 credits
Sociological research and theory is used to examine how gender is socially constructed through social institutions, social interaction, and the formation of a gendered identity. Considers how gender interacts with other categories of difference (such as race and social class) to shape major social institutions and personal experiences. Explores how gender arrangements can be transformed.

SOC 225 Social Problems 3 credits
An examination of selected social problems-basic facts, effects on individual and society, and explanations. Problems will be selected

from the following three areas, but not all topics will be covered each term. 1. Systemic problems: racial and sexual discrimination, inequality and poverty, militarization and war, ecological problems, overpopulation, urban and rural problems, life cycle problems. 2. Problems of specific institutions: government, economy, family, education, religion, and social services. 3. Personal pathologies: mental illness, suicide, alcoholism, and drug addiction.

SOC 280 Co-op Ed: Sociology 3-12 credits
In this internship course students will gain sociology-related work experience in community organizations. Students may integrate theory and practice, develop skills, explore career options, and network with professional while earning college credit.

Spanish—See Language Studies

Speech Communication

For information, contact the Language, Literature and Communication Division, Center Bldg./Rm. 457, 541.463.5419.

SP 100 Basic Communication 4 credits
Basic Communication is a survey course designed to provide students with an overview of communication as a field of study. Its aim is to help develop oral communication competencies needed to function effectively in diverse communication contexts. The course addresses a variety of theoretical topics in communication studies and attempts to build skills in interpersonal, small group, and public speaking. May be offered online.

SP 105 Listening and Critical Thinking 4 credits
Analysis of listening behavior to develop understanding of listening's vital role in the communication process. Designed to help students improve a variety of listening skills such as attention, critical thinking, and memory-through exercises with diverse speakers and subjects. Students are urged to take Listening and Critical Thinking (SP 105) before Interpersonal Communication (SP 218). Also useful for English Language Learners preparing for the TOEFL exam.

SP 111 Fundamentals of Public Speaking 4 credits
This course is designed to help students learn strategies for expressing ideas with confidence and clarity. The aim is to teach students to speak in public by preparing presentations to diverse audiences in a variety of contexts. In addition, students will learn to become critical listeners by analyzing others' presentations.

SP 112 Persuasive Speech 4 credits
Speech 112 is designed to provide students with an understanding of the persuasive communication process so that they are able to prepare effective audience-adapted persuasive presentations and to evaluate persuasive messages they encounter. Students will demonstrate their proficiency through expository and persuasive speeches, written analyses, and argumentation practice.

SP 115 Introduction to Intercultural Communication 4 credits
This course is designed for people whose work, lifestyle, travel, or interests will involve them in intercultural interactions. A variety of topics will illustrate how differing values, beliefs, attitudes, and social systems affect verbal and nonverbal human communication behaviors. The students will develop awareness, understanding, and sensitivity to cultural diversity among different nations and cultures within our society. May be offered online.

SP 130 Business and Professional Speech 4 credits
This course is designed for students who need to develop or enhance their presentation and briefing skills in business or professional settings. Special attention is given to the use of presentation aids commonly used in small group settings and the business world. The emphasis will be on clarity, delivery, and organization. Students are required to prepare and deliver a variety of in-class presentations. May be offered online.

SP 218 Interpersonal Communication 4 credits
This course is designed to develop students effective practices in intra- and interpersonal communication in a variety of face-to-face settings. The goal is to understand oneself, others, and the role of communication in achieving and maintaining satisfying relationships. Knowledge and skill building are used to foster improvement, with special attention to self-concept, listening, emotions, intimacy, and verbal and non-verbal communication. Students learn to manage stress and conflict and to use assertive/supportive rather than aggressive/defensive messages as tools for improving relationships and for conducting more

productive incidental relationships. Students are urged to take Listening and Critical Thinking (SP 105) before taking Interpersonal Communication. May be offered online.

SP 219 Small Group Discussion 4 credits
The purpose of the course is to provide a setting in which students may increase their knowledge about the function and role of small group communication in the home and workplace. Students will have the opportunity to participate in a variety of small groups with single tasks. They will participate in an on going problem-solving small group.

SP 220 Communication, Gender and Culture 4 credits
This course is intended for people who are interested in increasing their knowledge and awareness of differences in male and female communication styles. We will explore how communication, gender, and culture interact to influence perceptions and expectations of gender roles. May be offered online.

SP 221 Forensics 1-2 credits
SP 221, SP 222, SP 223 Forensics (Variable credit) These courses offer training in several novice-level to intermediate speaking events in preparation for participation in intercollegiate speech (forensics) competition. The aim of this activity is to enable students to hone their speaking skills in the two primary forms of individual speaking events—platform speeches and oral interpretation—as well as in debate. These courses allow for flexibility so that individual students will work in their areas of interest and at their own skill levels.

SP 222 Forensics 1-2 credits
See SP 221

SP 223 Forensics 1-2 credits
See SP 221.

SP 262 Voice and Articulation 4 credits
This course offers study and practice in the principles of voice production and the articulation of American English speech sounds, with attention to elementary speech physiology and phonetics. Intended to meet the needs of teachers, performers, radio and television speakers, public speakers, English Language Learners, and speech pathology majors, as well as others who want to improve the sound of their speech.

SP 280 Co-op Ed: Speech 3-12 credits
Gain work experience that integrates speech theory and practice while developing skills, exploring career options and networking with professionals/employers. Students set learning objectives, keep a learning journal, and are evaluated by their site supervisor. Meet with the speech co-op coordinator the term before (if possible) to set up the internship.

Spelling—See Study Skills

Studio Art Classes—See Art, Studio

Study Skills and College Prep

Also see Mathematics and Writing

For information about classes with course numbers that begin with:

CG—Contact the Counseling Department, Bldg. 1/Rm. 103, 541.463.5299.

EL and RD—Contact Academic Learning Skills, Center Bldg./Rm. 218, 541.463.5439.

CG 100 College Success 1-3 credits
This course emphasizes practice and active learning of skills and strategies that help create greater academic, professional and personal success. College Success strategies empower students to make wise choices that lead to improved experiences and outcomes in college and beyond. May be offered as a telecourse. May be offered as a telecourse.

CG 100A College Success 1 credits
This course is the first block of the three credit CG100 College success course. Students will study the following topics: Welcome to College, The First Step, Ideas are Tools, Finding the Time, Looking Ahead, You've Got a Great Memory and Muscle Reading. May be offered as a telecourse.

CG 100B College Success 1 credits
Prerequisite: CG 100A. This course is the second block of the three

credit CG100 College Success course. Students will study the following topics: Reading Challenges, Taking Notes, Challenges Worth Noting, Preparing for the Test, This is Not a Test, Thinking Creatively and Thinking Critically. May be offered as a telecourse.

CG 100C College Success 1 credits
Prerequisite: CG 100A and CG 100B. This course is the third block of the three credit CG100 College Success course. Students will study the following topics: Math and Science: A 3-D Solution; Research: Solving a Mystery; Writing well-The First Draft; and Writing Well-The Final Presentation. May be offered as a telecourse.

EL 113A Connections: Special Study Skills 1 credits
This course is a content-specific study skills course designed for students reading at a college level who wish to strengthen their study skills and strategies in a specific content area for success in the content course. The course is linked with content areas through a content-area course in which students are co-enrolled. The two courses (EL113A and the content-area course) are either linked with extensive instructor collaboration or team-taught.

EL 115 Effective Learning 3 credits
This course is designed for students who wish to strengthen their study skills and strategies. Students will learn how to take notes from lectures and textbooks, study for tests, improve memory, read and study from textbooks, manage time effectively, and use the library. Coursework requires college-level reading skills.

EL 115E Effective Learning: ESL 3 credits
This course is designed for English language learners who wish to strengthen their study and language skills. Students will learn how to take notes from lectures and textbooks, study for tests, improve memory, read and study from textbooks, manage time effectively, use the library, and communicate effectively. For a description of this ALS class in Spanish, see <http://lanec.edu/als/classes/espanol.htm>.

EL 115H Effective Learning: Health Science Majors 3 credits
This course is designed for health occupation majors who wish to strengthen their study skills and strategies. Students will learn how to take notes from lectures and textbooks, study for tests, improve memory, read and study from textbooks, manage time effectively, and use the library. Course work requires college-level reading skills.

RD 080 Preparatory College Reading 6 credits
Preparatory College Reading Prerequisite: Minimum level as determined on the college reading test. This is the entry level reading class offered by the Academic Learning Skills Department. Students will learn active reading strategies such as finding main idea and supporting details to improve textbook comprehension. Students will develop techniques for enlarging vocabulary and creating study tools. Brief reading selections from actual first year textbooks are part of this course. This course is offered as a part of the Guided Studies Program.

RD 089 Academic Reading for ELL Students 3 credits
Department consent required. Corequisite: WR089. This course is for English language learners. Students will learn active reading strategies such as finding the main idea and supporting details. Students will develop techniques for expanding their vocabulary and creating study tools. Readings will include both advanced ESL texts as well as short authentic readings.

RD 090 College Reading Skills 3 credits
This is the second in the sequence of reading classes offered by the Academic Learning Skills Department. Students will learn to integrate active reading strategies such as finding main idea and supporting details, note taking, and mapping to comprehend longer college level reading selections. Students will learn how to draw thematic connections between a variety of readings.

RD 093 College Reading for ELL Students 3 credits
Prerequisite: Placement by reading/writing test. This is a course for English language learners. Students will learn reading strategies that will improve comprehension in reading such as reading for main idea, supporting detail, patterns of organization, and inference. Students will learn basic literary terminology and how to draw thematic connections between a variety of authentic texts including a novel, short stories, newspaper and journal articles, and poetry. In addition, students will learn to conduct basic library research and cite sources correctly. The course is designed so that students will increase their English language proficiency and improve their reading skills.

Theatre Arts

For information, contact the Music, Dance and Theatre Arts Department, Bldg. 6/Rm. 204, 541.463.5209.

TA 121 Introduction to Costuming 3 credits
Student will learn basic sewing, costume rendering and execution of a design.

TA 140 Acting Shakespeare 4 credits
Students become "Shakespeare-friendly" through lectures and classroom activities. Introductory trainings include acting, vocal/physical skills, swordplay, and Elizabethan song. Coached work on how to bring 400-year-old words alive. (Optional participation in public Term's End Shakespeare Showcase.)

TA 141 Acting 1 3 credits
Introduces the student to basic acting skills. Class exercises focus on increased self-awareness, observation skills, relaxation techniques, overcoming stage fright, and introduction to character analysis and scene study. No prior experience necessary. This course prepares students for continuing on in the Beginning Acting class sequence.

TA 142 Acting 2 3 credits
Prerequisite: TA 141. Continuation of the Beginning Acting sequence. Students are introduced to monologue audition techniques, in-depth character analysis, and more advanced scene work.

TA 143 Acting 3 3 credits
Prerequisite: TA 142. Continuation of the Beginning Acting sequence. Students continue in-depth character analysis, and apply it to more advanced scene work. This course prepares students for continuing on in the Intermediate Acting class sequence.

TA 144 Improvisational Theatre 1 3 credits
Students learn theater games, scene development, and role-playing. Participants put their creative energy into action, release their inhibitions, expand their imaginations, and sharpen their wits. This class is essential training for actors, and useful for others, too.

TA 145 Improvisational Theatre 2 3 credits
Previous experience required. Students study and practice historical styles, and apply the principles of improvisation to character development and scene analysis as well as to everyday life.

TA 150 Technical Production 3 credits
This course provides comprehensive information for students who want to learn the necessary technical functions, aspects and operations of Performing Arts productions. Besides a strong knowledge of many technical elements of productions, students become familiar with stagecraft, scenic design, lighting, sound, stage management and crew work. This course is recommended for performers, stagehands and future arts producers in Music, Dance and Theatre, who need to know the basics of stagecraft and backstage communications.

TA 153 Theatre Rehearsal and Performance 1-3 credits
Consent of the instructor. Designed to provide practical application of classroom theory. The course may be repeated for a maximum of nine credits. Should be taken by participants in a theatrical production of this department scheduled for public performance.

TA 164 Writing for the Theatre 1 3 credits
This first sequence focuses on the essentials of playwriting. Students experience a series of exercises; and listen to, record, and write pieces for live theatre. This class may be taken for a total of not more than three terms.

TA 227 Stage Makeup 3 credits
Stage Makeup covers the history, purpose, and especially the technique of application of theatrical makeup. Students study the use of makeup in various theatrical media, with emphasis on stage performers.

TA 241 Intermediate Acting 3 credits
Prerequisite: TA 143. This course begins a three-term concentration on the problems of characterization. In preparation for various audition situations, students perform from theatre literature, commercial copy, film scripts, and television shows. This course is highly recommended for those students transferring to schools requiring entrance auditions and for anyone wishing to enter the business now. The three-course sequence may be repeated for a maximum of nine credits.

TA 242 Intermediate Acting..... 3 credits
Prerequisite: TA 241. This course continues the concentration on the problems of characterization, with an emphasis on 'method' acting. Students learn to bring themselves to the role in an intimate way. A preparation for the third term in this series. The three-course sequence may be repeated for a maximum of nine credits.

TA 243 Intermediate Acting..... 3 credits
Prerequisite: TA 242. This course continues the concentration on the problems of characterization, with an emphasis on acting for the camera. The three-course sequence may be repeated for a maximum of nine credits.

TA 250 Technical Production 2 3 credits
Prerequisite: TA 150 The course provides advanced training and experience for students who want to learn the necessary functions and operations behind-the-scenes. Besides gaining technical expertise, students learn stage and lighting design, stage management and production crew work. This course is recommended for performers, stagehands and future arts producers in Music, Dance and Theatre, who need to know more advanced skills in stagecraft and backstage communications. 30 hours of lab time outside of class is required.

TA 253 Theatre Rehearsal and Performance..... 1-3 credits
Designed to provide practical application of classroom theory and skills. Should be taken by participants in a theatrical production of the Music, Dance, and Theatre Arts Department that is scheduled for public performance. The course may be repeated for a maximum of nine credits.

TA 264 Writing for the Theatre 2 3 credits
Prerequisite: TA 164. A continuation of Writing for the Theatre 1, this sequence focuses on the rewriting process of script development, as students continue to work on projects. They learn to reshape events, they participate in readings, and analyze and critique each other's work. This course can be taken up to three terms.

TA 280 Co-op Ed: Performing Arts..... 3-12 credits
Co-op offers students on-the-job work experience in a theatre-related site. Students integrate theory and practice gained in the classroom with practical experience in the professional world. Students develop skills, explore career options and network with professionals and employers while earning credit toward a degree. Please contact performing arts cooperative education coordinator before attempting to register.

Tutoring

For information, contact Tutoring Services, Center Bldg./Rm. 210, 541.463.5783.

ED 125 Tutor Training 1..... 1 credits
Prerequisite: Employment as a tutor. This class is the first of three levels of certified tutor training. The content includes learning styles, communication, tutoring techniques, and problem solving. Students learn how to facilitate learning. The teaching format is interactive with tutors supplying their own answers and teaching each other. Upon completion, tutors will gain regular level I certification from the College Reading and Learning Association (CRLA).

ED 126 Tutor Certification-Advanced 1 credits
Prerequisite: Continued employment as a tutor and completion of ED125. This class is designed for current LCC tutors with some experience. The content will deepen in the areas of learning styles, communication, and cultural competence as it relates to tutoring and life. The teaching format is interactive with tutors teaching and learning collaboratively. Upon completion, tutors will gain advanced level II certification from the College Reading and Learning Association (CRLA).

ED 127 Tutor Certification-Master Level 1 credits
Prerequisite: Continued employment as a tutor and completion of ED 125 and ED 126. This is the third and final level of the College Reading and Learning Association's (CRLA) certified tutor training. Tutors will gain skills in mentoring, teaching, leadership, and critical thinking. The teaching format allows tutors to individualize learning based on goals and needs through a project outside of class. Upon completion, tutors will gain a master level certification from the CRLA.

Video Production—See Media Arts

Vocabulary—See Writing

Water Conservation

For information, contact the Science Division, Bldg. 16/Rm. 253, 541.463.3997.

SUST 101 Introduction to Sustainability 3 credits
What is sustainability? Students discuss, measure and learn how to implement action. Topics include economic, ecologic and environmental literacy; history; power and privilege; basic needs of food, water and shelter; energy, transportation and development; products, purchasing, waste and recycling; governance. Features guest speakers.

WATR 101 Introduction to Water Resources 3 credits
This course provides a sociological perspective of topics including history and perception; water use; basic hydrology, water stressors at multiple scales; stormwater, wastewater and drinking water; water quality appropriate to use; water supply and demand management as well as emerging issues.

WATR 102 Water Careers Exploration..... 4 credits
The course provides an introduction to water conservation and watershed technician fields, examining water issues from personal to global contexts. The class will define water as a critical concern of society at all levels. Students will investigate employment opportunities related to water through readings, documentaries, lectures and guest speakers.

WATR 105 Water Conservation: Residential..... 4 credits
This course focuses on strategies to increase water conservation and efficiency at the residential level using proven water conservation strategies. The course covers program development, water use, waste, auditing, efficiency measures and incentives as well as fixtures and appliances. Students participate in hands-on activities.

WATR 107 Water Conservation: Outdoor 4 credits
This course focuses on conservation at the residential outdoor level including water use and waste; efficiency measures; and landscape issues such as planning and design, irrigation systems, soils, mulch and maintenance. Theoretical work will be enhanced by hands-on outdoor learning.

WATR 202 Fostering Sustainable Practices 3 credits
Study and practice communication and collaboration skills that develop effective community programs for sustainability. Learn techniques to overcome barriers that stifle sustainable behaviors. Practice initiatives at the community level through direct contact with people, and learn how green industry practitioners encourage sustainable practices.

WATR 206A Coop Ed: Water Conservation Seminar 1 1 credits
Students will increase their understanding of industry expectations as well as develop job search tools and skills. Students will learn and practice presenting themselves to employers in a competent and professional manner in preparation for a cooperative education internship.

WATR 206B Co-op Ed: Water Conservation Seminar 2 1 credits
Prerequisite: WATR 206A This course is a continuation of WATR 206A and further develops students' understanding of industry expectations as well as job search tools and skills. The emphasis is to provide additional skills that will help students find employment upon earning their degree.

WATR 208 Water Conservation: Agricultural..... 4 credits
Course provides an overview of water efficiency in irrigated agriculture. Topics include water use, waste, efficiency, conservation, auditing, measurement, soil moisture monitoring and irrigation, laser leveling and other emerging technologies. The class includes field trips and hands-on experiences.

WATR 210 Water Conservation: Industrial / Commercial 4 credits
Course focuses on retrofitting to increase wise water use. Emphasis of the class will be water use, waste, efficiency and auditing for Commercial, Industrial and Institutional (CII) sites. Topics include metering, sanitation, process water use, and heating and cooling systems. Concept of Industrial Ecology introduced.

WATR 215 Integrated Water Management..... 4 credits
Prerequisite: SUST 101 and WATR 101 This class examines a wide range of water uses and water issues in multiple settings and at various scales using global, regional and local case studies. Emphasis will be on the interaction between various resource uses and the effects of conservation measures.

WATR 220 Water Conservation: Program Development 4 credits
This capstone class explores the design, implementation, maintenance and evaluation of water efficiency plans and programs. Emphasis is on creating formal water conservation plans. Students learn how to make the business case for efficiency and how wise water use supports sustainability.

WATR 221 Water Mechanical Systems 4 credits
Prerequisite: WATR 210. Course provides an overview of mechanical systems that use or re-circulate water in residential, commercial and industrial settings. Topics include: efficient use of water and energy, appropriate technology theories and practices, rules and regulations, systems analysis techniques and emerging technologies.

WATR 222 Stormwater Best Management Practices 4 credits
Students gain a working knowledge of best management practices for stormwater management. We will explore non-mechanical treatments from constructed wetlands to swales to green roofs. Topics will include site analysis, flow management, and phyto-remediation. Labs include field trips, field work and guest lecturers.

WATR 261 Regional Water Policy 3 credits
Explores policy, regulation, rights and law pertaining to the Pacific Northwest bioregion. Additional topics include national and international code trends, case studies illustrating conflict management techniques and the role of economic incentives in encouraging efficient resource use.

WATR 280 Co-op Ed: Water Conservation Technician 3-12 credits
This internship course offers a work experience that integrates theory and practice in the field of water conservation. Develop skills, explore career options and network with professionals and employers while earning academic credit toward the degree.

Watershed Science

For information, contact the Science Division, Bldg. 16/Rm. 156, 541.463.5446.

GS 102 General Science: Introduction to Watershed Field Methods 2 credits
Co-Requisite: GS 101 or instructor consent. Introduction to field data collection, including site sketching, photo documentation; measuring direction, length, area and slope; species counts and plant cover quantification. Students learn procedures for permanent plot installation and how to protect data integrity.

WST 205 Soils Fields Methods 2 credits
Basic principles of experimental design, site and instrument selection for field research to study soil and slope physical and biological characteristics. Basic tools and data acquisition techniques are used in a variety of field settings. Field exercises on evenings and/or weekends combined with self-paced online learning.

WST 206 Co-op Ed: Watershed Science Technician Seminar 2 credits
Students will increase their understanding of industry expectations while developing job search tools and skills. Students will learn and practice presenting themselves to employers in a competent and professional manner in preparation for a cooperative education internship and, ultimately, a professional career.

WST 221 Invasive Species Field Methods 1 credits
Practical field experience using standard protocols to collect data on invasive species and their mitigation in a variety of natural systems. Field exercises on evenings and/or weekends combined with self-paced online learning.

WST 222 Threatened and Endangered Species Field Methods 1 credits
Practical field experience in monitoring the status of threatened and endangered species and assessing strategies to mitigate their loss. Field research exercises on evenings and/or weekends combined with self-paced online learning.

WST 223 Prairies to Woodlands Field Methods 2 credits
Practical field experience in collecting data on the condition of prairies, savannas, woodlands, and forests. Emphasis is on species of concern including endangered, keystone, invasive, and indicator species. Field exercises on evenings and/or weekends combined with self-paced online learning.

WST 224 Wetlands Field Methods 2 credits
Practical field experience in monitoring biological, chemical and

physical properties of wetlands. Includes plant communities and microbiology. Introduction to hydraulics and treatment efficiencies. Field exercises on evenings and/or weekends combined with self-paced online learning.

WST 225 Riparian Field Methods 2 credits
Prerequisite: ENVS 183 or instructor consent. Introduction to basic skills needed to determine the functional status of riparian systems. Vegetation identification. Habitat assessment of stream-side plants, animals and macro-invertebrates. Field exercises on evenings and/or weekends combined with self-paced online learning.

WST 226 In-Stream Field Methods 2 credits
Prerequisite: ENVS 183 or instructor consent. Introduction to protocols and procedures used in streams to measure stream and channel attributes, aquatic ecology and water quality. Emphasizes where, when and how to sample stream ecosystems. Field exercises on evenings and/or weekends combined with self-paced online learning.

WST 230 Watersheds and Hydrology 4 credits
Physical hydrology of watersheds including the water cycle, water budgets, water yields and peak flows. Effects of surface erosion, stream temperatures, nutrient levels and human activities upon watershed health.

WST 234 Watershed Best Practices 4 credits
Capstone experience applying sustainable approaches to watershed restoration and management to improve and maintain water integrity. Students combine watershed field skills and conceptual knowledge with emphasis on integrated, multidisciplinary methods and best practices.

WST 280 Co-op Ed: Watershed Science Technician 3-12 credits
In this internship course, students gain watershed science-related work experience in businesses, government, non-profits and NGOs. Integrate classroom theory with practical experience in the professional world. Develop skills, explore career options and network with professionals and employers while earning college credit.

Web—See Business and Computers: Introduction/Information Systems/Computer Science

Welding—See Fabrication and Welding

Women in Transition

For information, contact the Women's Program, Bldg.1/Rm. 202, 541.463.5353.

BT 030 Computer ABCs for Women in Transition 3 credits
Prerequisite: CG 220 (may be taken the same term). Strongly recommend ability to type. This is a beginning computer skills course for students who are in the Women in Transition program, providing a supportive environment to learn basic computer operations. Through guided, hands-on, in-class computer exercises and assignments students will gain increased confidence in operating computers and preparing for entry-level computer courses. Focus is on student success and integration with other programs in the learning community.

CG 100E College Success Transiciones 1-3 credits
Esta clase de credito (cuenta hacia un titulo) se dedica a preparar las Latinas y jovenes Latinos para tener éxito escolar en la Universidad. Se puede tomar para obtener créditos en Lane Community College o simplemente para su aprendizaje. Cualquier estudiante que es mujer y habla español puede tomar esta clase. La clase se da en Español. La clase se enfocara en entender el sistema de Lane Community College, aspectos familiares/culturales, formando un ambiente que promueve el estudio, manejar el tiempo, estudiar, encontrar dinero para estudiar, y conocer los recursos que apoyan a los estudiantes.

COLLEGE SUCCESS FOR SPANISH SPEAKING WOMEN. This credit class is intended to reach Spanish speaking women and Spanish speaking youth who are preparing to study at Lane Community College and want to learn how to be successful in the college level academics. This class is offered in Spanish. The class will focus on Lane Community College systems, sensitively dealing with family-cultural barriers, setting up an appropriate study environment, how-to manage time, forming good study skills, finding scholarships, and learning about student resources. Both non-traditional and high school students are encouraged to enroll for this class.

CG 100T College Success: WIT 1-3 credits
Prerequisite: CG 220. This course is designed to help students enrolled in the Women in Transition Program in identifying, exploring and implementing vital self-management skills crucial to creating and maintaining success in college and life. Students will utilize a variety of experiential, personalized tools as they learn how to apply concepts of self-management to developing and achieving academic and personal goals.

CG 140T Career and Life Planning: WIT 3 credits
Co-Requisite: CG 220. This course is designed to help students enrolled in the Women in Transition program plan their careers and their lives. Topics will include: self-awareness (exploring and identifying values, interests, skills and personality styles); career exploration (available careers, careers that fit personal wants and needs, steps to pursuing career goals); and decision making (how to make decisions, weigh options, and set goals). Note: CG 140T is a Career and Life Planning class with an emphasis on issues for women in transition, there are also general Career and Life Planning courses offered by Counseling with overlap in content. Students may receive credit for either CG140 or CG140T.

CG 207 Life Transitions 2 3 credits
Prerequisite: CG 220. This course is the next sequence in the Women in Transition program. It is designed to assist students in enhancing their ability to navigate life changes in powerful and positive ways, building on the skills and knowledge gained in the first Life Transitions course. Topics include: responding successfully to changing personal and professional demands; strengthening resiliency and self-esteem; establishing and maintaining healthy relationships; and setting, enacting and attaining personal, academic and career goals. Class activities will stress practical and personal application of course information. Successful completion of the first Life Transitions course is required.

CG 220 Life Transitions: Women in Transition 4 credits
Co-requisite: CG 140T. This course is designed to help students enrolled in the Women in Transition program navigate their current life transitions and explore positive new life directions. Topics include: life transitions; (understanding change, endings, losses and new beginnings); relationships; (patterns, identifying productive and damaging interactions, learning new skills); and personal growth; (self-esteem, coping with powerful emotions, healthy power, assertiveness).

EL 115T Effective Learning: Women in Transition 3 credits
Prerequisite: CG220, can be taken in a previous term or concurrently. This course is designed for students who are in the Women in Transition program and wish to strengthen their study skills and strategies. Students will learn how to take notes from lectures and textbooks, study for tests, improve memory, read and study from textbooks, manage time effectively, and use the library.

MTH 010T Whole Numbers, Fractions, and Decimals: WIT 3 credits
Prerequisite: CG220, can be taken in a previous term or concurrently, and placement by the LCC math test or consent of the instructor. This course is designed for students who are in the Women in Transition program. Students will review whole number skills and learn to compute with fractions and decimals. Universal math concepts will be integrated into the curriculum to increase students' abilities and to extend their understanding of basic math principles in preparation for higher level math courses. Effective math study strategies and math anxiety issues will be discussed to increase students' confidence in their abilities to succeed in math classes and to use math in daily life. MTH 010T is intended for students who need to strengthen their basic math skills before moving on to MTH 020.

MTH 020 Math Renewal 1-3 credits
Prerequisite: MTH 010A, MTH 010T or equivalent courses with a grade of "C-" or better, or pass a placement test through Testing Services. Prerequisite grades or test scores must have been completed within the past four terms. If you have taken a higher level math course than this and passed the course with a "C-" or better, you may not use this course for your degree/certificate requirements. This course begins with a review of whole number, fraction, and decimal arithmetic that includes rounding, estimation, order of operations, averages, and the solving of one-step equations. This review is followed by an introduction to ratios, proportions, percent, measurement, and basic geometry in a problem-solving context,

with the earlier review skills integrated throughout. Some applications for technical careers will be incorporated for students in professional technical programs. Scientific Calculator is required. Please refer to the Calculator Recommendation Chart on lanec.edu/math. This course is available in a variable credit self-paced format where students must obtain instructor permission in order to register. This permission is obtained after an orientation in the Math Resource Center (MRC) in Bldg.16/Rm.169 on one of the first two days of the term.

PE 183U Strength Training for Women 1 credits
Learn safe and correct techniques with free weights, machines, bands, stability balls and more, to tone and strengthen major muscles. Instruction in basic anatomy, terminology, nutrition, and exercise principles associated with resistance training. Open to women of all ages and experience levels.

WR 115 Introduction to College Writing 4 credits
Prerequisite: Appropriate scores on Lane's Writing Placement Test or a passing grade (C-or better) in WR 093, WR 095, WR 97 or equivalent. WR 115 emphasizes the writing process of pre-drafting, composing, revising, and editing to help students express ideas clearly in logical and meaningful essays. WR 115 also helps students develop analytical skills so that they can become better critical thinkers, readers, and writers. Assignments and class discussions affirm the relevance of writing skills to students' academic, occupational, public, and/or personal lives. Because this course serves as an introduction to college writing, skills essential for success in WR 121 will be introduced in WR 115. The course also fulfills writing requirements for some Lane programs.

WR 121 Introduction to Academic Writing 4 credits
Prerequisite: Appropriate scores on Lane's Writing Placement Test or a passing grade (C-or better) in WR 115. This fundamental course for all writing students introduces students to the conventions of academic writing. It emphasizes defining and developing a significant topic and using principles of clear thinking to support an assertive or argumentative thesis. Students will gain an understanding of their subject matter, audience, purpose, and point-of-view, and demonstrate that understanding through the organization and development of their essays. Students will learn how to analyze and evaluate other writers' work to sharpen their critical abilities as readers and writers. The course also introduces students to skills in source analysis, documentation, and beginning research methods. May be offered online.

Women's Studies

For information, contact the Social Science Division, Center Bldg./Rm. 403, 541.463.5427.

SOC 108A Selected Topics in Women's Studies, Women's Bodies, Women's Selves 3 credits
Throughout history, cultural views and practices regarding women's bodies have fundamentally affected women's experiences, position, and relative power in society. This class focuses on the embodied experiences of women, in what ways these experiences are socially constructed, and women's accommodation and resistance to those cultural constraints. Major areas of focus will include women's health, reproduction, sexuality, gendered violence, and body image, and will include cross-cultural information.

SOC 207 Women and Work 3 credits
Women perform nearly two-thirds of the world's work, receive one-tenth of the world's income, and own less than one-hundredth of the world's property. This class is an introduction to and analysis of the issues necessary to understand women's work experience and economic position, past and present. Focus areas will include the multi-cultural economic and labor history of women in the US, the family and women's work, welfare/workfare issues, and women's position in the global economy.

WS 101 Introduction to Women's Studies 4 credits
Introductory course to the interdisciplinary field of Women's Studies, to feminism, and to the issues raised by a focus on the lives of women. Special attention will be given to the areas of work, family, sexuality, body image, gender socialization, violence against women, social and economic relations, and theories about women's oppression, authority, and power. Class discussion is central in relating readings and lectures to students' everyday lives. Participation in a weekly discussion group is required.

Writing

For information about classes with course numbers that begin with:

ENG and WR080-095—Contact Academic Learning Skills, Center Bldg./Rm. 218, 541.463.5439.

WR115-245—Contact the Language, Literature and Communication Division, Center Bldg./Rm. 457, 541.463.5419.

ENG 116 College Vocabulary.....3 credits

Students will acquire vocabulary that will increase their speaking, listening, reading, and writing vocabularies. Students will study the history of the English language, affixes and roots, pronunciation, dictionary and thesaurus use (hardcover and online), as well as strategies for vocabulary acquisition and enrichment. Instruction will move at a faster pace, introduce more material, and deal with vocabulary at a higher level than Preparatory Vocabulary.

SKD 085 Preparatory Vocabulary.....3 credits

Students will acquire vocabulary skills that will increase their speaking, listening, reading, and writing vocabularies. Students will study word parts, pronunciation, dictionary use (hardcover and online), and techniques for vocabulary acquisition and enrichment.

WR 080 English Grammar and Sentence Writing 6 credits

Prerequisite: Placement by the LCC reading/writing test or instructor consent, or a grade of C-or better in RD080. Students will learn about parts of speech, subject/verb agreement, pronoun/antecedent agreement, and basic sentence patterns. Also, students will study sentence types, standard punctuation, and rules of capitalization. Students will develop their ability to write standard English sentences that will demonstrate their mastery of these concepts.

WR 089 Academic Writing for ELL Students 4 credits

Prerequisite: Placement by the LCC reading/writing test or department consent required. Corequisite: RD 089 This is a course for English language learners. Students will develop sentence, paragraph, and essay writing skills. They will also work on summary writing and personal reaction writing. Students will develop clearly focused essays with adequate support using sentences without major grammatical error (verb tense, subject-verb agreement, etc.) Course activities may be enhanced through an extended workshop setting, an online module, or a service-learning component. Students will submit papers using word processing software.

WR 090 Paragraph Writing 3 credits

Prerequisite: A passing grade in WR080 or WR085B or WR089, or placement by the LCC reading/writing test, or recommendation of instructor. WR090 is the second in a three-course sequence that prepares students for transfer-level composition courses. Students will learn a process for writing and revising basic expository paragraphs. In addition, students will practice paragraph structures, development of ideas in a paragraph, and sentence improvement. Students will submit final drafts typed and printed from a computer.

WR 093 College Writing for ELL Students 4 credits

Prerequisite: A passing grade in WR 089 or WR 090, or placement by the LCC reading/writing test, or recommendation of the instructor. English language learners will develop more competence in writing. Students will learn skills in paragraph and essay writing with an emphasis on development and organization techniques. Students will also learn advanced grammatical concepts and produce essays that reflect that knowledge. Students will demonstrate control and understanding of the writing process: generate and organize ideas, write drafts, revise and edit multi-paragraph essays. Students will also use critical reading skills to analyze essays and improve their own writing. Students will submit papers using word processing software.

WR 095 College Writing Fundamentals 4 credits

Prerequisite: A passing grade in WR087 or WR089 or WR090 or WR093, or placement by the LCC reading/writing test, or recommendation of instructor. WR095 serves as preparation for WR115. Students will demonstrate control and understanding of the writing process: generate and organize ideas, write drafts, revise and edit paragraphs and multi-paragraph essays. Students will also use critical reading skills to analyze essays and improve their own writing. Students will produce writing that reflects knowledge of advanced grammar skills. Students will submit final drafts typed and printed from a computer. Course activities may be enhanced through an extended workshop setting, an online module, or a service learning component.

WR 105 Writing for Scholarships.....2 credits

Prerequisite: WR 115 or placement test. This course is part of the "Show Me the Money" Learning Community. Students must co-register with CG 105, "Scholarships: Money for College." The course provides a systematic approach to writing essays required for scholarship applications. It will include frequent writing exercises with extensive revision of drafts to help students learn essay writing strategies, styles, and methods to express themselves clearly, effectively, personally, and genuinely. Assignments will be based on essay topics from the Oregon Student Assistance Commission application. NOTE: This two-credit writing course will not count toward a WR 115/115W, 121, 122, 123 or 227 writing course.

WR 115 Introduction to College Writing 4 credits

Prerequisite: Appropriate scores on Lane's Writing Placement Test or a passing grade (C-or better) in WR 093, WR 095, WR 97 or equivalent. WR 115 emphasizes the writing process of pre-drafting, composing, revising, and editing to help students express ideas clearly in logical and meaningful essays. WR 115 also helps students develop analytical skills so that they can become better critical thinkers, readers, and writers. Assignments and class discussions affirm the relevance of writing skills to students' academic, occupational, public, and/or personal lives. Because this course serves as an introduction to college writing, skills essential for success in WR 121 will be introduced in WR 115. The course also fulfills writing requirements for some Lane programs.

WR 115W Introduction to College Writing:

Workplace Emphasis.....3 credits

Prerequisite: Appropriate scores on Lane's Writing Placement Test or a passing grade (C-or better) in WR 093, WR 095, WR 97, or equivalent. This course provides students with a forum for exploring, evaluating, and creating various forms and styles of spoken and written English. Writing 115W emphasizes frequent writing, revision, and editing to help students learn to express ideas clearly in logically organized essays, letters, and reports by drawing on critical analytical and thinking skills. WR115W fulfills writing requirements for some Lane programs. NOTE: This three-credit writing course will not count as a prerequisite for WR 121.

WR 121 Introduction to Academic Writing 4 credits

Prerequisite: Appropriate scores on Lane's Writing Placement Test or a passing grade (C-or better) in WR 115. This fundamental course for all writing students introduces students to the conventions of academic writing. It emphasizes defining and developing a significant topic and using principles of clear thinking to support an assertive or argumentative thesis. Students will gain an understanding of their subject matter, audience, purpose, and point-of-view, and demonstrate that understanding through the organization and development of their essays. Students will learn how to analyze and evaluate other writers' work to sharpen their critical abilities as readers and writers. The course also introduces students to skills in source analysis, documentation, and beginning research methods. May be offered online.

WR 122 Composition: Argument, Style and Research 4 credits

Prerequisite: A passing grade (C-or better) in WR 121. or a passing score on the English Department's Waiver exam. While continuing the concerns of WR 121-English Composition: Introduction to Academic Writing-WR 122-Argument, Style, and Research-focuses on persuasion and argument supported by external research, including the processes of finding and evaluating sources, citing, documenting, and integrating source material into the student's own text. Both subjects—argument and research—are presented in the context of critical reading and the writing. Also available online.

WR 123 Composition: Research.....4 credits

Prerequisite: A passing grade (C-or better) in WR 122. While continuing the goals of WR 122, this course emphasizes skills needed to complete a quarter-long research project. Students will write a research essay that supports an analytical and/or assertive thesis. WR 123 also emphasizes the critical reading and writing skills involved in defining and researching a genuine problem of inquiry, as distinct from encyclopedic reporting. May be offered online.

WR 227 Technical Writing.....4 credits

Prerequisite: A passing grade (C-or better) in WR 121 or a passing score on the English Department's waiver exam. Recommended: A passing grade (C-of better) in WR 122. This transfer course emphasizes forms of writing demanded in the workplace rather

than academic essays. While addressing issues like evaluation of materials and audiences, sources of information, organization and design, and visual aids, the writings include letters, informal reports, descriptions, instructions, and proposals. May be offered online.

WR 240 Creative Nonfiction 4 credits

Prerequisite: A passing grade of (C-or better) in WR121 or a passing score on the English department's waiver exam or waived based on instructor's evaluation of student writing. This course is designed to introduce students to the genre of Creative Nonfiction, in which they will learn the conventions and techniques of the genre through guided creative writing projects. Students will learn how to implement narrative, backstory, pacing, and characterization by reading the work of other students and published authors, whose work will serve as models for the students. The readings will include the various modes of the genre, such as autobiography/memoir, personal essay, nature and/or science writing, and literary journalism. Students will produce, workshop, and present their own works of creative nonfiction in class.

WR 241 Introduction to Imaginative Writing: Fiction 4 credits

Prerequisite: A passing grade (C-or better) in WR 121, or a passing score on the English Department's waiver exam, or waived based on instructor's evaluation of student writing. Writing 241 is an introduction to the principles and practice of writing, editing, and publishing short fiction. Elements covered include character, conflict, plot, point of view, setting, theme, dialog, and tone. Stories by well-known authors are read and discussed as models. Students generally write two to three stories in addition to completing other exercises, peer responses, and a journal. Workshop discussions are often used along with instructor feedback to guide revision and editing of student work.

WR 242 Introduction to Imaginative Writing: Poetry 4 credits

Prerequisite: A passing grade (C-or better) in WR 121, or a passing

score on the English Department's waiver exam, or waived based on instructor's evaluation of student writing. Writing 243 deals with writing poetry. The goals of the course are to help students: 1) learn the elements of poetry; 2) develop an interest in reading poems by well-known poets; 3) develop an interest and ability in writing poems; 4) read and write poems effectively; 5) discover and develop talents; 6) receive constructive criticism of their writing; 7) learn to be confident in their critical evaluations of their peers; and 8) gain a better understanding of themselves and others.

WR 255 Poet in the City 4 credits

Prerequisite: A passing grade (C-or better) in WR 121, or a passing score on the English Department's waiver exam, or waived based on instructor's evaluation of student writing. WR 245 is a poetry-writing course that encourages participatory learning through writing poetry in both the classroom and alternative settings throughout the community. This course uses a holistic approach to learning, recognizing the student as a member of a college classroom and an outside community. As students study the form and style of poetry, they will experience poetry emotionally and intellectually. After students write, read, and team-teach poetry in community outreach settings, students will return to the traditional classroom to reflect on that engagement through guided writing assignments.

WR 280 Co-op Ed: English/Writing 3-12 credits

This internship course is for students with excellent writing skills who might want work as a writer or in an occupation that requires writing. Gain work experience while polishing writing skills, explore career options and network with professionals/employers. Meet with the co-op coordinator the term before (if possible) to set up the internship.

Zoology—See Biology



Continuing Education

Many of the college's academic and student services are available to all students. Examples include Career and Employment Services, Counseling, Disability Resources, and the Multicultural Center. For complete information about these resources see pages 24 through 35.

Registration, Costs and Payment Methods To learn about registration, costs and payment methods for these training opportunities, consult the current class schedule or call the program of interest. For information about credit and refund policies, see page 23 of this catalog.

Continuing Education

Continuing Education (CE) offers hundreds of noncredit courses each term in career and technical (vocational) training, employment training, computers, consumer/money, art, music, foreign language, home/house/garden, health and health occupations, human development, recreation, outdoor programs, and general interest areas.

CE also offers short-term training and upgrading for a wide range of professional fields. In some cases, students can earn continuing education units, industry certification, or meet state and/or national professional examination preparation requirements. Current noncredit technical trainings available through CE are described in this catalog, Community Education Class Schedule and the quarterly web class schedule.

Enrollment in most courses is open to any interested person over 16 years of age. A few courses have prerequisites. A list of course offerings and registration information is included in Community Education Class Schedule, mailed each quarter to area residents. Community Education Class Schedule also is available on the main campus, at the Downtown Center, at all outreach centers, and at lanecc.edu prior to the beginning of each term.

Tuition and fees for noncredit classes are published in Community Education Class Schedule and on the web class schedule.

Instructors have expertise in the subjects they teach. People interested in teaching a CE course may contact a coordinator at the CE office at the Downtown Center or call 541.463.5252.

Continuing Education Career Training

Computer Training From mastery of individual software programs to specialist certifications, the college offers a broad range of computer learning opportunities. Offerings include skill building in Windows operating systems, presentation, word-processing, and desktop design software, including AutoCAD, web programming, and database creation and application. Many computer trainings are available online.

myLane

Use myLane for registration, account payments, viewing schedules, class details, and grades. Check each term's class schedule for information on registration dates, getting your "L" number and going on-line in myLane.

Floristry This course of study is designed to give students comprehensive information of floral industry design, management, and retail skills and behind the scenes information. The floristry course consists of 102 hours of required classes and 24 hours of elective classes. Students gain valuable hands-on experience making basic, event and seasonal floral arrangements. Students take home practice arrangements after each class. Upon successful completion of the course, students are awarded a certificate of completion.

Massage Therapist Program This program is designed to prepare students to sit for the Oregon State Board of Massage Therapists Certification Exams and has been approved by the Oregon Board of Massage Therapists. The program also provides hours toward continuing education for LMTs. Students must successfully complete required courses of anatomy and physiology, kinesiology and pathology, applied massage, communication and ethics, professional practices, hydrotherapy, labs and clinical. Contact hours and program content are subject to change. For current information, visit lanecc.edu/ce.

Nursing Assistant This training provides 150 hours of instruction in basic nursing procedures. It includes theory and clinical hours. Upon successful completion, students may sit for the Oregon State Board of Nursing (OSBN) certification exam. A current CPR card is required before applying for the certification exam. The program is OSBN approved. For more information, visit lanecc.edu/ce.

Phlebotomy Upon completion of two courses, Phlebotomy I and Phlebotomy II, and one year of work experience, students are eligible to sit for the ASCP national Phlebotomy Technician Certification exam. This program is offered two times per year. The first session begins fall term, and the second session begins spring term. For more information, visit lanecc.edu/ce.

Fashion Design This course of study consists of 190 hours of instruction which includes core classes and elective classes. This course trains individuals for entry level positions in fashion design. For more information, visit lanecc.edu/ce.

Jewelry Making and Marketing This course of study consists of 150 hours of core classes and 50 hours of elective classes spread over four terms. Upon completion of this course of study, students will have a comprehensive knowledge of the jewelry industry. For more information, visit lanecc.edu/ce.

English as a Second Language

English as a Second Language (ESL) Department provides English language instruction for English language learners who need to improve their English skills for work, community, academic, or personal goals. Courses are designed to help students with everyday communication as well as with transitions to work or to other training and academic programs, including credit and noncredit programs in community colleges or universities.

This noncredit program enrolls students from more than 40 different nations, and students from Asian, Latino, European, and Middle Eastern cultures. All classes are culturally mixed, and all instruction is conducted exclusively in English.

Registration Day classes are offered at the Main Campus (MC), 4000 East 30th Avenue. Call 541.463.5253 for more information or visit the office in Building 11, Room 201. MC office hours are 8 a.m.-5 p.m. Monday-Thursday and Friday 8:30-4:30 p.m. Evening classes are located at the Downtown Center (DTC), 1059 Willamette St., Room 210. Call 541.463.4935 or stop by ESL DTC office on Monday and Wednesday between 4-7 p.m.

New and returning students must make an appointment to take an English placement test. Placement tests are available at scheduled times in both the day and evening. There is no minimum skill level for entry to classes.

ESL Classes Instruction includes seven levels of classes in integrated skills (listening, speaking, reading and writing) and supplemental classes, such as TOEFL Preparation.

Volunteer ESL Tutors Enrolled students can be matched with volunteer tutors. Community members may contact Amy Gaudia, 541.463.5919 to learn more about becoming a volunteer tutor.

International ESL Students (IESL) International students whose TOEFL score is lower than 475 PBT or 53 iBT may be issued an I-20 to obtain a student visa to attend ESL classes. International students are integrated into ESL classes and pay an international class fee comparable to international student tuition in the credit program.

International ESL application deadlines are August 1, December 1, March 1, and June 1. Students are required to attend international orientation prior to the beginning of the term. Questions concerning International Student Admissions should be directed to Jane Marshall, International Admission Coordinator, Lane Community College, 4000 East 30th Avenue, Eugene, OR 97405; telephone: 541.463.3404; lanecc.edu/international. International students on student visas must enroll for a minimum of 18 hours of class per week. Other students in the U.S. on nonimmigrant visas may enroll in ESL classes for a fee on a space available basis.

El Centro de Mujeres

El Centro de Mujeres de Lane Community College brinda el programa para mujeres "Transiciones". Si tiene interés llame 541.463.3253.

Inglés como Segundo Idioma

El programa de Inglés como Segundo Idioma provee instrucción a personas cuya primera lengua es otra que inglés y que necesitan mejorar su inglés para lograr sus metas personales, académicas, laborales, y comunitarias. Las clases han sido creadas con el propósito de facilitar la comunicación diaria, además de ayudar a los estudiantes a crecer laboralmente o a entrar en otros estudios y programas académicos, incluyendo programas con o sin valor curricular en Lane Community College (colegio comunitario) y en otras universidades.

Este programa sin valor curricular admite estudiantes de más de 40 diferentes naciones, incluyendo Asiáticos, Hispanos, Europeos y del Medio Oriente. Todas las clases son culturalmente combinadas y toda la instrucción es exclusivamente en inglés.

Inscripción Llame al 541.463.5253 para clases matutinas en el Main Campus o al 541.463.4935 para clases vespertinas en el Downtown Center. También puede visitar una de nuestras oficinas: Salón 201 del Edificio 11, ubicada en la dirección 4000 E. 30th Ave y en 1059 Willamette Street, Salón 210.

Los estudiantes que quieren iniciar clases por primera vez, o los que están regresando a clases después de un tiempo de ausencia, deben hacer una cita para tomar un examen de inglés para colocarse en un nivel. Las citas para los exámenes de colocación están disponibles en horas predeterminadas por la mañana y la tarde. No hay ningún requisito mínimo de conocimiento de inglés para entrar al programa.

Clases de ESL El Programa de Inglés como Segundo Idioma (ESL) proporciona instrucción sólo en inglés y consta de siete diferentes niveles incluyendo clases de lectura y escritura, comprensión auditiva y conversación, y algunas clases suplementales como preparación para el examen de TOEFL.

Tutores Voluntarios Los estudiantes inscritos tiene la oportunidad que se les asigne un tutor voluntario. Los miembros de la comunidad pueden contactar a Amy Gaudia al 541.463.5919 para saber más acerca del entrenamiento de tutores voluntarios.



Adult Basic and Secondary Education

Lack of basic skills is often a barrier to getting or keeping a job. The ability to read, write and compute at the 9th grade level is now the minimum required for entry-level employment. Higher paying jobs and employment in the 21st century will require higher level basic skills plus new skills such as computer literacy, problem solving, teamwork, and learning to learn.

Admission Requirements All students must be 18 years of age or older, or have a release-referral from the local public school district if 16 or 17 years of age, or have Lane Community College homeschool release and verification of current homeschool registration from ESD. (This applies to in-school and out-of-school youth. The decision to release a student is made by local school district officials in accordance with Oregon Revised Statutes and local school district policy).

Admission Procedures Class locations, orientation and registration information are available in the quarterly class schedule or on the department website at lanecc.edu/abse. For more information, call 541.463.5214.

Many of the college's academic and student services are available to all students. Examples include Career and Employment Services, Counseling, Disability Resources, and the Multicultural Center. For complete information about these resources see pages 24 through 35.

Registration, Costs and Payment Methods To learn about registration, costs and payment methods for Adult Basic and Secondary Education, consult the current class schedule or call 541.463.5214.

Adult Skill Development

Adult Skill Development offers a variety of pre-college level alternatives for adults who need to brush up on basic reading, writing, or math skills for work, college entrance or passing the GED exam.

Class times are offered during the day and evening in many locations in Lane County. All new students must attend an orientation session.

General Education Development (GED)

Lane Community College offers classes to prepare teens and adults to take the GED exam. Preparation is offered in all five test areas: social studies, science, reading, writing, and math. The structure of classes differs from location to location and offers a combination of small group instruction, individual attention and practice testing.

The official GED tests can be taken in Testing Services on main campus.

Core College Connection

Lane's Adult Basic and Secondary Education (ABSE) department provides tuition-free core college classes that will help you:

- Prepare for or improve score on Lane Community College placement tests.
- Develop reading comprehension skills and strategies
- Renew or increase math skills
- Develop writing and grammar skills

Adult Basic Skills Development

Moving Toward Employment (MTE): Specialized Math, Reading, Writing, and Current Events/Technology

The Basic Skills Program offers structured courses that provide specialized instruction and support for students with multiple learning styles including students with disabilities. Courses focus on improving basic academic skills including Reading, Writing and Math, Basic Math: Story Problems and Current Events. Students must meet eligibility criteria to enroll. New student orientation is held the first week of each term at the Downtown Center. Contact the program for additional information.

Registration Students or referring agency should call 541.463.5945, Monday through Friday, 8 a.m. to 5 p.m. for more information on the admission process.

Community Services

Center for Meeting and Learning

This 35,000 square-foot conference and event venue on Lane's main campus features a 6,900 square-foot main event space, high-tech auditorium, breakout rooms, demonstration kitchen, computer training lab, and a spacious lobby with alcoves. The Center offers full service, in-house catering focusing on local and seasonal selections and provides Culinary Arts and Hospitality Management students the opportunity to work side-by-side with the Center's professional staff in a learning lab environment. Profits from the Center help fund a Hospitality Management faculty position at Lane. Booking an event at the Center helps support education. The Center accommodates campus, community,

and regional events of all types. Call 541.463.3500 to book an event or visit lanecc.edu/center.

Community Center for Family Counseling

Counseling and Continuing Education at Lane sponsor the Community Center for Family Counseling, informally known as Saturday Circus. Call 541.463.5234.

Both credit (CG 211) and noncredit learners (at no charge) can attend parent education/child guidance sessions at the Saturday Circus, 9 a.m. - noon, Saturdays (Thursdays or Fridays in the summer) at Lane's Downtown Center. Participants can view family

counseling sessions that illustrate principles and skills for improving relationships with children and participate in exercises and discussion. An advanced class (CG 212 for credit and noncredit learners at no charge) helps participants refine implementation of principles and skills. Childcare for children age three (and out of diapers) through elementary school age is available upon arrangement. Outgrowths of the Saturday Circus are noted below.

- Each term the Improving Parent-Child Relationships telecourse (CG 213) combines real-life, in-home interactions between parents and children with segments of interviews in which a counselor discusses with parents the application for principles and skills for improving relationships. Telesessions are cablecast as well as available at the main campus Library and outreach centers.
- An understanding anger class (CG 214) provides a goal-directed approach for improving self-management and effectiveness in responding to others who express anger.
- In collaboration with the Oregon Society of Individual Psychology, the Saturday Circus offers an Annual Conference on Families. Learners can participate through Continuing Education or as credit students (CG 299).

English As A Second Language See page 272.

KLCC-FM Radio *klcc.org*

KLCC 89.7 FM a listener-supported public radio station licensed to Lane Community College provides NPR news, local and regional news, and a wide world of intelligent music to over 88,000 people in the Eugene/Springfield area and western and central Oregon. Musical genres include jazz, folk, blues, and world beat. KLCC consistently ranks among the top five public stations in the country for market impact.

Broadcasting 24 hours a day with 81,000-watts of power, KLCC is operated by a professional staff and volunteers from the community. It is funded by the Corporation for Public Broadcasting, Lane Community College, the business community, and the listening audience. KLCC is a charter member of National Public Radio.

Family Connections

Family Connections is a community-based child care resource. For more information, see page 26.

Library

The Library provides resources for students, faculty, staff, and community residents. For more information, see page 29.

Music, Dance and Theatre Arts

The department presents concerts and performances available to the community. For information, see page 30.

myLane

Use myLane for registration, account payments, viewing schedules, class details, and grades. Check each term's class schedule for information on registration dates, getting your "L" number and going on-line in myLane.

Specialized Support Services

Specialized Support Services (S³) provides employment training and education to adult students with intensive support needs. S³ operates as a cooperative venture between the college, Lane County office of Developmental Disabilities, Full Access Brokerage, Mentors Oregon Brokerage, and the State of Oregon's Division of Human Services. S³ offers individual and small group instruction that addresses social skill development, on-the-job training, work crew skills in socially integrated settings, competitive employment placement, as well as community inclusion activities to adults with developmental disabilities.

As a means of providing vocational training and actual work experience for its students, S³ contracts to provide services to various public and private organizations. Services include confidential shredding, collating and assembling publications, paper recycling, bulk mailings, packaging, small parts assembly, and employee placement with on-the-job training and follow-along support in the employers' workplace. Additional services include janitorial, laundry work, and kitchen crews. S³ has a central office on main campus and other jobsites in the community. For information, call 541.463.5101.

Successful Aging Institute

The Successful Aging Institute (SAI) provides lifelong learning opportunities for adults of all ages, with special emphasis on classes for mature adults and those who nurture their success. Explore new careers, including those related to work with older adults; cultivate skills for the third age of life; and enjoy stimulating interactive courses in a variety of disciplines. SAI offers courses that promote health, wellness, intellectual growth, and information about the issues relevant to successful aging. Tailored training for professional caregivers and senior-related businesses is also available. Contact SAI with ideas of classes you would like to take and/or teach. At Lane, your quest for learning never ends. For information, call 541.463.4634 or visit *lanecc.edu/sai*.

The Senior Companion Program

The Senior Companion Program is sponsored nationally by the federal Corporation for National & Community Service and locally by Lane Community College. Senior Companions help frail seniors and adults living with disabilities overcome loneliness and retain their independence through 1:1 friendly visits, and assistance with simple chores and transportation. Working in collaboration with 30+ agencies throughout Lane County, Companions provide more than 60,000 hours of service to 400+ clients annually. Companions must be age 55+, have a limited income, and serve clients 15-20 hours/week. They receive a tax-free hourly stipend of \$2.65 and comprehensive ongoing training. Those interested in becoming Companions are invited to apply, pass a criminal background check, and participate in a week-long pre-service training. For more information, call 541.463.4630 or visit *lanecc.edu/scp*. (The Senior Companion Program does not link Companions with clients directly. Please contact Senior & Disabled Services at 541.682.4038 if you would like to receive the services of a Senior Companion.)

Business and Workforce Development

Small Business Development Center

The Small Business Development Center (SBDC) provides excellent entrepreneurial education for all phases of business development from starting a business to growing an existing business. The Center, founded in 1982, is a member of the Oregon Small Business Development Center Network and is actively involved in the economic development. The services provided to businesses are:

- Find assistance with personalized, confidential, no-cost business advising services. Experienced business advisors, focusing on essential business skills, assist entrepreneurs with start-up, marketing, social networking, and making critical business decisions. Advising is available by appointment only.
- Develop new, practical skills through entrepreneurial classes, workshops, and business management programs taught by business professionals. Network with peers and use the information learned the very next day.
- Discover helpful information through an extensive business resource library, housed in the SBDC, and gain access to the Lane Business Link website – with the vast array of resources our cities, county, and state have to offer.
- And, a staff of helpful and knowledgeable employees and community professionals to assist you.

The SBDC is located at the LCC Wildish Building, 1445 Willamette St., Ste. 1, Eugene. Business hours are 8:30 am to 5 pm, Monday-Friday. Phone number is 541.463.5255. Website is LaneSBDC.com.

Business Start-up and Early Stages

The SBDC offers a variety of classes and workshops for the early stages of business for start-up, marketing, record keeping, taxes, and more. We also partner with local experts and other service providers to offer topics of interest to business owners.

Going Into Business: Next Steps (GIB)

GIB is an in-depth class for business development. So now you've decided to take the entrepreneurial plunge. This class gives you all the tools you need to create a sound foundation. Decide on the structure and financial setup, record keeping, taxes, planning, marketing, and more. Guest speakers and former students share their expertise. Follow-up advising is available to assist with building a business model further.

QuickBooks® for Business

Learn how to use basic and advanced QuickBooks functions: paying expenses using cash, checks, or credit cards; recording customer sales using sales receipts, invoices, and sales orders; issuing credits and refunds; memorizing and scheduling transactions; managing accounts receivable and payable; customizing sales forms; preparing standard and customized reports; reconciling accounts; and year-end tasks. Also, covered are the basics of processing payroll and personalizing QuickBooks files.

Business/Entrepreneurial Services

Business Advising and Resource Referral

From the idea through conception and growth of your business, support and resources are available to help businesses succeed. Aid with idea generation, inventions, innovations, and process improvement is also available as well as business development, strategic planning, and product development, financial management and marketing

plus many other topics. Personalized, professional, and confidential business advising services for new and established businesses are underwritten by grant funds and the college. Advisors are available to help with the process, assist with workshops, classes, and resource referrals at no-cost to the participant.

Business Management Programs

Signature small business management programs are designed to help business owners increase profitability and reach goals through improved business management where your business is the textbook. Small Business Management and Agricultural Business Management are our signature business management programs. Other business management programs have been developed to reach specific groups.

Business Communications and Leadership Program

This business program is designed to help develop advanced leadership and communication skills. This is an open enrollment program allowing entry at any time in the year. This program is based on the proven Toastmaster business communications curriculum with the addition of a leadership track, coaching, and mentoring.

New! Start, Run, and Grow Your Business

Program is offered by the Lane SBDC in conjunction with Palo Alto Software, and the Oregon Broadband Delivery Project. This 12-module interactive online program is designed for any business, whether start-up or established, wanting to improve and be more successful. It can be started at any time and is self-paced. Program includes online courses covering all aspects of a successful business, developing a professional business plan, presentations, handouts, planning software, videos, and more. Confidential face-to-face or electronic business advising is a component of the program.

Small Business Management (SBM) Program

Over a three-year period, the Small Business Management Program covers management topics through a customized curriculum helping you identify and prioritize outcomes and devise a plan to achieve them. The result is: you get the tools and support you need to work smarter not harder. Our SBM Program is a unique program in which your business is the textbook.

Small Business Management Year I: Foundations

The SBM Year I: Foundations runs fall through spring terms with 15 classroom sessions offered twice a month in the evenings, as well as one-on-one personalized coaching sessions once a month. The one-on-one coaching is designed to fast-track implementation of key concepts and provides the small business owner with access to a professional business consultant. Owners will benefit from classroom sessions by learning from seasoned entrepreneurs. SBM Year I consists of the three modules listed below.

• SBM Marketing Foundation Module 1

This marketing module focuses on all aspects of marketing with the goal of having each business leave the module with a marketing plan they can execute. Class topics include: value proposition, features and benefits, customer stages, marketing 101, building a plan, image and branding, internet, social media, email marketing, and personal selling skills and strategies.

• SBM Financial Foundation Module 2

This financial module focuses on financial statements, accounting, and financing, and cash-flow budget. Class

topics include: accounting concepts, introduction to financial statements, understanding break-even and margins, cash-flow management, pricing, budgeting, taxes, working with accountants, and trends.

SBM Operations Foundation Module 3

Having a plan and executing that plan is what this module is all about. It is focusing on employee issues, goal setting, customer service strategies, and more. Each business will finish the module with a plan for managing workflow both in the short-term and in their future growth model. Class topics include: setting and achieving goals, planning, time management; customer service strategies; wealth building; legal and insurance issues; employee basics, recruitment and management; operational manuals; and team building.

Small Business Management Year II: Systems

The SBM Year II: Systems is focused on growing your business through understanding, creating, and implementing systems within your business. SBM Year II is designed for businesses with at least one full-time staff (owner/operator ok). Class topics include: strategic planning, plan/do/check/ act; introduction to the e-myth; project management 101; performance evaluations and development; financial statement strategies and ratios; CRM systems and solutions; systems thinking and process improvement; leadership and ethics; advertising and public relations; and class customized topics. Acceptance in the program is based on instructor approval. SBM Year II: Systems is a series of 10 monthly classes with personalized one-on-one coaching using your business as the textbook.

Small Business Management Year III: Advanced Concepts

Continuing the unique combination of classroom sessions and one-on-one personal coaching, businesses work on mastering the earlier concepts while fine-tuning their operation with new material. SBM: Advanced Concepts is designed for businesses that have completed the SBM: Systems class. Class topics include: workplace profiles and facilitation skills; sales management; board of directors; sustainability, job costing; budgeting processes; risk management; exit strategies; and a large number of customized topics based on class member interest. Qualified third-year business owners will receive a certificate of recognition. SBM Year III: Advanced Concepts is a series of 10 monthly classes, plus personalized one-on-one coaching.

Small Business Management Alumni Program

This continuing education and support program is open only to graduates of the three-year SBM program. Alumni members can drop into any current SBM, get additional one-on-one business coaching, plus attend the annual "Alumni Only Business Roundtable." This is the best way for SBM graduates to keep their skills fresh, their contacts growing, and their business on the right path.

ODOT Small Business Management Program (ODOT SBM)

Program is offered by the SBDC, in partnership with the Oregon Department of Transportation. ODOT Small Business Management program will include nine, 3-hour classes geared to helping contractors learn how to do business with ODOT or more about the process. Each class will be devoted to small business management topics, understanding ODOT-specific issues, peer group discussion and one-on-one confidential business advising.

Veterans Small Business Management (V-SBM)

This program is sponsored by a grant from the Oregon Small Business Development Center Network and the SBDC. Veterans

interested in building or growing their business can receive assistance for their business through classroom training and personal one-on-one advising.

Farm and Garden Partnership

Partnering with OSU Extension/Lane Farms and Gardens Program and the SBDC's Agricultural Business Management Program to assist agricultural businesses achieve family and business goals through improved management, organization, horticulture capacity, livestock management, and food preservation. This farm and garden partnership offers a variety of agricultural, horticultural, preservation classes and workshops for the business owner throughout Lane County.

Agricultural Business Management Program (ABM)

The Agricultural Business Management Program is designed for local farmers and agricultural professionals who want to build and improve the business side of their enterprise and increase their horticulture capacity. It contains nine class sessions, practical applications, and on-site evaluations (of soils; insect; disease; weed issues; crop production; pesticides; and more), and personalized one-on-one coaching. Classes provide current, practical information, and a methodology to apply it with advising that allows owners to work on their unique challenges. Open enrollment—entry at any time.

Ideas, Innovations, and Inventions

Assistance for inventors includes product development resources and referrals, training, and one-on-one confidential business advising.

Innovation Series

Participants will learn how to take their creative ideas, evaluate them, and protect them. Turning their ideas into business goals, and then achieve those goals.

Innovation Business Management Program (IBM)

This program is designed to help innovators take their creative ideas, turn them into business goals, and then achieve those goals. Whether you want to check the viability of an idea, build a manufacturing business, or license your intellectual property to another company, this 10-month program will give you the tools to get there. The curriculum includes all three modules of our "Small Business Management Program (SBM) Year I: Foundations".

Non-Profit Management Institute

The Non-Profit Management Institute provides a full range of professional development programs for nonprofits in Lane County.

Non-Profit Business Management Program

Non-Profit Business Management Program helps leaders of existing nonprofit organizations navigate more effectively in today's environment and brings focus to their efforts. This results in greater benefits for key stakeholders as well as the community. Experts lead discussions and answer questions on topics including: strategic planning; building organizational capacity; funding; measuring outcomes; recruitment and management of volunteers and staff; responsible financial management; technology; and more. In class, peers share best practices and act as resources for one another. Monthly one-on-one advising with the instructor focusing on individual goals and issues is a valued benefit of this program.

Employer Training Services

Employer Training Services (ETS) assists businesses, organizations, and employers with customized employee training. ETS facilitates training needs and provides access to the most current technology training available to ensure that your workplace is the most agile, effective, and efficient. In addition, we focus on the following areas:

- Basic/Advanced Job Skills and Certifications
- Project, Process, and Time Management
- IT/Computer Training and Certification
- Customer Service and Leadership
- Safety, Compliance, and Regulatory
- And, much more!

Attributes of our training facilitation are: flexible hours, customized training to meet the company's cultural needs, and a focus on employer driven outcomes and deliverables. You dream it—we deliver! ETS is located at the LCC Wildish Building, 1445 Willamette St., Ste. 1, Eugene. Contact Education Coordinators, Ame Beard at 541.463.4612 or bearda@lanecc.edu or Gary Schweitzer at 541.463.4624 or schweitzerg@lanecc.edu.

Employer Training Services Offerings

Lane's Employer Training Services are cost effective, innovative, led by expert instructors, and uses quality curriculum with immediate results. Scheduling is flexible and held at your place or ours. A new 24 station computer lab is available with the ability to add other software.

Human Resources

A partnership was created with the Society of Human Resource Management, the SBDC, and ETS to provide human resource management training to the Lane County area.

SHRM: PHR & SPHR Test Preparation

This course is designed for business owners, managers, and human resource professionals to prepare them for the PHR or SPHR exam and gain a comprehensive review of the entire body of Human Resource knowledge tested by the Human Resource Certification Institute using the SHRM Learning System®. Class is 36 hours, plus one Saturday, 6-hour sample test session; equals 4.5 CEUs, and offers a SHRM certificate.

SHRM: Human Resource Essentials

Class is designed for entry-level HR professionals, small business owners, and managers responsible for the HR functions in their companies and people looking into HR as a career-change possibility. Knowledge of the basics of HR can improve valuable on-the-job effectiveness; protect your business from needless litigation; and career advancement. Participants receive 1.5 CEU's and a SHRM Certificate.

Leadership

Learning to Lead Series by AchieveGlobal™

Learning to Lead Series is offered jointly with AchieveGlobal™, the SBDC, and Employer Training Services. This nationally recognized leadership certification series provides practical leadership skills for managers, employees, and business owners. It provides managers and potential managers with practical skills for optimizing employee engagement and meeting the expanding needs of their job. This interactive series focuses on situations that leaders

face on a day-to-day basis. Participants will learn and practice the skills that increase productivity, strengthen relationships, and build leadership success. An AchieveGlobal™ Certificate is given for successful completion.

Medical and Resuscitation Workshops

Classes are held in partnership with PeaceHealth and Employer Training Services.

Advanced Cardiac Life Support (ACLS)

ACLS is designed to provide American Heart Association (AHA) standards, cardiac knowledge, and psychomotor skills associated with the delivery of professional care of the cardiac patient. ACLS addresses the core knowledge necessary to evaluate and manage an adult victim of a cardiovascular emergency or cardiac arrest. Course structure is lecture and hands-on skill stations with written examination and satisfactory performance at the evaluation stations according to AHA performance criteria. Advanced homework required! ACLS Provider Manual required.

Pediatric Advanced Life Support (PALS)

The PALS course was developed for training of health care providers who may be required to resuscitate children and focuses on assessment of pre-arrest states and prevention of cardiopulmonary arrest in children. Content is presented through lecture and hands-on skill stations with written examination and satisfactory performance at the evaluation stations according to AHA performance criteria. Advanced homework required! PALS Provider Manual required.

Trauma Nurse Core Course (TNCC)

ENA's TNCC provides ED and ICU RNs with core knowledge and skills to care for the trauma patient. TNCC provider verification is valid for four years. Current RN License required for certification. Current copy of AHA TNCC card must be submitted with registration for the renewal course. Advanced homework required! Sixth Edition TNCC Provider Manual required. Equals 14.42 CEU's/Core and 8 CEU's/Renewal.

Workforce Development

The Workforce Development Department is a grant funded department that focuses on job readiness, skill enhancement, and training for reemployment. It is located on Lane's main campus in Building 19 and can be reached at 541.463.5223 or lanecc.edu/wdd/. The following services, programs, classes and workshops are free and open to the public as well as Lane students.

The Workforce Network The Workforce Network is the delivery of workforce development services to adults and dislocated workers in Lane County through a One-Stop career center system. The goal is twofold: 1) to assist with individual job search activities, and 2) to help build a skilled and educated workforce that can meet the needs of the contemporary workplace. The Workforce Network utilizes a consortium approach and is an alliance with the following Lane County agencies:

- Oregon Employment Department
- Department of Human Services
- Lane Workforce Partnership

The Workforce Network provides state-of-the-art resources for the community through the following no-cost services:

- Skills, abilities and interests assessments
- Career exploration
- Skill upgrading
- Resume and cover letter development
- Online job search and application
- Job search workshops and seminars
- Information on the local labor market and job openings
- Information on community resources
- Information on scholarships
- Internet access to employment and training resources
- Internet access to tutorials in basic skills
- Basic classes in math and computer skills for the workplace

A monthly calendar schedule of current job search workshops and basic skills classes is available at the department website at lanecc.edu/wdd/

The Career Readiness Certificate (CRC)

The CRC is a nationally recognized certification that measures skills needed for the workplace, with certificates awarded at Bronze, Silver or Gold levels. Earning the CRC demonstrates that you have the skills needed by employers nationwide. CRC orientations, classes, access to courseware, and testing are available at no charge through the Workforce Development Department. Call 541.463.3217 for more information.

Brighter Futures Grant

Lane was one of eight community colleges nationwide selected in August 2009 for the Brighter Futures Grant, a project of the League for Innovation and the Walmart Foundation. This two-year demonstration project allows for expanded career development and advising, enhanced job search assistance, and follow-up services for dislocated workers who participate. Call 541.463.5861 for more information.

Governance and Staff

Lane Community College Board of Education

Seven elected, nonpaid citizens comprise the Board of Education. Elections are held in May of odd-numbered years and openings are staggered. Vacancies due to unexpired terms are filled by board appointment. Board members are elected to four-year terms.

The Board of Education has primary authority for establishing policies governing the operation of the college and for adopting the college's annual budget. The board's charge is to oversee the development of programs and services that board members believe will best serve the needs of the people of the Lane Community College district.

The board holds public meetings the second Wednesday evening of each month, normally in the Boardroom, Building 3, main campus. Additional meetings are held as needed.



Sharon Stiles, retired EEO officer, Florence, elected May 2009, term expires June 30, 2013
Zone 1—Western part of college district



Robert Ackerman, attorney, Eugene, elected July 1965, re-elected March 1969, elected July 1999, elected May 2007, re-elected May 2011, term expires June 30, 2015
Zone 2—Northern part of college district



Gary LeClair, physician, Springfield, elected May 2009, term expires June 30, 2013
Zone 3—Marcola and Springfield part of college district



Susie Johnston, retired, Pleasant Hill, elected May 2005, re-elected May 2009, term expires June 30, 2013
Zone 4—Eastern part of college district



Pat Albright, retired teacher, Eugene, appointed April 2007, elected May 2007, re-elected May 2011, term expires June 30, 2015
Zone 5—Central Eugene part of college district



Rosie Pryor, marketing and strategy officer, elected May 2011, term expires June 30, 2015
At-Large—Position 6



Tony McCown, insurance agent, Eugene, elected May 2007, re-elected May 2011, term expires June 30, 2015
At-Large—Position 7

Administration

The college is administered by the president, under authority delegated by the Lane Community College Board of Education, with assistance from vice presidents, executive deans, division deans, and directors.

- **Mary Spilde**, President; at Lane since 1995. Ph.D. Oregon State Univ.; M.Ed. Oregon State Univ.; B.S., L.L.B. Univ. of Edinburgh
- **Sonya Christian**, Vice President for Academic and Student Affairs; at Lane since 2003. Ph.D. Univ. of California; M.S. Univ. of Southern California; B.S. Univ. of Kerala, India
- **Helen Garrett**, Executive Dean, Student Affairs; at Lane since 2000. M.A. Michigan State Univ.; B.A. Michigan State Univ.
- **Don McNair**, Executive Dean, Academic Affairs Transfer; at Lane since 1982. M.S. Univ. of Oregon; B.S. Univ. of Oregon
- **Andrea Newton**, Executive Dean, Academic Affairs Career Technical; at Lane since 1998. School Administrator Certificate Univ. of Oregon; M.Ed. Oregon State Univ.; B.S. Western Illinois Univ.
- **Greg Morgan**, Chief Financial officer; at Lane since 2006. M.S. Univ. of Southern California; B.S. Brigham Young Univ.
- **Dennis Carr**, Chief Human Resource officer; at Lane since 2003. M.S.I.R. Univ. of Oregon; B.S. Hiram College

Emeriti

The late **Dr. Eldon G. Schafer** was named president emeritus by the Board of Education in 1985. Dr. Schafer served as Lane president from 1970-85.

Dr. Dale Parnell was named president emeritus by the Board of Education in 2004. Dr. Parnell was Lane's founding president and served from 1965-68. He became a national leader in the community college movement.

Oregon State Board of Education

As one of Oregon's 17 publicly supported community college districts, Lane operates under the general direction of the Oregon State Board of Education.

- Serilda Summers-McGee, Portland
- Leslie Shepherd, Hammond
- Brenda Frank, Klamath Falls
- Artemio Paz, Jr., Springfield
- Duncan Wyse, Portland
- Samuel Henry, Portland

State Department of Education administration includes:

- **Susan Castillo**, State Superintendent of Public Instruction
- **Cam Preus**, Commissioner, Department of Community Colleges and Workforce Development

Lane Community College Budget Committee

The Budget Committee analyzes the administration's annual budget proposal. The 2011-2012 Budget Committee includes the Board of Education and the following members:

- **Jacque Betz**, term expires 2013, Asst City Manager, Florence
- **Jennifer Ocker**, term expires 2013, Medical Informaticist, Springfield
- **Matt Keating**, term expires 2012, Campaign Manager, Eugene
- **Carmen X. Urbina**, term expires 2013, school district family and community coordinator, Eugene
- **Chris Matson**, term expires 2013, Marketing and Political Consultant, Eugene
- **Dennis Shine**, term expires 2012, retired college instructor, Springfield
- **Kevin Cronin**, term expires 2014, Community Organizer, Springfield

Advisory Committees

More than 600 volunteers are appointed by the Lane Community College Board of Education to 45 advisory committees. These committees offer advice and assistance to instructional programs, enabling the college to tie its programs closely to current practices in the world of work and to employment opportunities.

All of the college's career and technical programs, as well as most noncredit programs, have advisory committees. The college also has advisory committees for programs and services such as KLCC, English as a Second Language, and Small Business Management.

The Career and Technical Education Coordinating Committee (CTECC) provides oversight for all advisory committees.

Members of the advisory committees may change during the year. Current lists are managed by the Office of Academic and Student Affairs.

Lane Community College Foundation

The Lane Community College Foundation raises and invests funds for scholarships, programs and capital needs.

Program support The state provides only a portion of the funding necessary to support instructional programs. Gifts from individuals and businesses strengthen Lane's ability to provide education and career training to nearly 40,000 students each year.

Scholarships Scholarships open the door to higher education for many people who otherwise could not afford college. Gifts for scholarships are an investment in the future.

Tax-deductible gifts to support Lane's programs and students should be made payable to: Lane Community College Foundation, 4000 East 30th Avenue, Eugene, OR 97405. Call 541.463.5226 for more information on how you can help. **If you are interested in applying for a scholarship**, please go on-line at lanecc.edu/foundation.

Staff

For fall term 2011, Lane employed 1,151 full- and part-time faculty and staff. A list of contracted and part-time instructional staff follows.

Full-Time Instructional Staff

Academic Learning Skills/ESL/Tutoring

Lindsley, Catharine D. Dean; B.A. Lewis & Clark Col.; Ed.M. Oregon State Univ.

Coleman, Liz E. B.A. Univ. of Oregon

Gayle-Reddoor, Susan C. B.A. Univ. Calif Riverside; M.A. Univ. Calif Riverside

Johnston, Stephen D. B.A. Univ. Mass Boston; M.A. Univ. of Oregon

McKenzie, Judith C. B.A. Evergreen State Col.; M.A. Goddard Col.

McQuiddy, Stephen J. B.A. Univ. of Oregon; M.F.A. Univ. of Oregon

Mitchell, Adrienne C. B.A. Univ. of Oregon; M.A. Univ. of Oregon; M.Ed. Univ. of Oregon

Pray, Elaine V. A.A. Canada Col.; B.A. San Francisco State Univ.; M.A. San Diego State Univ.

Adult Basic and Secondary Education

DeWolf, Dawn B. Dean; B.S. Montana State Univ. Billings; M.Ed. Oregon State Univ.

Gaudia, Amy B.S. Buffalo State Clg (Sunny); B.S. Univ. of Oregon; M.A. Pacific Univ.

Hemsoth, Gail L. B.A. Heidelberg Col.; M.S. Univ. of Oregon

Jackson, Patricia J. B.A. Washington State Univ; M.Ed. Oregon State Univ.

Kent, Leonora T. B.A. San Francisco State Univ.; M.Ed. Univ. of Oregon; Teaching Engl Speakr Othr Lang; Elem Education Teaching Cert

Lamoreaux, Alice A. B.A. Univ. of Oregon; M.S. Univ. of Oregon

O'Brien, James S. B.S. Univ. of Oregon

Pardew Grutta, Christine E. B.A. Mcdaniel Col.; M.A. Univ. Maine Orono

Schaefer, Karen L. B.A. Seattle Pacific Univ.; Ed.M. Oregon State Univ.

Young, James K. B.A. Rice Univ.

Advanced Technology Division

O'Connor, Patrick Dean; B.A. UC-Irvine; M.A. Univ. of Idaho; Ph.D Univ. of Oregon

Bergen, Dean E. ASE Cert Master; 3M Dupont Certificate; Cert Chart Frame Equipment; Cert John Bean Steering/Suspen; Cert I.C.A.R. Instructor; Auto Ref/Coll - Shop Mgr; Cert Glasurit and Diamont

Bridges, Jon H. B.A. St Marys Col. Ca; FAA Private Pilot Single Land; USAF Flight Engineer C5/C130

Clark, Alan B. A.S. Lane Community Col.; CAT/Cummins/Detroit Eaton Svc; Journeyman; ASE Cert Master, Truck

Dale, Terry A.S. Spartan col.; B.S. San Jose State Univ.

Hill, Allen D. Dipl. Lincoln Tech Inst-Pennsauken; C.E.R.T.1. Santa Monica Col.; A.A. Santa Monica Col.; Journeyman Machinist

Huntington, Mark M. C.E.R.T.1. Pinellas Tech Ed Ctr-Clearwater; M.S. Eastern Washington Univ.

Keen, Leonard R. OR Carpenter Apprenticeship; Journeyman

Kimball, Daniel G. 3M Auto Refin/Collision Rep Sh; Cert Binks Spray Finishing; Cert I.C.A.R. Instructor; GM/Ford Apprenticeship School; Journeyman; SHARK; Cert John Bean Alignment

Laskey, Allen L. A.S. Lane Community Col.; AWS Certified Welder; Cert Prod and Inventory Mgmt; ASME Certified Welder; AWS Cert Welding Instructor; AWS Cert Welding Educator

Mathers, Kelly D. ASE Cert Master; ASE Cert Master Auto Tech

Riordon, Egan A. A.A. Lane Community Col.; ASE Cert Master

Robertson, Margaret E. B.L.A. Univ. of Oregon; M.L.A. Univ. of Oregon

Webb, Steven A. C.E.R.T.1. Lane Community Col.; A.A.S. Lane Community Col.; CAT/Cummins/Detroit Eaton Svc; ASE Cert Master Med/Hvy Duty T

Weiss, Doug O. A.A. Palomar Col.; A.S. Schoolcraft Col.; CET Intl Society of Elect Tech

Arts Division

Williams, Rick R. Dean; B.S.J. Univ. of Texas - Austin; M.A. Univ. of Texas - Austin

Bird, Jeffery S. B.S. Col. St Rose; M.F.A. Univ. Mass Amherst; M.A. Suny Coll Oswego

Coronado, Ian I. B.F.A. Univ. Oklahoma; M.F.A. Univ. of Oregon

Finnerty, Kathryn A. M.F.A. Louisiana St Univ. Baton Rouge

Goolsby, Jefferson J. B.A. Calif St Univ. - Chico; M.A. Calif St Univ. - Chico; M.F.A. Univ. of Oregon

Grosowsky, Adam B.A. Evergreen State Col.; M.F.A. Univ. Iowa; M.A. Univ. Iowa

Hughes, Teresa B. B.S. Univ. of Oregon

Imonen, Lee C. B.A. Willamette Univ.; M.F.A. Univ. of Oregon

Keene-Wilson, Meredith A. A.A. Orange Coast Col.; A.A.S. Lane Community Col.

Lowdermilk, Susan K. B.F.A. Colorado State Univ. Ft Collins; M.F.A. Univ. of Oregon

Motouji, Satoko B.A. Univ. of Oregon; B.A. Ritsumeikan Univ.; M.F.A. Univ. Mass Amherst

Salzman, Andreas C. B.S. Univ. Wisc Stevens Point; M.F.A. Univ. Minnesota Minneapolis

Simms, Merrick L. B.A. Calif St Univ. East Bay; B.F.A. Univ. of Oregon; M.F.A. Univ. of Oregon

Vander Schaaf, Elizabeth B.A. Univ. of Oregon; M.A. Univ. of Oregon

Aviation Academy

Boulton, Stephen A. Dean; M.Div. Emmanuel School Of Religion

Bird, Keith D. A.S. Lane Community Col.; FAA Inspection Authorization; FAA Airframe and Powerplant

Gustafson, Bruce L. B.A. Univ. of Oregon; FAA Transp Pilot Mult Land; FAA Flight Instructor, CFII; FAA Transp Pilot Single Land; FAA MEI (Multiengine Instruct); FAA Instructor Single Engine; FAA Ground Instructor Instrum; FAA Ground Instructor Advanced

Povenmire, King K. B.A. San Diego State Univ.; M.S. Univ. Illinois Urbana; FAA Ground Instructor AI; FAA Comm Pilot Glider; FAA Flight Instructor AIMG; FAA Transport Pilot ASMEI

Business

Scott, Lawrence R. Interim Dean; B.S.C. Univ. of Victoria - Canada; B.S.C. Univ. of Victoria - Canada; M.A. Antioch Univ.-Yellow Springs

Boozar, Judy A. B.A. Idaho State Univ.; M.S.T. Portland State Univ.

Culver, Christopher D. B.S. Univ. of Oregon; M.B.A. Univ. of Oregon; Certified Public Accountant

Grant-Churchwell, C C. B.S. San Jose State Univ.; M.S. San Jose State Univ.

Kimble, Sharon R. B.S. Westrn Carolina Univ.; M.Ed. Westrn Carolina Univ.

McGlynn, Kaaren L. B.S. Portland State Univ.; M.B.A. Portland State Univ.; M.S. E-Commerce National Univ.

Child and Family Education

Nancy Hart Dean; B.A. George Fox Col.; M.A. Univ. of Oregon

Bishop, Jean M. B.A. Eastern Washington Univ.; M.A. Univ. of Oregon

Hickey, Beverly J. B.S. Univ. Calif Davis; M.A. Stanford Univ.; Elem Education Teaching Cert; Bilingual Spanish/English

Lloyd, Kathleen M. B.A. Lewis & Clark Col.; M.Ed. Univ. of Portland; Ph.D. Oregon State Univ.

Computer Information Technology

Scott, Lawrence R. Interim Dean; B.S.C. Univ. of Victoria - Canada; B.S.C. Univ. of Victoria - Canada; M.A. Antioch Univ.-Yellow Springs

Bailey, James L. B.S. Oregon State Univ.; M.S. Brigham Young Univ. Utah; Ph.D. Oregon Health Sci Univ.

Bricher, Gary P. B.S. Univ. of Oregon; B.S. Univ. of Oregon; M.S. Univ. of Oregon; Cisco Certified Network Assoc

Colton, Joseph W. B.S. Brigham Young Univ. Hawaii; M.S. Univ. of Oregon

Good, Marilou B.S. Univ. Minnesota Minneapolis; M.S. Univ. of Oregon

Little, Ronald K. B.S. Montana State Univ. Bozeman; M.S. Portland State Univ.

Loft, Linda L. B.A. Univ. of Oregon; M.S. Univ. of Oregon

Wilkins, Paul C. M.S. Oregon State Univ.

Cooperative Education

Al King Dean; B.S. Indiana Univ.-Bloomington; M.S. Indiana Univ.-Bloomington

Clemons, Marvin L. B.S. Univ. Wisc Waukesha; M.S. Univ. of Oregon; Sec Principal/Superintendent

Fike, Charles E. B.A. Northwest Christian Univ.

Fort, Daren B.A. College of William and Mary; M.Ed. Univ. North Carolina Wilmington

Kelsch, Jamie L. A.A.S. Lane Community Col.; A.G.S. Lane Community Col.; B.S. Linfield Col.

Pinkas, Tamara L. B.A. Univ. Calif Santa Cruz; M.S. Univ. of Oregon

Watrous, Merrill K. B.A. Scripps Col.; B.A. Occidental Col.; M.Ed. Santa Clara Univ.

Counseling

De Leon, Jerry F. Dean; B.A. Univ. Colorado Boulder; M.A. Adams State Col.

Parthemer, Mary S. Dean; A.A.S. Whatcomm Community Col.; B.A. Western Washington Univ.; M.S.W. Arizona State Univ.; Licensed Clinical Social Worker

Alvarado, Jessica S. A.A.S. Lane Community Col.; A.A.S. Portland Community Col.; B.S. Univ. of Oregon; M.S. Univ. of Oregon

Ganser, Debra J. B.S. Univ. of Oregon; M.S. Univ. of Oregon; National Certified Counselor

Hampton, Anthony A.A. Chabot Col.; B.A. Univ. Texas Pan American; M.Ed. Univ. Texas Pan American

Harris, Mark C. B.A. Sonoma State Univ.; M.A. Sonoma State Univ.

Landy, Beth S. B.S. Cal Poly - San Luis Obispo; M.S. Univ. of Oregon; National Certified Counselor

Litty, Carolyn L. B.S. Univ. Calif San Francisco; M.S.N. Univ. Calif San Francisco; M.S. Univ. of Oregon; Ph.D. Univ. of Oregon; Cert Licensed Prof Counselor; Psychiatric/Ment Health N Prac; National Certified Counselor; Marriage and Family Therapist; Mental Health Nurse

Salter, Christina L. B.A. New Clg - Univ. South Florida; M.S. Univ. of Oregon; National Certified Counselor; Cert Licensed Prof Counselor

Siegfried, Jill B.A. Wittenberg Univ.; M.S. Oregon State Univ.

Smyth, Douglas A. B.A. Depaul Univ.; M.Div. McCormick Theol Sem-Chicago; Ph.D. Univ. of Oregon; Licensed Psychologist

Solomon, Marva D. B.A. CUNY Queens Col.; M.S.W. CUNY Hunter Col.

Soriano, Leslie C. M.S. Calif St Univ. East Bay

Culinary Arts and Hospitality

Brian Kelly Dean; B.F.A. Southern Illinois Univ.; M.B.A. Marylhurst Univ.

Aherin, Lisa S. B.S. New Mexico St Univ. Univ. Park; M.A. Coll Santa Fe; Ph.D. Univ. of Idaho

Crosthwaite, Christopher Cert Executive Chef, ACF; Cert Exec Pastry Chef, ACF; Cert Culinary Educator, ACF

McCully, Joe B.S. Univ. of Denver; M.S. Florida International Univ; Cert Hospitality Educator, AHM

Partain, Duane A. B.A. Univ. Washington; M.B.A. American Grad Sch Intl Mgmt

Wanstall, Clive B. Dipl. Thanet Technical Clg; Cert Cookery London Inst; Cert Basic Cookery London Inst; Cert Executive Chef, ACF

English as a Second Language

Lindsley, Catharine D. Dean; B.A. Lewis & Clark Col.; Ed.M. Oregon State Univ.

Bakshi, Indira M. B.S. Purdue Univ. West Lafayette; M.A. Univ. of Texas - Austin

Guerrero, Maria C. B.A. Univ. of Oregon; M.A. Univ. of Oregon; M.C.S.E. Univ. of Oregon

Henninger-Willey, Tracy L. B.A. Northwestrn Col. Ia; M.A. Univ. Iowa

Johnson, Norman A. Dipl. Regent Clg - Br Columbia; B.A. Seattle Pacific Univ.; M.A. Univ. of Oregon

Seifert, Christine A. B.A. Univ. Calif Davis; M.Ed. Oregon State Univ.

Todd Le Douarec, Annick M. B.A. Univ. of Oregon; M.A. Univ. of Oregon; M.B.A. Univ. of Phoenix

Health and PE

Hawken, Chris Dean; B.H. Univ. of London; P.G.C.E. Univ. of London; Administrative Credential St. Mary's Col.; M.A. Univ. of California Berkeley; M.B.A. Columbia Southern Univ.

Bates, Rodger D. B.S. Boise State Univ.; M.Ed. Oregon State Univ.

Cousar, Susie J. A.A. Butte Clg-Oroville; B.A. Calif St Univ. - Chico; M.S. Oregon State Univ.; CPR/AED/Oxyg Admin, ARC; First Aid Instructor Cert; CPR Certified

Gaul, Shannon I. B.A. Adrian Col.; M.S. Univ. Toledo; Licensed Massage Therapist

Hastie, Marisa L. B.S. Gonzaga Univ.; M.S. Univ. of Oregon

Herbold Sheley, Sharrie A. B.A. Calif St Univ. - Chico; M.A. Calif St Univ. - Chico

MonDragon, Sean E. B.S. Calif St Univ. East Bay; M.S. Calif St Univ. East Bay

O'Connor, Patrick G. B.S. Univ. of Oregon; M.S. Oregon State Univ.

Sheley, Greg N. B.A. Calif St Univ. - Chico; M.A. Calif St Univ. - Chico

Simmons, Wendy S. B.A. Univ. Calif Irvine; M.S. Univ. of Oregon; ACSM Cert Exercise Specialist; Licensed Massage Therapist; Cert Wellness Coach

Thompson, Susan J. A.A. Los Angeles City Col.; B.A. Calif St Univ. Los Angeles; M.A. Calif St Univ. Los Angeles

Weissfeld, Lynne R. B.S. Univ. of Oregon; M.S. Univ. of Oregon

Health Professions

Berman, Sheryl Dean; B.S. Wayne State Univ.; M.S. Wayne State Univ.; Ph.D. Wayne State Univ.

Blickle, Thomas P. A.A.S. Portland Community Col.; B.A. Univ. of Oregon; M.S. Oregon Health Sci Univ.; Cert Hospice & Palliative Care; Registered Nurse

Brokaw, Thomas R. A.A.S. Lane Community Col.; Oregon EMT Paramedic; NAEMT Prehospital Trauma LS In; Advanced Life Support Instruct; CPR Certified

Canale, Suzanne B.S.N. Plattsburgh State Univ.; M.S. Univ. of Oregon; M.N. Oregon Health Sci Univ.; Registered Nurse

Clark, Leslie W. A.A.S. Clark Col.; B.S. Concordia Univ. Or; M.Ed. Concordia Univ. Or

Cummins, Michelle R. A.A.S. Lane Community Col.; B.S. Oregon Institute Of Technology; Registered Dental Hygienist

Driscoll, Norma L. A.S. Lane Community Col.; B.S. Linfield Col.; R.R.T.; R.C.P.

Garner, Annette B.S.N. Univ. Akron; M.S.N. Case Western Reserve Univ; A.H.A.; G.S.N.

Hagan, Sharon S. B.S. Idaho State Univ.; M.S. Westrn Kentucky Univ.; Registered Dental Hygienist

Hancock, Marlene R. B.S. Calif St Univ. Sacramento; M.S.N. Vanderbilt Univ.

Harclerod, Jeanne E. B.S.N. Univ. Iowa; M.S.N. Univ. Calif San Francisco; Psychiatric/Ment Health N Prac

Kavanaugh, Rita S. A.A.S. Diablo Valley Col.; B.A. Calif St Univ. East Bay; Registered Dental Hygienist; Bilingual Spanish/English

Killen, Janet L. A.S. Grossmont Cmty Col.; A.A.S. Saddleback Col.; B.S.N. Oregon Health Sci Univ.

Lynch, Mary Lou L. B.S.N. Mount St Marys Coll Chalon; M.N. Oregon Health Sci Univ.; Registered Nurse

Mc Donald, Shari A.

McCready, Douglas C. A.S. Lewis & Clark Col.; M.N. Univ. of Utah

Miller, Denise K. B.S.N. Pacific Lutheran Univ.; M.A.T. Evergreen State Col.

Naylor, Elizabeth H. B.A. Univ. Colorado Boulder; M.S. Univ. Wisc Stout/ Menomonie; Registered Dietician

Pittman, Martha E. A.A.S. Regents Clg- Univ. State Of Ny; C.M.A.; Registered Nurse

Powell, Tamberly M. M.S. Oregon State Univ.

Rodgers, Susan B. A.A. Pasadena City Col.; B.S.N. Mount St Marys Coll Chalon; M.S. Oregon Health Sci Univ.

Swett, Katherine C. B.S.N. Univ. Iowa; M.S. Oregon Health Sci Univ.; Registered Nurse

Tiel, Bren A. A.A.S. Portland Community Col.; B.S.N. Walla Walla Col.; M.N. Univ. Calif Los Angeles; Registered Nurse

Tully, Tricia G. B.S.N. Northern Illinois Univ.; M.S. Troy State Univ. Montgomery

Ulrich, Susan K. B.S.N. Oregon Health Sci Univ.; M.N. Oregon Health Sci Univ.

Welch, Janet S. B.S.N. Univ. of Minnesota-Sch Medicine; M.N. Univ. of Minnesota-Sch Medicine; Registered Nurse

Institutional Research, Assessment and Planning

Taylor, Craig H. Dean; B.S. Univ. Washington; M.B.A. Univ. of Oregon; Ph.D. Univ. of Oregon

Brau, Mary L. B.A. Univ. Washington; M.S. Univ. Tennessee Knoxville

Language, Literature, and Communication

Carlin, Susan J. Dean; B.A. Southern Illinois Univ. Carbondale; B.A. Southern Illinois Univ. Carbondale; M.A. Univ. of Oregon; M.A. Utah State Univ.; Ph.D. Northern Arizona Univ.

Almquist, Karin B.A. Univ. of Oregon; M.A. Univ. of Oregon; Ph.D. Univ. of Oregon

Bayless, Margaret A. B.A. Idaho State Univ.; M.S. Portland State Univ.; M.A. Univ. of Oregon; Ph.D. Univ. of Oregon

Beasley, Amy B.A. Gettysburg Col.; M.A. Washington State Univ

Breaden, Barbara L. B.A. Univ. Illinois Urbana; M.A. Univ. Illinois Urbana

Bunker, Suzanne L. B.S. Eastern Oregon Univ.; M.S. Univ. of Oregon

Chaves, Hernando J. B.A. Western Washington Univ.; M.F.A. Univ. of Oregon

Cusimano, Roma R. B.A. Oregon State Univ.; B.S. Univ. Wisconsin Madison; M.A. Univ. of Oregon

Dane, Pamela N. B.A. Portland State Univ.; M.A. Portland State Univ.; Ph.D. Univ. of Oregon

Frasier, Crosby J. B.A. Ambassador Clg-Big Sandy; M.A. Univ. Louisiana Monroe

Harrison, Jeffrey D. B.A. Duke Univ.; M.A.T. Duke Univ.; Ph.D. Univ. of Oregon

Jensen, Sandra M. B.A. Univ. Washington; M.A. Calif St Univ. Fullerton; Bilingual Spanish/English

Krumrey-Fulks, Karen S. B.A. Southern Utah Univ.; M.A. Univ. Kentucky Lexington; Ph.D. Univ. Kentucky Lexington

Luke, Matthew M. B.A. San Diego State Univ.; M.A. Univ. of Oregon

Lushia, Sarah B.A. State Univ. of New York; M.A. Illinois State Univ.; Ph.D. State Univ. of New York

Matalon-Florendo, Sylvie B.A. Univ. Sorbonne Nouv - Paris Iii; B.A. Univ. Sorbonne Nouv - Paris Iii; M.A. Univ. of Oregon

McDonald, Michael B. M.A. Univ. of Oregon; Ph.D. Univ. of Oregon

McGrail, Anne B. B.A. Univ. Mass Boston; M.A. SUNY Buffalo; Ph.D. SUNY Buffalo

Naynaha, Siskanna B.A. Boise State Univ.; M.A. Boise State Univ.; Ph.D. Washington State Univ

Rosenberg, Hyla B.A. Sch For International Trng; M.S. Portland State Univ.; Cert Engl Lang Teaching Adults

Shitabata, Russell H. B.A. Univ. Hawaii Manoa; M.A. Univ. of Oregon; Ph.D. Univ. of Oregon

Stefanovska, Bojana B.A. Univ. of Grenoble; M.A. Univ. of Grenoble

Sullivan, Kate E. B.A. Minnesota State Univ. Moorhead; M.A. Northern Univ.; Ph.D. Univ. of Oregon

Thompson, Eileen M. B.A. Univ. Puget Sound; M.A. Univ. of Oregon; Ph.D. Univ. of Oregon

Tullis, Lynn B. B.A. Colorado Col.; M.A. Portland State Univ.; Ph.D. Univ. of Oregon

Viles, Andrew M. A.S. Blue Mountain Cmty Col.; B.A. Oregon State Univ.; M.F.A. Univ. of Michigan-Ann Arbor; Ph.D. Univ. of Oregon

Von Ammon, Jennifer L. B.A. Florida State Univ.; M.A. Florida State Univ.; Ph.D. Florida State Univ.

Woolum, Bill A.S. North Idaho Col.; B.A. Whitworth Col.; M.A. Univ. of Oregon

Zimmerman, Kenneth S. B.A. Oberlin Col.; M.F.A. Univ. of Oregon

Library

Pineda, Marika C. Interim Director; B.A. Univ. of Oregon; M.F.A. Univ. Washington; M.L.S. Univ. Washington

Doctor, David L. B.A. Univ. Puget Sound; M.L.S. Univ. Washington

Ferro, Jennifer A. B.A. Univ. of Arizona; M.L.I.S. Univ. of Texas - Austin

Klaudinyi, Jennifer M.

Macnaughtan, Donald T. B.A. Univ. of Auckland; M.A. Univ. of Auckland; M.L.S. Victoria Univ. of Wellington

Mathematics

Hledik, Kathryn Dean; B.A. Oregon State Univ.; M.A. Univ. of Oregon

Green, Dale E. B.A. Univ. of Oregon; M.A. Oregon State Univ.

Hsiao, Berri B.S. Univ. of Oregon; M.S. Montana State Univ. Billings; M.S. Univ. of Oregon

Hill, Benjamin L. B.A. Univ. North Dakota Grand Forks; M.S. Univ. of Oregon; Ph.D. Univ. of Oregon

Kirkpatrick, Vicky R. B.S. Univ. of Oregon; M.S. Oregon State Univ.

Knoch, Jessica R.

Kovcholvsky, Michel P. B.A. Univ. of Oregon; M.S. Univ. of Oregon

Martinek, Angela B. B.S.M.E. Univ. Vermont; M.S. Univ. Vermont; M.S.M.E. Univ. Vermont

Miner, Catherine A. B.S.M.E. Mass Institute Technology; B.A. Wellesley Col.; M.S. Univ. of Oregon

Moore, Philip E. B.A. Harvard Univ.; M.S. Univ. of Iowa

Murphy, Deanna J. B.A. Temple Univ.; M.S. Portland State Univ.

Peck, Arthur M. B.S. Muhlenberg Col.; M.S. Univ. of Oregon

Rajabzadeh, Ahmad B.S. Eastern Washington Univ.; M.S. Oregon State Univ.

Selph, Stephen L. B.S. Trinity Univ.; M.S. Northwestern Univ.

Smith, Gayle L. B.S. Univ. Illinois Chicago; M.S. Eastern Washington Univ.

Thompson, Robert B. A.A. Santa Monica Col.; B.S. Univ. Calif Los Angeles; M.S. Univ. Calif Los Angeles

White, Karen L. B.A. Colorado Col.; M.S. Univ. of Oregon

Music, Dance and Theatre Arts

Williams, Rick R. Dean; B.S.J. Univ. of Texas - Austin; M.A. Univ. of Texas - Austin

Bertucci, Ronald K. B.A. Univ. of Oregon; M.M. Univ. of Oregon

Simoa Reid, Bonnie L. B.A. Calif St Univ. - Chico; M.F.A. Mills Col.; Cert Continuum Movement Instr

Svoboda, Matthew D. B.A. Lewis & Clark Col.; B.M. Univ. of Oregon; M.M. Univ. of Oregon; M.M. Univ. of Oregon

Watanabe, Hisao B.M. Roosevelt Univ.; M.M. New England Conservatory Music

Science

Ulerick, Sarah L. Dean; B.A. Harvard Univ.; Ph.D. Univ. of Texas - Austin

Alford, R. Bruce A.A.S. Lane Community Col.

Andrews, Christine M. B.S. Univ. Washington; Ph.D. Univ. Pennsylvania Undergrad Adm

Baker, Gail A. B.S. Univ. Calif Irvine; M.S. San Diego State Univ.

Bunson, Paul E. B.S.E.E. Univ. Pennsylvania Undergrad Adm; M.S. Univ. of Oregon; Ph.D. Univ. of Oregon

Ebbage, Roger A. B.A. San Francisco State Univ.; M.A. San Jose State Univ.

Gilbert, Dennis D. B.S. Calif St Univ. Fresno; M.S. Univ. of Oregon; Ph.D. Univ. of Oregon

Kiser, Stacey L. B.S. Oregon State Univ.; M.S. Univ. of Oregon

Marinello, Suzanne L. B.S. Cal Poly - San Luis Obispo

Morrison-Graham, Kathleen B.S. Univ. Calif Davis; Ph.D. Univ. Calif Los Angeles

Mort, Gary E. B.S. Southern Oregon Univ.

Newell, Carrie L. B.S. South Dakota State Univ.; B.S. Southern Utah Univ.; M.S. Northern Arizona Univ.

Nichols, Brian R. A.A.S. Lane Community Col.; B.S. Univ. of Oregon; M.S. Univ. of Oregon

Pooth, Albert M. A.S. Onondaga Cmty Clg-Syracuse; B.S. SUNY Coll Environmtl Sci Frstry; Ph.D. Univ. of Miami

Russin, Joseph A. B.S. Suny Center Albany; M.S. Utah State Univ.; Secondary Teaching Certificate

Swank, Stanton R. B.S. Cal Poly - San Luis Obispo; M.S. Univ. of Oregon; Ph.D. Univ. of Oregon

Taylor, Brooke E. B.S. Univ. of Oregon; M.S. Univ. of Oregon

Thompson, John E. B.S. Westmont Col.; M.S. Univ. Colorado Boulder

Young, Douglas M. B.A.S. Univ. Calif Davis; M.S. Univ. of Oregon; Ph.D. Univ. of Oregon

Small Business Development Center and Employer Training Services

Lindly, James L. Dean; B.S. Univ. of Oregon; M.B.A. Univ. of Oregon; Chartered Prpty Casualty Undwtr; Cisco Certified Design Assoc

Social Science

Murdoff, Kenneth Dean; B.A. San Francisco State Univ.; M.A. San Francisco State Univ.; Ph.D. Univ. of Oregon

Adams, Cynthia B.A. Calif St Univ. Long Beach; M.A. Calif St Univ. Long Beach; Ph.D. Wayne State Univ.

Anderson, Jody L. B.A. Univ. of Oregon; M.A. Univ. of Oregon

Benjamin, Jane E. B.S. Univ. of Oregon; M.S. Univ. of Oregon

Bichsel, Ruth J. B.S. Univ. of Oregon; M.S. Univ. of Oregon; Ph.D. Univ. of Oregon; Am Clg Forensic Exam Intl; A.B.P.S., Behavioral Psych

Borrowdale, Jeffrey B.A. Calif St Univ. Sacramento; M.A.C.PhI. Univ. Calif Santa Barbara

Broderick, Sheila N. B.A. Univ. of Oregon; M.A. Univ. of Oregon

Burrows, William H. B.S. Southern Oregon Univ.; M.S. Southern Oregon Univ.

Candee, Stephen M. B.S. Univ. of Oregon; M.S. Univ. of Oregon

DeFilippo, Barbara J. B.A. Univ. South Florida; M.A. George Mason Univ.; Ph.D. Univ. of Oregon

DeNero, John E. B.A. Calif St Univ. Northridge; M.A. Univ. of Oregon; M.S. Univ. of Oregon

Escobar, Joe G. B.A. Calif St Univ. Fullerton; M.A. Calif St Univ. Fullerton

Gilds, Kendra S. B.S. Carnegie Mellon Univ.; M.S. Univ. of Utah

Helzer, Margaret M. A.S. Penn State Univ/Mont Alto; B.S. Univ. of Oregon; M.S. Univ. of Oregon; Ph.D. Univ. of Oregon

Leung, David W. B.A. Univ. of Oregon; M.A. Univ. of Oregon

Martinez, Philip R. B.A. Univ. Calif Irvine; M.A. Univ. Calif Berkeley; M.A. Univ. Calif Riverside

Oldham, Garry A. B.S. Univ. of Oregon; M.S. Univ. of Oregon

Raza, Nadia K. A.A. Orange Coast Col.; B.A. Univ. Calif Los Angeles; M.A. Humboldt State Univ.

Salt, James T. B.S. Univ. Maine Orono; M.A. Univ. of Oregon; Ph.D. Univ. of Oregon

Samano, Michael L. B.A. Univ. of Oregon; M.A. Univ. Calif Davis; M.A. Humboldt State Univ.; Ph.D. Oregon State Univ.

Songer, Lynn C. B.S. Univ. of Oregon; M.A. Univ. of Oregon; Ph.D. Univ. of Oregon

Taylor, Stan N. B.A. Univ. Kansas; M.A. Univ. of Oregon; L.L.M. Georgetown Univ-Law Ctr; J.D. Univ. of Pacific/Mc George Law; Ph.D. Univ. of Oregon

Williams, Suzanne L. B.S. Grand Valley State Univ.; M.S. Univ. of Oregon; Ph.D. Univ. of Oregon

Student Life and Leadership Development

Delansky, Barbara L. Dean; B.S.E. Suny Coll Cortland; M.S. Indiana Univ. Bloomington; Ph.D. Univ. of Oregon

Evans, Gregory A. B.S. Myers Univ.; M.Ed. Oregon State Univ.

Garcia, James S. B.S. Univ. of Oregon

Torch

Wearne, Dorothy R. B.S. Univ. of Oregon; M.S. Univ. of Oregon

Women's Programs

Delansky, Barbara L. Dean; B.S.E. Suny Coll Cortland; M.S. Indiana Univ. Bloomington; Ph.D. Univ. of Oregon

Di Marco, Cara E. B.A. Univ. of Oregon; M.S. Univ. of Oregon; Ph.D. Univ. of Oregon



Part-Time Instructional Staff

Academic Learning Skills/ESL/Tutoring

Akdeniz, Aziza (Lucia) B.F.A. New York Univ.; M.A. Univ. of Colorado; M.F.A. Univ. of Oregon

Coulthard, Deborah G. B.A. Univ. of Oregon; M.Ed. Oregon State Univ.

Harvey, Ronald C. B.A. Andrews Univ. Berrien Springs; M.A. Ohio Univ. Athens; Ph.D. Michigan State Univ. East Lansing

Kepka, Jennifer A. B.A. Univ. of Kansas; M.F.A. Univ. of Oregon

Kirwin, Maria J. A.A. Clackamas Community Col.; B.S. Portland State Univ.; M.Ed. Portland State Univ.; M.Ed. Portland State Univ.

Kissinger, Sydney S. B.A. Millersville Univ. PA; M.S. Univ. of Oregon

Kolman, Sue E. B.A. Goucher Col.; M.Ed. Goucher Col.

Leonard, Enid R. B.A. Calif St Univ. Northridge; M.Ed. Oregon State Univ.

Levine, Vicki E. B.A. Antioch Univ. Yellow Springs

McKerrow, Julie A. B.S. Univ. of Oregon; M.A. Pacific Univ.

McLain, Barbara L. B.A. Univ. of Oregon; M.A. Western Washington Univ.

Murrell, Richard J. B.S. Univ. of Oregon; M.A. Pacific Univ.; M.A. Troy State Univ. Troy

Myers, Karen D. B.A. Univ. of Guelph - Ontario; M.A. Univ. of Oregon

Nissila, Phyllis M. B.A. George Fox Univ.; M.A. Calif. State Univ. Dominguez Hills

Perkins, Megan A. A. Lane Community Col.; B.S. Univ. of Oregon; M.Ed. Oregon State Univ. Corvallis;

Pfaff, Julie A. B.S. Marquette Univ.; M.Ed. Univ. of Oregon

Schweigert, Cynthia J. B.A. Univ. of Oregon; M.A. Univ. of Oregon

Sposato, Robert J. B.S. Univ. Bridgeport; M.Ed. Univ. Vermont

Summers, Leroy M.Ed. Oregon State Univ.

Tuerk, Jessica L. B.A. Boston Univ.; M.A. Univ. Pennsylvania Undrgrd Adm

Van Dusen, John E. B.S. Univ. of Oregon; M.S. Univ. of Oregon

Warner, Alice L. B.A. Yale; J.D. Boston Univ. Law School; M.A.T. Western Oregon Univ.

Webb, Victoria A. B.A. Brigham Young Univ. Provo; M.A. Univ. of Utah Salt Lake City; M.A. Univ. of Reading, Berkshire UK

Westover, Jared B.A. Univ. of Oregon; M.Ed. Univ. of Oregon; M.A. Portland State Univ.

Wight, Sherrill C. B.S. Brigham Young Univ. Utah; M.A. Univ. of Utah

Adult Basic and Secondary Education

Blum, Antonia B.A. Humboldt State Univ.; M.S. Southern Oregon Univ.; Elem Education Teaching Cert

Clark, Dennis S. B.S. Univ. Wisc Oshkosh; M.S. Univ. of Oregon

Hays, Gary D. B.S. Univ. of Oregon; M.S. Univ. of Oregon

Kirwin, Maria J. A.A. Clackamas Community Col.; B.S. Portland State Univ.; M.Ed. Portland State Univ.; M.Ed. Portland State Univ.

Levine, Keren O. A.A. Lane Community Col.; B.A. Univ. of Oregon; B.F.A. Univ. of Oregon; M.Ed. Western Oregon Univ.; M.Ed. Oregon State Univ.

Lewman, Cheryl S. B.A. Univ. of Oregon; M.A. Univ. of Oregon

Mason, Teresa E. B.S. New Mexico Inst Mining & Tech; M.Ed. Univ. of Oregon

Monroe, Anne S. B.S. Univ. Wisc Madison

Niles, Aliscia M. M.A. Univ. of Oregon; Teaching Engl Speakr Othr Lang

Nissila, Phyllis M. B.A. George Fox Univ.; M.A. Calif St Univ. Dominguez Hills

Park, Helen L. B.A. Univ. of Oregon; M.Ed. Univ. of Oregon

Parrish, John E. B.A. Univ. San Francisco; M.A. Univ. San Francisco

Russell, Catherine B.A. Simmons Col.

Schlichtmann, Daniel P. A.A. Col. of Marin; B.A. San Francisco State Univ.; M.A. Oakland Univ.; M.A. Univ. of Oregon

Schroeder, Mark H. B.A. Univ. Calif Irvine; M.A. Univ. of Oregon

Shelly, Rachel R. M.A. Pacific Univ.

Starr, Susan L. B.A. Calif St Univ. Long Beach; M.S. Oregon State Univ.

Stroop, James D. B.A. Univ. of Houston; M.Ed. Oregon State Univ.

Walker, Ann E. B.A. San Francisco State Univ.; M.A. Pacific Univ.

Advanced Technology Division

Babson, James N. B.A. Cornell Univ.

Bridges, Lynn A. A.S. Lane Community Col.; B.S. Northwest Christian Univ.; M.A. Leslie Univ.

Caffey, Stephen P. A.A.S. Lane Community Col.

Call, Daniel L. B.S. Univ. Washington; Cert Master RV Technician

Carrere, Daniel A. B.S. Georgia Coll & State Univ; M.S. Georgia Coll & State Univ

Fleming, Cheryl L. A.S. Lane Community Col.; A.S. Laramie County Cmty Col.; B.S. Linfield Col.

Kruse, David A. B.S. Yale Univ.; B.M. Juilliard School; M.M. Juilliard School

Lowenkron, Laurence H. B.S. Humboldt State Univ.; FAA Comm Pilot Single Sea; FAA Airframe and Powerplant; Cert Professional Engineer; FAA Comm Pilot Glider; FAA Com Pilot Sgl Eng Lnd Inst

Revell, Robert D. Journeyman Cert Millwright

Steinberg, Shalimar A.S. Lane Community Col.; B.A. Pacific Univ.

Wellborn, Sherry L. B.S. Oregon State Univ.; B.S. Univ. of Oregon; M.A. Pacific Univ.

Arts Division

Ali, Katherine L. B.F.A. Calif Col. of Art

Ahola-Young, Laura B.A. Minnesota Col. of Art and Design; M.F.A. San Jose State Univ.

Berner, Christopher A. B.F.A. Kansas City Art Institute

Boonstra, Michael B.F.A. Univ. of Michigan; M.F.A. Univ. of Oregon

Burton, Thomas J. A.A.O.T. Lane Community Col.

Caprario-Ulrich, Kathleen M. Dipl. Newark Sch Fine & Indust Art

Ciaston, Andrea B.F.A. Pratt Institute; M.F.A. Hunter Col.; Ph.D. New York Univ.

De Vine, Robert B.F.A. St Johns Univ. Jamaica

DeVore, Carla E. B.F.A. Univ. Minnesota Duluth; M.A. Univ. of Oregon

Dillon, Hannah B.A. Univ. Puget Sound; M.A. Univ. of Oregon

Dussinger, Camilla B.F.A. Western Illinois Univ.; M.F.A. Syracuse Univ.

Frank, Paige B.A. Univ. of Montana

Godfrey, Anne C. B.A. Carleton Col.; B.L.A. Univ. of Oregon; M.L.A. Univ. of Oregon

Halvorsen, Jan A. B.F.A. Univ. of Oregon

Harger, Christian A.F.A. Delta Col.; B.F.A. Central Michigan Univ.; M.F.A. Univ. of Oregon

Legg, Keith

Lennox, Richard T. B.F.A. Ohio Univ. Athens; B.S.Ed. Ohio Univ. Athens; M.S. Univ. of Oregon

Loge, Kenneth P. A.A. Central Wyoming Col.; B.A. Univ. of Oregon; M.S. Univ. of Oregon

Lucanio, Patrick J. B.S. Western Oregon Univ.; M.A.T. Western Oregon Univ.; M.S. Univ. of Oregon; Ph.D. Univ. of Oregon

Madison, Thomas O. B.S. Western Oregon Univ.

McDonald, Damian B.A. Univ. of Oregon; A.A.O.T. Lane Community Col.

Morrill, Suzanne D. B.F.A. Univ. of Oregon; M.F.A. Univ. of Oregon

Mrazek, Jarmila M.F.A. Univ. of Oregon

Noriyuk, Duane B.S. Univ. of Colorado

Phillips, Michael G. B.F.A. Univ. of Oregon; M.F.A. Rochester Inst Tech

Plunkett, Mary A. B.A. Univ. Texas El Paso; M.A. Univ. of Oregon

Potwora, Kristie A. B.A. Humboldt State Univ.; B.F.A. Univ. of Oregon; M.F.A. Univ. of Oregon

Richenberg, Carrie O. B.A. Univ. of Oregon; M.F.A. American Univ. Dc

Salzman, Jennifer K. B.S. Univ. Wisc Stevens Point; M.F.A. Univ. Minnesota Minneapolis

Schmitt, Dan T. B.A. Univ. of Puget Sound; M.F.A. Kent State Univ.

Selover, Robin E. B.F.A. Univ. of Oregon; M.F.A. Univ. of Oregon

Soraci, Gabriella M. B.F.A. Univ. of Oregon; M.F.A. Univ. of Oregon

Tykeson, Ellen P. B.S. Univ. of Oregon; M.F.A. Univ. of Oregon

Watson, John C. B.F.A. Univ. Montevallo; M.F.A. Texas A&M Univ. Corpus Christi

Welton, Daniel V. B.A. San Jose State Univ.; M.S. Univ. of Oregon

Athletics

Garner, Scott V. B.S. Univ. of Oregon; M.S. Univ. of Oregon

Aviation Academy

Becker, Michael J. A.S. Lane Community Col.; FAA Ground Instructor Advanced; FAA Com Pilot Sgl Eng Lnd Inst; FAA Flight Instructor, CFII; FAA Ground Instructor Instrum

Killam, Justin B. A.S. Lane Community Col.; FAA Ground Instructor Advanced; FAA Ground Instructor Instrum; FAA MEI (Multiengine Instruct); FAA Com Pilot Sgl Eng Lnd Inst; FAA MEL (Multi-Engine Land); FAA Flight Instructor, CFII

Rasmussen, Mark A.

Roney, Michael S. A.A.S. Lane Community Col.; FAA Ground Instructor Instrum; FAA Flight Instructor, CFII; FAA Com Pilot Sgl Eng Lnd Inst; FAA Ground Instructor Advanced

Senderling, Steven B.S. Univ. of Maryland/Univ. Clg; FAA Com Pilot Sgl Eng Lnd Inst; FAA MEL (Multi-Engine Land); FAA MEI (Multiengine Instruct); FAA Ground Instructor Advanced; FAA Ground Instructor Instrum; FAA Flight Instructor, CFII

Tillford, Berkeley R.

Viles, Tyler J.

Wisdom, Jacob I. A.S. Lane Community Col.; FAA Flight Instructor, CFII; FAA Com Pilot Sgl Eng Lnd Inst; FAA Ground Instructor Advanced; FAA Ground Instructor Instrum

Business

Arnaud, Velda A. B.A. Univ. of Oregon; M.A. Univ. of Oregon

Boyle, Patricia A. B.S. Cal Poly - San Luis Obispo; M.B.A. Oregon State Univ.

Chase, James M.A. Northwest Christian Univ.

Clark, Connie J. A.S. Eastern Oregon Univ.; B.A. Idaho State Univ.; E.D.S.C.

Darling, Bruce L. B.A. Coll Wooster; M.S.T. Cleveland State Univ.; M.B.A. Cleveland State Univ.

Frichtl, Lois M.S.T. Oregon State Univ.

Gazo, Henry A.S. Lane Community Col.; B.A. CUNY Queens Col.

Hansen, Marcelle M.

Hovet, Timothy D. B.A. Univ. Montana; M.B.A. Univ. of Oregon

Howard, Andrew C.

Johnston, Kenneth F. B.A. Montana State Univ. Billings; M.A. Oregon State Univ.

LePelley, Eilene R. B.A. Idaho State Univ.

Lindsey, Julie L. B.S. Linfield Col.; M.B.A. Grand Canyon Univ; M.S. Grand Canyon Univ.

Oatman, David B. B.A. Culver-Stockton Col.; M.Ed. Northrn Illinois Univ.

Paschall, Annie C. B.A. Duke Univ.; M.S. Univ. Missouri Columbia; Certified Public Accountant

Rice, Rhonda L. B.A. Calif St Univ. - Chico; M.B.A. Northwest Christian Univ.

Wallace, Tuls E. B.L.A. Univ. of Oregon; M.B.A. George Fox Univ.

Center for Meeting and Learning

Eriksen, Amanda L. B.S. Univ. Nevada Las Vegas; Cert Meeting Professional

Computer Information Technology

Allen, James T. B.A. Univ. of Oregon; B.S. Univ. of Oregon; M.S. Univ. of Oregon

Ances, Freda B.S. New York Univ.; M.A. San Francisco State Univ.

Baughman, Andrea S. A.A. Lane Community Col.; B.A. George Fox Univ.

Beisse, George F. B.A. Western Washington Univ.; M.A. Univ. of Oregon

Bird, Brian A. B.A. Multnomah Bible Col.; B.S. Portland State Univ.; M.A. Univ. of Oregon

Bronsema, Max B.A. Col. Of Idaho; M.S. Western Washington Univ.

Crissman, Kevin B.S. Vanguard Univ.

Ditson, Mary T.

Dotson, Pamela J. B.A. Washington State Univ.; M.D. San Francisco Theological Seminary

Elligsen, Colin D.

Evans, Susan R. B.S. Montana Tech; M.S. Colorado State Univ.

Fox, Brandon J.

Friedland, Ron B.S. Cla Tech; B.S. Univ. of Oregon; M.S. Univ. of Oregon; Ph.D. MIT

Gifford, Brent D. B.S. Brigham Young Univ. Utah; M.S. George Mason Univ.

Gray, Michael K. B.A. Univ. of Oregon; M.A. Univ. of Oregon; Secondary Teaching Certificate

Grimwood, Derald R. B.S. Univ. Evansville

Haley, Robert J. B.A. San Jose State Univ.; Secondary Teaching Certificate

Humphreys, Jordi

Konar, Thaddeus A.A. Cuyahoga C C Eastern; B.S. Cleveland State Univ.; M.A. Univ. of Phoenix

Lindsey, Julie L. B.A. Linfield Col.; M.B.A. Grand Canyon Univ; M.S. Grand Canyon Univ.

Loewinger, Howard A. A.S. Lane Community Col.; B.A. Univ. Calif Berkeley; M.S. Univ. of Oregon

Malecha, Geoffrey R.

Maleki, Mohammad B.S. Univ. of Oregon; M.S. Univ. of Oregon

Morgan Jr., Owen B. B.S. Northwest Christian Col.; M.S. Webster Univ.

Osak, Linda S. B.S. Univ. Calif Riverside

Richter, Jonathon J.

Ross, Gerald J. B.A. Suny Buffalo; M.A. Univ. of Oregon; Teacher Corps Graduate

Sholaas, Margaret G. B.A. San Francisco State Univ.

Thomas, Kristine A.

Waechter, Aaron A. B.S. Cal Poly - San Luis Obispo

Cooperative Education

Ditson, Mary B.A. Goucher Col.; M.C.A.T. Mahemann Medical Col.; C.M.T.; Cert. Special Ed.

Ewell, Joy C. B.A. Whitman Col.; M.S. Univ. of Oregon

Farfan, Beverly V. C.E.R.T.1. San Jose State Univ.; A.S. Univ. Calif Santa Cruz; B.A. Calif St Univ. Long Beach; Severely Disab Teaching Cert; Elem Education Teaching Cert; Learning Hndicpd Teaching Cert

Goodman, Bear J. B.A. Univ. of Oregon; M.A. Pacific Univ.

Lasher, Marlene G. M.P.H. Univ. Hawaii Manoa; M.S.W. Univ. Washington

Lauf, Peter J. B.A. Univ. of Wisconsin, Madison; M.Ed. Western Washington Univ.

Lilliefors, Lori A. A.A. Delta Col.; B.S. Central Michigan Univ.

Cottage Grove Center

Couch, Denise D. B.A. San Diego State Univ.; M.A. San Diego State Univ.

Farrington, Marianne P. C.E.R.T.1. Alvin Ailey American Dance Ctr; A.A.S. Fashion Inst Tech; AFAA Certification; Personal Trainer Certification; Kickboxing Certification; OSSA Coach

Getz, William J. B.A. Univ. Calif Berkeley; M.A. San Jose State Univ.

Gilroy, Mary M. A.A. Ventura Col.; B.A. Humboldt State Univ.; M.A. Oakland Univ.

Gourley-Biggs, Patricia A.

Grieger, Ben B. B.S. Univ. Houston Clear Lake; M.A. Univ. Houston Clear Lake

Rothgery, Andrew W. B.A. Univ. of Oregon; M.A. Univ. of Oregon

Shapiro, Alice K. B.A. Univ. Calif Berkeley; B.S. Univ. Calif Riverside; M.S. Univ. Calif Irvine

Thompson, William E. B.S. Univ. of Oregon

Vogel, Bruce W. B.S. Western Oregon Univ.; M.A. Lewis & Clark Col.

Counseling

de Caccia, Linda S. B.A. Univ. Calif Santa Barbara; M.Ed. Oregon State Univ.; Secondary Teaching Certificate; Cert Licensed Prof Counselor

Jones, Laura M. B.S. Univ. of Oregon; M.S. Univ. of Oregon; Ph.D. Univ. of Oregon

Lehr, Martha J. B.A. Illinois State Univ.; M.S. San Diego State Univ.

Mc Kenzie, Bree M. B.A. Univ. Calif Santa Cruz; M.S. Oregon State Univ.

Townsend, Gayle V. B.S. Whitman Col.; M.S. Univ. of Oregon

Whittington, Kathleen M. Oregon Basic Training Certif; National Certified Counselor; Personnel Svcs:Counselor Endrs

Willoughby-Roberts, Dawna R. B.A. Univ. of Oregon; M.S. Univ. of Oregon

Culinary Arts and Hospitality

Dombrosky, Adrienne L.

Ellis, Keith

Fether, Julie K. B.A. Wright State Univ. Dayton; M.A. Indiana Univ. Bloomington

King, Ariel

Landsberg, Michael

Lohr, Peter Journeyman Cert Hotel/Catering

English as a Second Language

Burley, Hali M. M.A. Oregon State Univ.; Teaching Engl Speakr Othr Lang

Christiansen, Andrew B.A. Univ. of Oregon; M.A. Saint Michaels Col.

Claypool, Leah A. B.A. Univ. of Oregon; M.A. Portland State Univ.

Daudt, Diane B.S. Western Oregon Univ.; B.A. Linfield Col.; TESOL Cert. Northwest Christian Col.; M.A. Univ. of Phoenix

Gessert, Kate R. B.A. Wellesley Col.; M.S. Bank Street Clg Of Ed-New York

Guerrero, Maria C. B.A. Univ. of Oregon; M.A. Univ. of Oregon; M.C.S.E. Univ. of Oregon

Haynes, Pamela G. B.A. Univ. of Oregon; M.A. Portland State Univ.; Elem Education Teaching Cert

Higgins, Cybele M. B.A. Univ. Calif Santa Cruz; M.A. Portland State Univ.

Howard, Andrew B.A. Brown Univ.; B.S. Oregon State Univ.; M.A. Univ. of Oregon

King, Lisa A. B.A. Guilford Col.; M.A. Sch For International Trng

Kremers, Luda V. B.Ed. Odessa State Linguistic Univ; Ph.D. Foreign Col.s; Ph.D. Odessa State Linguistic Univ

Liontos, Demetri B.A. Sir George Williams Univ; M.A. Concordia Univ. - Montreal

Schenderlein, Dave B.S. Univ. of Calif.; M.A. Fuller Theo Sem.

Shields, Colleen M. B.A. Boston Univ.; Teaching Engl Speaker Other Lang; M.A. UMass Boston

Weinstein, Michael Jay B.A. Univ. of Oregon; M.A. Univ. of Oregon

Whisler, Jacqueline L. B.S. Univ. of Oregon; M.A. Univ. of Texas at Arlington

Young, Heather E. B.A. Univ. of Oregon; M.A. Univ. of Oregon

Zinniker, Stacey M. B.A. Univ. of Oregon; M.A. Pacific Univ.

Florence Center

Anderson, Deborah G. B.A. Calif St Univ. Los Angeles; M.S. Calif St Univ. Los Angeles

Brown, Deborah X. A.S. Sacramento City Col.; B.S.N. Calif St Univ. Sacramento; M.S.N. Univ. of Phoenix

Brown, Karen S. B.A. Wright State Univ-Dayton; M.A. Wright State Univ-Dayton

DePuente, Yvonne B. A.A. Lane Community Col.; B.S. Oregon State Univ.; M.S. Oregon State Univ.

Dupont, Cathy A. B.S. Univ. Minnesota Minneapolis; M.A. Northrn Illinois Univ.

Hasvold, Christine C. M.A. Univ. Northern Iowa

Mitchell, James A. M.S. Brigham Young Univ. Utah

Purtell, Elizabeth B.A. Linfield Col.; M.Ed. Univ. of Oregon

Stone, Kenneth B.S. Univ. of Idaho; Ph.D. Univ. Colorado Health Sci Cntr

Wilcox, Wesley R. M.S. Univ. of Oregon

Health and PE

Allen, Carol B.A. San Diego State Univ.; M.A. San Francisco State Univ.

Barton, Anna

Blunt, Josh B.A. Cal Poly San Luis Obispo; M.A. Valdosta State

Cacioppi, Rebecca A. B.A. Bowdoin Col.; M.S.W. Smith Clg/Grad Sch-Social Work

Caldwell, Cristina

Carman, Bradley D. B.S. Oregon State Univ.; M.S. Univ. of Oregon

Chavka, Bruce A. B.A. Westrn State Col. Co; B.S. Westrn State Col. Co; M.S. Emporia State Univ.

Colon-Cortes, Eric

Davis, Tina M. B.S. Oregon State Univ.; M.Ed. Oregon State Univ.

Ellis, David L. B.S. Oregon State Univ.

Farrington, Marianne

Farwell, Christie M.

Fredette, Edward W. B.S. Oregon State Univ.; M.S. Univ. of Oregon

Gibeau, Samantha J. A.A. Portland State Univ.; B.S. Western Oregon Univ.; M.Ed. Pacific Univ.

Gilbert-Morgan, Tove M.S. Oregon State

Grumbley, Kevin L. B.S. Western Oregon Univ.

Hayes, Sean W. B.A. Michigan State Univ.

Kosmatka, David

King, Sharilayne M. B.S. Walla Walla Col.; Personal Trainer Certification

Oberstaller, Peggy E.

Olmos, Kristen C. B.S. Calif St Univ. San Bernardino; M.P.H. Loma Linda Univ.; Registered Dietician

Pearce, Kelley

Reidy, Verna

Robbins, Lawrence W. B.A. Univ. of Oregon; M.Ed. Univ. of Oregon

Rubino, David P. B.S. Suny Coll Cortland; M.A. Univ. Northrn Colorado

Russell, Chantelle R. B.S. Univ. Findlay; M.A. Centrl Michigan Univ.

Scholl, John D. B.S. Univ. Arkansas Fayetteville; M.Ed. Univ. Arkansas Fayetteville

Seeley, Kathleen M. B.S. Univ. of Oregon; ACE Cert Group Fitness Instr

Sorenson, Eric A. B.A. Point Loma Nazarene Univ.; M.S. Univ. of Oregon; Ph.D. Univ. of Oregon

Steinbock, Stacie J. B.A. Macalester Col.; M.Ed. Widener Univ.

Strickland, Robert G. B.A. Suny Buffalo

Wilken, Lyndell K. B.S. Univ. Illinois Urbana; M.S. Univ. Illinois Urbana

Health Professions

Bowman, Julie A. A.A. Lane Community Col.; B.A.S. Northrn Arizona Univ.; Registered Nurse

Cassidy, Suzanne C.M.A.

Collins, Kelly D. B.S. Univ. Missouri Columbia; J.D. Univ. of Oregon

Greer, Leslie D. A.A.S. Lane Community Col.; D.F.O.D.A / E.F.O.D.A.; Certified Dental Assistant; E.F.D.A.

Hamlin, Piper L. B.S. Linfield Col.; Cert Computer Science

Hill, Richard W.

Jones, Jill M. B.S.D.H. Oregon Health Sci Univ.; M.S. Univ. of Iowa

Knight, Stephen G. A.A.S. Lane Community Col.; B.S. Univ. of Oregon

Langlois, Alicia J. B.A. Northwest Christian Univ.

Maahs, Tamara A.A.S. Lane Community Col.; B.S. Oregon Institute Of Technology; Registered Dental Hygenist

Manning, Cindy A. B.S. Linfield Col.; M.A. Ldrshp Inst Seattle-Bastyr Univ

Miner, Jonathon C. A.A.S. Oregon Health Sci Univ.; B.S. Univ. of Oregon; AH Adv Cardiac LS Instruct; Outdoor Emerg Care Tech Instr; E.V.O.C. Instructor - Oregon; Wilderness EMT Certification; Emerg Resp Instr Trainer A.R.C.; Paramedic Nat'l Registry EMT; Oregon EMT Paramedic; P.A.L.S. Cert for AHA

Peterson, Kimberly M. Certified Dental Assistant

Rathakette, Noy B.S. Mahidol Univ. - Thailand; M.S. Univ. of London - U.K.; Ph.D. Univ. of Oregon

Snyder, Teresa M. B.S. Quinnipiac Univ.; B.S. Rutgers/State Univ-New Jersey; M.S. Rutgers/State Univ-New Jersey; Registered Dietician

Tavernier, Jennifer R. A.S. Lane Community Col.; B.S.N. Indiana State Univ-Terre Haute; B.S. Univ. of Oregon; M.S.N. Indiana State Univ-Terre Haute

Williams, Shelley K. A.A.S. Lane Community Col.; B.A. Northwest Christian Univ.

Yui, Amber M. B.S. Cal Poly - San Luis Obispo; M.P.H. Calif St Univ. Long Beach; Cert Health Educ Specialist; Registered Dietician

Language, Literature and Communication

Andersen, William C. A.A. Clackamas Community Col.; A.S. Clackamas Community Col.; B.S. Oregon State Univ.; M.A. Oregon State Univ.

Armstrong, Daniel P. B.A. Marian Col. Indianapolis; M.A. Indiana Univ. Bloomington; Ph.D. Indiana Univ. Bloomington

Aydelott, Elizabeth

Bockoven, David S. B.A. Univ. Washington; M.A. Univ. of Oregon; Ph.D. Univ. of Oregon

Boscha, Tina R. B.A. Calvin Theol Sem-Grand Rapids; M.A. Univ. Wisc Milwaukee; M.F.A. Univ. of Oregon

Brasted-Maki, Donald M. B.A. St Olaf Col.; B.S. Univ. Minnesota Minneapolis; Ph.D. Temple Univ.

Braverman, Erica B.A. Florida State Univ.; M.A. Univ. of Oregon

Budz, Devon T. B.A. Univ. of Oregon; M.A. Univ. of Oregon

Cantor, Ellen B. B.A. Goddard Col.; M.F.A. Univ. of Oregon

Capehart, Albert N. B.A. Marshall Univ.; M.A. Utah State Univ.

Casimir, Ulrick C. B.A. North Car State Univ. Raleigh; M.F.A. Univ. North Carolina Greensboro; M.A. Univ. of Oregon

Caston, Merry C. B.A. Univ. of Iowa; M.F.A. Univ. of Oregon

Coleman, Stanley R. B.A. Dillard Univ.; M.S. Univ. Louisiana Lafayette; Ph.D. Louisiana St Univ. Baton Rouge

Contreras, Jeffrey E. B.A. Oregon State Univ.; M.A. Univ. of Oregon

Cordova, Angela J. B.S. Oregon State Univ.; M.S. Oregon State Univ.

Daniels, Joshua B.A. Cornell Univ.; B.A. Univ. of California; M.A. Univ. of Oregon

DeVries (Tillman), Rosemarie A.S. Syracuse Univ; B.S. Syracuse Univ; M.A. Syracuse Univ; M.A. Syracuse Univ; Ph.D. Univ of Oregon

Fandino Unzaga, Nora C. B.A. Univ. of Oregon; M.A. Univ. of Oregon

Fleming, William P. M.A. CUNY City Col.; M.F.A. Univ. of Oregon

Gabrieli, Daphne A. B.A. Univ. South Florida; M.A. Univ. of Oregon

Gagnon, Armand A. B.A. Calif St Univ. Northridge; M.A. Calif St Univ. Northridge

Ghiselin, Katherine B.A. Bethany Col. Wv; Ph.D. Univ. of Oregon

Gill, James A. B.A. Southern Illinois Univ. Carbondale; M.F.A. Southern Illinois Univ. Carbondale

Ginsberg, Marsha W. B.A. Cornell Univ.; Ph.D. Suny Buffalo

Hankinson, Cheryl L. B.Ed. Central Washington Univ.; M.A. Brigham Young Univ. Utah

Harper, Zachary B.A. Fontbonne Univ.; M.A. Northern Illinois Univ.

Henry, Daniel L.

Hermach, Deborah A. B.S. Northwest Christian Univ.; M.S. Univ. of Oregon

Heymann, Sally J.

Horton, Kathleen A. A.A. Grays Harbor Col.; B.A. St Martins Col.; M.A. Univ. of Oregon; Ph.D. Univ. of Oregon

Houchens, Clayton F. B.A. Davidson Col.; M.A. Univ. North Carolina Chapel HI; Ph.D. Univ. of Oregon

Keech, Beth E. B.A. Villanova Univ.; B.S. Villanova Univ.; M.A. Middlebury Col.

Kemmy, Ann M. B.A. Reed Col.; M.A. Univ. of Oregon; Ph.D. Univ. of Oregon

Kendall, Brooke M. B.S. Oregon State Univ.; M.A. Washington State Univ

Kiser, James J. B.A. Humboldt State Univ.; M.A. Humboldt State Univ.

Kissinger, Sydney S. B.A. Millersville Univ. Pa; M.S. Univ. of Oregon

Kroik, Polina

Levin, Mara B.A. Suny Buffalo; M.A. Univ. Connecticut - Storrs; Ph.D. Univ. of Denver

Lougee, Cameron E. B.A. Southern Oregon Univ.; M.A. Univ. of Oregon

Love, Jennifer M. B.A. Oberlin Col.; M.A. Oregon State Univ.; M.L.I.S. Univ. Wisc Milwaukee; Ph.D. Univ. Nevada Reno

Ma, Perry W. B.A. Shanxi Univ. - Taiyuan China; M.A. Univ. of Oregon; Ph.D. Univ. of Oregon

Mackay, Daniel J. B.A. Wayne State Univ.; M.A. New York Univ.; M.A. Univ. of Oregon; Ph.D. Univ. of Oregon

Mazzocco, Johnnie J. B.A. Norwich Univ.; M.F.A. Univ. of Oregon; M.A. Univ. of Oregon

McLaughlin, Robert A.

McQuillan, Lucas P. B.A. Humboldt State Univ.; M.A. San Diego State Univ.

Metcalfe, Valerie J. B.A. Linfield Col.; B.A. Portland State Univ.; M.Ed. Portland State Univ.

Miller, Rachel A. B.A. Univ. Calif Los Angeles; Ph.D. Univ. Calif Los Angeles

Mortensen, Camilla H. B.A. New Clg - Univ. South Florida; M.A. Univ. Calif Los Angeles; Ph.D. Univ. of Oregon

Nichols, Nancy M. B.A. Oregon State Univ.; M.A. Oregon State Univ.

Owens, Nancy R. B.A. Knox Col.; M.A. Univ. Calif San Diego; M.F.A. Washington Univ.; Ph.D. Univ. Calif San Diego

Paz, Edana H. B.A. Univ. of Oregon; B.S. Unknown Oklahoma Col.; M.A. Univ. of Oregon

Pepe, Vanessa R. B.A. Univ. of Oregon; M.A. Univ. of Arizona; Teachng Engl Speakr Othr Lang

Rake, Timothy R. B.A. Univ. Kansas; M.A. Univ. of Oregon

Roethle, Christopher J. B.A. Univ. Tennessee Knoxville; M.F.A. Univ. of Oregon

Rosenow, Cecilia B.A. Santa Clara Univ.; M.A. Portland State Univ.; Ph.D. Univ. of Oregon

Rothgery, Andrew W. B.A. Univ. of Oregon; M.A. Univ. of Oregon

Rothgery, David B. B.A. Baldwin-Wallace Col.; M.Ed. Univ. of Virginia; M.A.T. Duke Univ/Grad Sch Arts & Sci; Ph.D. Univ. of Oregon

Ryan, Heather A.

Shaner, Timothy W. B.A. Ft Lewis Col.; Ph.D. Suny Buffalo

Shull, Kathleen R. B.A. Univ. of Oregon; M.A. Univ. of Oregon; Ph.D. Univ. of Oregon

Simmons, Jeremy S. B.A. Univ. Mass Boston; M.F.A. Univ. of Oregon

Skupsky, Michael M.A. Colorado Mesa Univ.; M.S. Colorado Mesa Univ.; M.A. Univ. of Oregon; M.S. Univ. of Oregon

Sparks, Lance T. B.A. Univ. Nevada Reno; D.A. Univ. of Oregon

Spicer, Arwen A. B.S. Humboldt State Univ.; B.A. Sonoma State Univ.; M.A. Sonoma State Univ.; M.L.S. Univ. Wisc Milwaukee; Ph.D. Univ. of Oregon

Stevenson, Gail C. B.A. Univ. of Oregon; M.S. Univ. of Oregon

Sullivan, Barbara T. B.A. Antioch Univ-Yellow Springs; M.F.A. Univ. of Oregon

Thompson, Angela M. Ph.D. Univ. of Oregon

Thompson, Donald E. B.A. Univ. of Oregon; M.A. Univ. of Oregon

Treichel, Eliot H. B.A. Prescott Col.; M.F.A. Bennington Col.

Underriner, Janne

Unruh, Mary F. B.F.A. Cornish Col. of Arts; M.A. Central School of Speech and Drama, London

Untz, Lynn M. B.A. New School/Eugene Lang Col.; M.F.A. Univ. of Oregon

Walker, Rosanna W. A.A. Southwestern Col. CA; B.A. Utah State Univ.; M.A. Utah State Univ.; Ph.D. Univ. of Oregon

Watt, Carol D. B.A. Univ. Calif Los Angeles; M.A. Calif St Univ. Long Beach; Ph.D. Univ. of Oregon

Williams, John E. B.A. Univeristy of the Pacific; M.A. New York Univ.; M.A. Univ. of Oregon

Williams, Susan E. B.A. Cornell Univ.; M.A. Univ. Calif Berkeley

Mathematics

Albrethsen, Kristen B.A. Mount Holyoke Col.; M.S. Purdue Univ. West Lafayette

Armstrong, Nikki B.S. California State Univ., Bakersfield; M.S. Univ. of California, Berkley

Bahen, Gordon B.A. Brigham Young Univ. Utah; M.A. Univ. Montana; Secondary Teaching Certificate

Bailey, Sabrina E. B.A. Stephens Col.

Behm, Charlotte E. B.A. Univ. Tennessee Knoxville; B.S. Univ. Tennessee Knoxville; M.A. San Francisco State Univ.; M.B.A. Xavier Univ. Oh; M.S. Univ. Tennessee Knoxville; Cert Professional Engineer

Bernardy, Donna M. A.A. Los Angeles Harbor Col.; B.A. Calif St Univ. Long Beach

Blackburn, Christopher J. B.A. Col. of the Holy Cross; M.A.T. Univ. of Florida

Brentmar, Ann B.S. Penn State Univ/Univ. Park; M.Ed. Univ. of Oregon

Brochard, Denise C. B.S. Univ. of Oregon

Burton, Alla M. B.A. Lviv State Univ; M.S. Lviv State Univ; Ph.D. Lviv State Univ

Carroll, Ron M. B.A. Calif St Univ. Northridge; M.S. Calif St Univ. Northridge

Cataldo, Donavon B. A.A. North Iowa Area Cmty Col.; B.S. Iowa State Univ.; M.E.P.D. Univ. Wisc Whitewater

Cataldo, Inga A. Univ. Ukraine Kyiv Polytech Ins

Chemotti, Frank B.S. Davidson Col; M.S. Univ. of Oregon

Collett, David L. B.S. Univ. Montana; M.S. Univ. of Oregon

Cunningham, Allison M. A.A. Cuesta Cmty Col.; A.S. Cuesta Cmty Col.; B.S. Cal Poly - San Luis Obispo; M.S. Cal Poly - San Luis Obispo

Dawson, Kimberly L. A.A. Orange Coast Col.; B.S. Utah State Univ.

Deggelman, Penelope A. A.A. Palomar Col.; B.S. Univ. of Oregon; M.S. Univ. of Oregon

Dixon, Harley T. B.S. Southern Oregon Univ.; M.A. Univ. of Oregon

Fletcher, Doron J. B.S. Univ. of Oregon

Foster, Jake M. M.S. Univ. Alaska Fairbanks; M.S. Northern Arizona Univ.

Gettys, Thomas P. B.A. Calif St Univ. - Chico; M.S. Calif St Univ. - Chico

Gilchrist, Grant C. B.S. Univ. of Oregon; M.A.T. Oregon State Univ.

Gladfelter, Stephen G. B.A. Oberlin Col.; M.S. Univ. of Oregon; M.S. Rutgers/State Univ.-Camden

Gydé, Nina B.B. Univ. Of Oregon; M.A. Oregon State Univ.

Halvorson, Sven B. B.S. Univ. of Oregon

Henderson, Kristen L. B.A. Univ. Calif Berkeley; M.S. Univ. Nevada Reno

Hertzberg, Steve L. B.A. Mass Institute Technology; M.A.T. Tulane Univ.

Hess, James M. B.S. Western Oregon Univ.; M.A. Univ. Illinois Chicago

Hintz, Douglas C. B.S. Univ. of Oregon; M.S. Univ. of Oregon

Hogle, Eric K. B.A. Reed Col.; M.A. Columbia Teacher Col.

Holland, Debra R. B.S. Western Michigan Univ.; Ph.D. Univ. of Oregon

Holton, Kristina L. B.S. Oregon State Univ.; M.S. Oregon State Univ.

Kau, Brian S. B.S. Univ. of Oregon; M.S. Univ. of Oregon

Larson, Jody A.A. Lane Community Col.; B.S. Univ. of Oregon; M.S. Univ. of Oregon

Lightheart, Wendy N. B.S. Oregon State Univ.; M.S. Oregon State Univ.

Miller, Zola E. B.S. Northwest Christian Univ.; B.S. Univ. of Oregon; M.S. Univ. of Oregon

Moore, Janice B.A. Stetson Univ.; M.A. Gonzaga Univ.

Olsen, Eric N. B.S. Univ. of Oregon

Oskuitabrizi, Reza Oskui M.S. Univ. of Idaho; Ph.D. Univ. of Idaho

Patterson, Amber S. B.S. Southern Oregon Univ.; M.A. Oregon State Univ.

Rawlinson, Wendelle L. B.A. Sonoma State Univ.; M.S. Univ. of Oregon

Richards, Andrew E. B.S. Univ. of Oregon; M.A. Univ. of Oregon

Shatalova, Larissa A. M.S. Univ. Ukraine Kyiv Polytech Ins; Ph.D. Univ. Ukraine Kyiv Polytech Ins

Steele, John W. B.S. Oregon State Univ.

Swanson, Charles B.S. Univ. of Minnesota; M.S. Univ. of Oregon; Ph.D. Univ. of Oregon

Van Slyke, David L. B.A. Pomona Col.; M.A. Univ. Calif Santa Barbara; M.Ed. Univ. Calif Santa Barbara

Wilkinson, Nathan A. B.S. Northwest Nazarene Univ.

Wofford, Margaret A. B.A. Univ. of Oregon; M.Ed. Regent Univ. - Virginia Beach

Woodford, Louis K. M.Ed. Univ. of Oregon; M.S. Western Washington Univ.

Zalonis, Elaine F. B.S. Bloomsburg Univ. of Pa; M.S. Bucknell Univ.; M.B.A. Golden Gate Univ.

Music, Dance and Theatre Arts

Alves, Olem B.A. Univ. of Oregon

Brabham, Vicki B. B.S. Northwest Christian Univ.

Carnes, Rachael A. B.A. Reed Col.

Chin, Gene G. Ph.D. Univ. of Oregon

Chu, Hung-Yun M.M. Peabody Institute; D.M.A. Univ. of Oregon

Clabby, Lawrence E. B.M. Boise State Univ.; M.M. Univ. of Oregon

Cloninger, Jesse M. B.M. Univ. North Texas; M.M. Univ. North Texas

Denny, Michael P. B.A. CUNY City Col.; M.A. Univ. of Oregon

Dewitt, Marianne

Ebert, Sarah B.F.A. Univ. Illinois Urbana; M.F.A. Univ. of Oregon

Garner-Gutierrez, Cynthia B.F.A. Univ. of Twin Cities, Minnesota; M.F.A. Univ. of Wisconsin, Milwaukee

Griffith, Glenn E. B.M. Capital Univ.; M.M. Univ. North Texas

Hiszczynskij, Laura B.F.A. Texas Christian Univ.; M.F.A. Univ. of Oregon

Holder, Sandy B.M. Oberlin Conservatory; M.M. Univ. of Oregon

Humphrey, Joshua B. B.A. Central Washington Univ.; M.A. Univ. of Oregon

Lee, Mei-Ling B.A. Fu Jen Catholic Univ. Taiwan; M.A. California State Univ.; Ph.D. Univ. of Oregon

Lemmer, Cheryl A. B.S. Ramapo Col. New Jersey; Gyrokinesis Instructor; Polestar Pilates Certification; Gyrotonic Instructor; Nat Cert Pilates Instructor

Mason, Genevieve M.

McConkey, James B.A. Washington State Univ.

McManus, Edward C. B.M. Univ. of Oregon; M.M.Ed. Univ. of Oregon

Mitchell, Raymond G. B.B.A. Univ. Missouri Kansas City; M.P.A. Univ. Missouri Kansas City; Ph.D. Univ. of Oregon

Moses, Florabelle B.A. Rubin Acad Music & Dance; M.A. Univ. of Oregon

Mulvihill, Seth M. B.A. Univ. Northern Iowa; M.A. Univ. Minnesota Minneapolis

Myrick, Barbara B.M.E. Montana State Univ. Bozeman; M.M. Univ. of Oregon; M.A. Eastman Sch Of Music-Rochester; D.M.A. Univ. of Oregon

Nemecsek, Sarah M. B.S. Univ. Nevada Las Vegas; M.F.A. Univ. of Oregon

Noel, Debra B. B.A. Oregon State Univ.; M.A. Oregon State Univ.

Roberts, Judith B. B.A. Brandeis Univ.; M.F.A. Brandeis Univ/Grad Sch Art&Sci

Sanford, Anita

Seereiter, Mary L. B.S. Univ. of Oregon; M.S. Univ. of Oregon; Cert Authentic Movement; Cert Teacher of of Body-Mind C; Registered Movement Therapist; Cert Laban Movement Analyst

Slade, Alison Ringling B.M. Penn State Univ.; M.M. Penn State Univ.

Stark, Melissa E. A.A. Sacramento City Col.; B.M. Univ. of the Pacific; M.M. Univ. of Oregon

VanUmmersen, Margo J. B.A. Macalester Col.; M.A. Univ. of Oregon

Vik, Siri E. B.M. Univ. Kansas; M.M. Univ. of Cincinnati

Waddell, Nathan A. Lane Community Col.; B.M. Univ. of Oregon; M.M. Univ. of Oregon

Yansane, Alseny

Zreliak-Hoban, Arianna A.

Science

Allee, John P. B.S. Univ. of Southern Maine; Ph.D. Univ. of Oregon

Arle, John F. B.S. Arizona State Univ.; M.S. Arizona State Univ.

Baer, Jennifer J. B.A. Univ. of Oregon; Doctor of Optometry Pacific Univ.; M.A. Univ. of Oregon

Baxter, Mary E. B.S. Univ. of Oregon; Ph.D. Univ. of Oregon

Behm, Harriet L. B.S. Univ. of Tennessee-Memphis; M.S. Univ. of Michigan-Ann Arbor; Ph.D. Univ. of Michigan-Ann Arbor

Boleyn, Pat C. B.S. Evergreen State Col.; M.S. Humboldt State Univ.

Bosworth, Shelly B.A. Univ. Calif Santa Cruz; M.S. Univ. Calif Berkeley

Clarke, Stephen T. B.S. Queens Univ. Kingston; B.Ed. Univ. of Ottawa; M.E.S. York Univ. North York

Coville, Mary E. B.A. Univ. Calif Santa Cruz; M.S. Univ. Calif Santa Cruz; Ph.D. Oregon State Univ.

Cross, Gabriel Certified LEEDS Bldg. Design and Construction

Flatt, Patricia M. B.S. Univ. of Denver; M.S. Univ. of Denver; Ph.D. Vanderbilt Univ.

French, Patricia A. B.S. Linfield Col.; M.S. Univ. of Oregon

Gubrud, Allan R. B.A. Pacific Lutheran Univ.; M.S. Syracuse Univ.; Ph.D. Cornell Univ.

Hadley, Kathryn Z. A.S. Yakima Valley Cmty Col.; B.S. Central Washington Univ.; M.S. Univ. of Oregon

Harbick, Kale B.S. Univ. S. Cal.; M.S. Univ. of S. Cal.; Ph.D. Univ. of S. Cal.

Hatten, Michael J. B.S. Oregon State Univ.

Hoell, Kelly E. B.A. Univ. of Denver

Holmes, Susan E. B.S. Oregon State Univ.; M.L.A. Univ. of Oregon

Jackson, Annette B.S. San Diego State Univ.

Keith, Evan J. B.S. Univ. of Oregon; M.S. Univ. of Oregon; Ph.D. Univ. of Oregon

Kelley, Bruce R. A.S. Oregon Institute Of Technology; B.S. Oregon State Univ.

Kilgore, Melissa J. B.S. Weber State Univ.; M.S. Central Michigan Univ.

Knolly, Leah J. B.S. Univ. of Houston-Downtown Clg.; B.Ed. Univ. Alaska Anchorage; M.S. Oregon State Univ.

Lewis, Kevin A. B.S. Southern Oregon Univ.; M.S. Washington State Univ.

Mae, Sonja A.A.O.T. Lane Community Col.; B.A. Prescott Col.

Mayfield, Ryan J. B.S. Humboldt State Univ.

McLaughlin, Jeanne M. B.S. Univ. of Oregon; M.S. Univ. of Oregon; Ph.D. Univ. of Oregon

Miles, Gregory A. B.S. Univ. of Oregon; M.S. Univ. of Oregon; Ph.D. Univ. of Oregon

Mitchell, Michael H. B.S. Washington State Univ.; M.A.T. Washington State Univ.

Monson, J. Mac B.S. Univ. of Oregon; M.S. Univ. of S. Cal.

Mort, Michele G. B.A. Lycoming Col.; B.A. Lycoming Col.; M.S.E.E. Naval Postgraduate School; M.S. Univ. of Oregon

Nelson, Julie A. B.S. Univ. of Oregon; M.S. Iowa State Univ.; M.S.H.S. Medical Col. Ga

Nurre, Stuart C. A.A.S. Lane Community Col.; B.S. Univ. of Oregon; M.E.P. Univ. of Oregon; M.S. Univ. of Oregon; R.R.T.

Owen, Claudia B.S. Stanford Univ.; M.S. Univ. Washington; Ph.D. Univ. Washington

Rice, Andrea E. B.S. Univ. Calif Los Angeles; B.A. Univ. of Freiburg - Germany; M.A. Univ. of Houston-Downtown Clg; M.S. Univ. of Oregon

Rice, Harry E. B.S. Univ. of Houston-Downtown Clg; M.S. Univ. Calif Los Angeles

Ross, Richard A. D.C. Western States Chiropractic

Rossberg, Andreas A.A.O.T. Lane Community Col.; B.S. Univ. of Oregon; M.A. Univ. of Oregon

Scannell, Billy C. B.S. Univ. of Oregon; M.S. Univ. of Oregon; Ph.D. Univ. of Oregon

Scott, Thomas F. B.S. Univ. of Florida

Simms, Michael D. B.B.A. Texas A&M Univ.; B.A. Univ. of Montana; M.S. Univ. of Oregon

Smith, Geoffrey D. B.S. Univ. of Oregon; M.S. Univ. of Oregon

Smith, Londa J. B.S. Ft Lewis Col.; M.S. Univ. of Oregon

Stearns, George W. B.S. Texas A&M Univ.-Clg Station; M.S. Washington State Univ; Ph.D. Univ. Nebraska Lincoln

Stenson, Jared R. B.S. Brigham Young Univ. Utah; M.S. Brigham Young Univ. Utah; Ph.D. Oregon State Univ.

Swanson, Charles E. B.S. Univ. Minnesota Minneapolis; M.S. Univ. of Oregon; Ph.D. Univ. of Oregon

Tavener Kruger, Sasha D. A.A.S. Everett Cmty Col.; B.S. Univ. Washington; M.S. Univ. of Oregon; Ph.D. Univ. of Oregon

Turnbull, Lisa C. B.S. Univ. Puget Sound; Ph.D. Univ. of Oregon

van Gelder, Roger E. B.S. Univ. Washington

West, Stephen L. B.S. Linfield Col.

Whitney, Sarah B.L.A. Univ. of Oregon; B.F.A. Long Island Univ. Southampton

Wisely, Beth A. B.S. Sonoma State Univ.

Young-Cheney, Joan E. D.C. Los Angeles Clg-Chiropractic

Social Science

Addison, Donald F. B.A. Univ. of Oregon; M.A. Univ. Calif Los Angeles; Ph.D. Univ. of Oregon

Anderson, Ryan V. B.S. Univ. of Oregon; M.A. Univ. of Oregon

Beane, Melinda L. B.A. Univ. Colorado Boulder; M.S. Univ. of Oregon; Ph.D. Univ. of Oregon

Boyer, William H. B.A. Univ. Calif Davis; M.A. Univ. of Oregon

Cordova, Micah M.A. Hunter Col. of the City Univ. of New York, N.Y.; B.A. New Mexico Highlands Univ., Las Vegas N.M.

Cowling, William D. B.A. Univ. Texas Dallas; M.A. Univ. of Oregon; M.A. Univ. Texas Dallas

Daugherty, Jean E. B.S. Oregon State Univ.; M.S.W. Portland State Univ.; Licensed Clinical Social Worker

Davidson Sprado, Katherine D. B.A. Univ. Calif Santa Barbara; M.A. Univ. Calif Los Angeles

Delf, Gregory B.A. Univ. of Iowa; M.A. Univ. of Iowa

Donavin, Kirkwood W. A.A. Santa Rosa Jr Col.; B.A. Calif St Univ. Sacramento; M.A. Calif St Univ. Sacramento

Duemler, David G. B.S. San Diego State Univ.; Ph.D. Univ. Calif Santa Barbara

Fudge, Toni J. B.S. San Diego State Univ.; M.S. San Diego State Univ.

Hill, Tami R. B.A. Penn State Univ/Univ. Park; M.A. Univ. of Oregon; Ph.D. Univ. of Oregon

Howard, Beena R. M.A. St Johns Col. Nm; M.A. Univ. South Carolina Columbia; M.A. Rohilkhand Univ; M.A. Rohilkhand Univ; Ph.D. Lancaster Univ. - U.K.

Humphrey, Erik C. A.A. Lane Community Col.; B.A. Univ. of Oregon; M.A. Univ. of Oregon

Ingalsbee, Timothy L. B.A. Univ. of Oregon; M.A. Univ. of Oregon; Ph.D. Univ. of Oregon

Khalsa, Viriam S. B.S. Univ. of Oregon; M.S. Univ. of Oregon

Kim, Eric L. B.S. Univ. of Idaho; M.S. Univ. of Oregon

Kolbuss, Lisa M. B.S. Northwest Christian Univ.; M.S. Univ. of Oregon

Lake, Adam B. B.A. Lawrence Univ.; M.A. Univ. of Oregon

Logan, David M. B.A. Univ. of Oregon; J.D. Willamette Univ.

Lugenbehl, Dale E. B.A. Calif St Univ. Long Beach; M.A. Calif St Univ. Long Beach; M.A. Univ. Calif San Diego

Mannering, Anne M. B.A. Univ. of Texas - Austin; M.S. Univ. of Oregon; Ph.D. Univ. of Oregon

Metzger, Rodney C. B.A. Univ. Montana; M.A. Univ. Montana; Certified Clinical Sociologist

Nadler, Peter N. B.A. Pitzer Col.; M.A. Univ. of New Mexico-Albuquerque

O Grady, Pat B.S. Univ. of Oregon; M.S. Univ. of Oregon

Obersinner, Eugene A. B.A. Univ. of Oregon; M.S.W. San Diego State Univ.

Olalde, Janese C. B.A. Univ. of Oregon; M.Ed. Univ. of Oregon

Pastor, Robert F. B.S. Northrn Illinois Univ.; M.S. Univ. of Oregon; Ph.D. Univ. of Oregon

Riedel, Jennifer E. B.S. Calif St Univ. Sacramento; M.P.H. Univ. Calif Berkeley

Sanchez, Bruce K. B.A. Univ. of Oregon; M.A. Univ. of Oregon

Sarvis, Will R. B.A. Va Polytechnic Inst Tlnt Srch; M.A. Va Polytechnic Inst Tlnt Srch

Seidel, Jonathan L. B.A. Oberlin Col.; M.A. Jewish Theol Seminary America; Ph.D. Univ. Calif Berkeley

Smith, Clinton R. B.A. Univ. Calif Santa Cruz; M.S. Univ. of Oregon; Ph.D. Univ. of Oregon

Smith, Gerald D. B.S. Univ. of Oregon; M.S. Univ. of Oregon

Snook, Denis A. B.A. Univ. Central Arkansas; M.A. Univ. of Oregon; Ph.D. Univ. of Oregon

Trolin, Clifford F. B.A. Brandeis Univ.; M.A. Graduate Theol Union-Berkeley; Ph.D. Graduate Theol Union-Berkeley

Villanueva, Anselmo G. A.A. Santa Barbara City Col.; B.A. Univ. Calif Los Angeles; M.S. Univ. Southern California; Ph.D. Univ. of Oregon

Wanke, Paul A. B.A. Western Washington Univ.; M.A. Univ. of Idaho; Ph.D. Univ. Kansas

Washburn, Sarah H. B.A. San Francisco State Univ.; M.A. Univ. Nevada Las Vegas

Women's Programs

Broomberg, Lola M. M.S. Oregon State Univ.; M.S. Univ. of Oregon

Castro, Judith A. B.A. Florida Atlantic Univ.; M.A. Florida Atlantic Univ.

Kerewsky, Shoshana D. Ph.D. Antioch Univ-Seattle

Landforce, Debora J. B.S. Oregon State Univ.; M.S. Univ. of Oregon

Wells, Raquel C.

Workforce Development

Raney, Patsy B.A. Univ. Tulsa; M.A. Univ. of Oregon

Index

A

About Lane 4
 Academic Advising 5, 12-13, 24, 26-27
 Academic Calendar 2
 Academic Learning Skills 24
 Academic Probation 53, 58
 Academic Programs 14
 Academic Renewal Policy 58
 Academic Standards 57-58
 Academic Standards and Alert System 57
 Accounting Program 68-69
 Accounting Courses 186
 Accreditation 4
 Acting (See Theatre Arts)
 Administration 278-279
 Administrative Office Professional 69-73
 Administrative Support Courses 186-187
 Administrative Withdrawal 55
 Admisión 10-13
 Admission 10-13
 Adult Basic Education/GED Program 273
 Adult Basic Skill Development 273
 Adult Development and Aging 135
 Adult Skill Development 273
 Advising 5, 12-13, 24, 26-27
 Advisory Committees 279
 Affirmative Action Statement inside back cover
 Agricultural Equipment/Mechanics (See Diesel)
 Air Conditioning (See Automotive, Diesel)
 American Indian Experience 162-163
 Antaomy/Physiology/Microbiology Courses 187
 Anthropology Courses 187-188
 Apprenticeship Courses 188-192
 Architecture (See Drafting and Engineering)
 Art History Courses 192
 Art, Studio Courses 192-194
 Art Transfer 163
 ASLCC (Associated Students of Lane Community Col.) 31
 Assessment and Testing 25
 Associate of Applied Science Degree 48
 Associate of Arts Oregon Transfer Degree 14, 41-44, 50-51
 Associate of General Studies 14, 47, 51
 Associate of Science Degree 14, 46, 51
 Associate of Science Oregon Transfer: Business 14, 45, 51
 Attendance 53
 Audio (See Media Arts)
 Audit 58
 Auto Body and Fender Technology Program 73-75
 Auto Collision Option 74
 Auto Paint Option 74
 Automotive Courses 195
 Automotive Collision and Refinishing Courses 194-195
 Automotive Technology Program 75-77
 Aviation Maintenance Courses 195-196

Aviation Maintenance Technician Program 77-78
 Awards 4

B

Baking and Pastry 96
 Basic Health Care 128
 Basic Manufacturing/Machining Technician 142
 Biology Courses 196-197
 Biology Transfer 164
 Black Student Union 31
 Board of Education, Lane 278-279
 Board of Education, Oregon 279
 Bookstore 33
 Botany (See Biology)
 Budget Committee, Lane 279
 Bus Pass 8
 Business Administration and Accounting Transfer 164-165
 Business and Workforce Development 275-278
 Business Assistant Program 78-80
 Business Courses 197-199

C

CAD, CADD (See Drafting and Engineering Technician)
 CAM (See Manufacturing)
 CNC (See Manufacturing)
 Calendar, Academic 2
 Campus Map 9
 Career Counseling 26
 Career Development Courses 199
 Career and Employment Services 26
 Career and Technical Programs 14, 52-53, 68
 Catalog 5
 Center for Meeting and Learning 273
 Centro Multi-Cultural 29-30
 Certificate Program 49
 Certified Medical Assisting (See Medical office Assistant)
 Chemical Dependency (See Human Services)
 Chemistry Courses 199
 Child Development (See Early Childhood Education)
 Child and Family Center 26
 Class Schedule 5, 53
 Clubs and Organizations 31-32
 College District 4
 College Level Examination Program 25
 College Preparation (See Study Skills)
 College Success Courses 199-200
 Communication (See Speech Communication)
 Community Center for Family Counseling 273-274
 Como Empezar en Lane 6
 Complaint Procedure 59-60
 Computer Game Programming

in C++ 86
 Computer Hardware Repair (See Electronics)
 Computer Information Systems - Health Informatics 80-82
 Computer Laboratories 26
 Computer Network Monitoring and Management 83-84
 Computer Network Operations 82-84
 Computer Network Security 84
 Computer Programming Program 84-85
 Computer Science Transfer 165
 Computer Simulation and Game Development 85-87
 Computer Specialist Program 87-88
 Computer Training (noncredit) 271
 Computer Systems Support 88-89
 Computers: Introduction/Information Systems/Computer Science Courses 200-204
 Computers: Keyboarding Courses 203
 Computers: Software Courses 204-205
 Construction Courses 204-205
 Construction Landscape 91
 Construction Technology Program 89-91
 Construction Trades 91-94
 Continuing Education Training Programs 271
 Cooperative Education 14-15 (Also see specific programs and course descriptions)
 Cooperative Education, International 16
 Cooperative Education/Internships Courses 205-206
 Core Ability Outcomes Statement 36
 Core Values inside front cover
 Cottage Grove Center 8
 Counseling 5, 12-13, 24, 26-27
 Course Descriptions 186-270
 Course Numbers 54
 Credit-by-Assessment 25
 Credit-by-Examination 25
 Credit for Prior Learning 25
 Credit Programs 68-161
 Credits 54
 Credit Student Outcomes 40
 Criminal Justice Courses 206-207
 Criminal Justice Program 135-136
 Criminal Justice Transfer 165-166
 Culinary Arts and Foodservice Management Program 94-97
 Culinary Arts Courses 207-208
 Curriculum for High School Students 15-16

D

Dance Transfer Plan 166-167
 Dance Courses 208-210
 Dance Productions 30
 Database Specialist 81-82
 Deferred Billing Terms Agreement 21-22
 Definitions 53-55
 Degrees and Certificates 36-49

Denali.....	32
Dental Assisting Courses	210
Dental Assisting Program	97-99
Dental Assisting Transfer	168-169
Dental Hygiene Courses.....	210-212
Dental Hygiene Program.....	99-100
Dental Hygiene Transfer.....	169
Determination of Residency	19-20
Diesel and Heavy Equipment.....	212
Diesel Technology Program.....	100-102
Dietary Manager	96-97
Differential Pricing Program	19
Direct Transfer.....	50
Disability Resources	27
Disciplinary Action.....	63
Disclosure Statement	55-56
Distance Learning	17
Downtown Center.....	8
Drafting Courses	212-213
Drafting Program.....	102-104
Drama (See Theatre Arts)	
Dropping a Class.....	55
Drug and Alcohol Statement	60-61

E

Early Childhood Education Courses	213-214
Early Childhood Education Program	104-106
Earth and Environmental Science ...	214-215
Economics Courses	215
Education Courses.....	215-216
Electrician Apprenticeship Technologies.....	106-109
Electronic Technology Program	109-110
Electronics Courses	216-217
Emergency Medical/Paramedic Courses	217-218
Emergency Medical Technology Program	110-112
Employer Training Service.....	277
Energy Management Courses	218-219
Energy Management Technician Program	112-114
Engineering (See Drafting, Electronics, Engineering Transfer)	
Engineering Transfer	170-171
Engineering Transfer Courses	219-220
English (See Literature, Writing)	
English as a Second Language (See Study Skills and College Preparation; also noncredit classes)	
English as a Second Language.....	272
Enrollment.....	10-11
Enrollment Services/Financial Aid ...	5,6,27
Equal Opportunity	inside back cover
Español.....	6,13,272
Ethnic Studies Transfer Plan	171-172
Ethnic Studies Courses	220-221
Exercise and Movement Science ...	114-118
Exercise and Movement Science Courses	221-223
Exercise and Sport Science Transfer....	172
Expenses	19-23

F

Fabrication/Welding Courses.....	223-224
Fabrication/Welding Technology Program	118-121
Facilities.....	8
Faculty	280-289
FAFSA	20
Family Connections.....	26
Family Studies (See Human Relations)	
Fashion Design	271
Fees and Expenses	19
Fee Refunds	11,23
Film (See Literature, Media Studies, and Political Science)	
Financial Aid	20-21
Fitness Education Center	30
Fitness Specialist	115-118
Flight Courses	224-225
Flight Technology Center	8
Flight Technology Program	121-122
Florence Center.....	8
Floristry.....	271
Food Preparation and Production	97
Food Service Management.....	132
Foodservices	27-28
Foundation, Lane	279
French (See Language Studies)	
Full-time Student	54
Funding.....	4

G

General Education and Core Abilities	36
General Educational Development (GED) Test	273
Geographic Information Systems.....	123-124
Geography Courses.....	225-226
Geology (See Earth and Environmental Science)	
Geospatial Information Science and Technology	122-124
Governance.....	278-279
Grade Changes	57
Grade Point Average	57
Grades	57
Grading Policies.....	57-58
Grade Notations.....	57
Graduation	54
Graphic Design Courses.....	226-227
Graphic Design Program.....	124-125
Guidance and Curriculum	106
Guided Studies Program.....	24

H

Half-Time Student.....	54
Health Education Transfer.....	172-173
Health and First Aid Courses	228-229
Health Clinic	28
Health Informatics Program.....	173-174
Health Informatics Transfer.....	173
Health Information Technology Specialist.....	82

Health Insurance, Student.....	28
Health Occupations Course	227
Health Records Technology	125-129
Health Records Courses	227-228
High School Connections.....	15-16
History Courses.....	229-230
Honor Lists	54
Honors Program	16
Honor Society	32
Hospitality Management Courses	230-231
Hospitality Management Program ...	130-134
Housing	29-30
How to Get Started	5
Human Development Classes.....	16
Human Relations Courses.....	231
Human Services Courses	231-233
Human Services Programs	134-138
Humanities Courses	233
Hybrid Courses	55

I

Immunizations	11,28
Incomplete.....	58
In-District Students.....	19
Industrial Mechanics and Maintenance Technology.....	138-139
Infant and Toddler.....	106
Inglés Como Segundo Idioma	272
Intercollegiate Athletics.....	30-31
International Cooperative Education	16
International Learning Opportunities	16-17
International Student Admission	10
International Student Program.....	29
International Students	10,19-20,29
Internet (See Business and Computers: Introduction)	
Internships/Work Experience (See Coopera- taive Education)	
Intoxicants, Use of	32,60-61

J

Jewelry Making and Marketing	271
Job Search Assistance	26
Journalism Courses.....	233
Juvenile Corrections Program.....	136-138

K

KLCC-FM Radio	274
---------------------	-----

L

"L" Number.....	55
Landscaping (See Construction)	
Lane Board of Education	278-279
Lane Budget Committee	279
Lane Foundation	279
Lane Transit District.....	8
Lane's Integration of Vets in Education...	34
LaneOnline	17

Language Studies Courses	233-235
Latino Student Union	31
Learning Communities.....	17-18
Legal Assistant Courses.....	235-236
Legal Assistant Program.....	139
Legal Office Skills	71-72
Legal Services, Student	29
Library	29
Library Courses.....	236
Literature Courses	236-239
Live Interactive Courses.....	17
Locations and Maps	8-9

M

Machine Shop, Machine Tools (See Manufacturing)	
Management (See Business/Management and Culinary)	
Manufacturing Courses.....	239
Manufacturing Technology Program	140-142
Manufacturing Technology: Computer Numerical Control (CNC) Technician Option.....	141
Map, Lane Campus	9
Massage Therapy Program.....	142-143
Mathematics Courses.....	239-244
Mechanics (See Automotive, Aviation, Diesel)	
Media Arts Courses	244-246
Medical Coding	128-129
Medical Office Assistant Program..	143-145
Medical Office Assisting Courses.....	246
Medical Transcription	129
Meeting, Convention, and Special Events Manager	133
Microbiology (See Biology)	
Money Matters.....	19-23
Multicultural Center	29
Multimedia/Web Design Program....	145-147
Music Transfer Plan	174-175
Music Courses.....	246-249
Music, Dance and Theatre Arts	30
Music Lessons Courses.....	249-250
myLane	55

N

Native American Student Program	30
Native American Student Association	31
New Student Information	12,13
Noncredit Programs	271
Nursing Courses	250-252
Nursing Assistant Program.....	271
Nursing Program	147-150
Nutrition Courses.....	252

O

Occupational Skills Courses	252-253
Occupational Skills Program	151
Off-Campus Centers	8
Office Software Specialist.....	72

Online Courses.....	17
Oregon Board of Education	278-279
Oregon Transfer Degree.....	14,41-44,50-52
Oregon Transfer Module	49
Out-of-District Students	19
Out-of-State Students	20
Outcome Assessment	40
Outcome Statements.....	36-39
Outreach Centers.....	8
Overview of Academic Programs.....	14

P

Paralegal Studies.....	151
Parking.....	8
Pass/No-Pass	58
Payments, Tuition and Fees	19-23
Payroll Clerk	69
Peace Studies Transfer	175-176
Phi Theta Kappa Honor Society.....	32
Philosophy and Religion Courses	253
Phlebotomy	271
Phone Numbers	7
Photo ID	30
Photography Courses.....	254
Physical Education Courses.....	254-257
Physical Exams & Immunizations	11-28
Physical Therapist Assistant	151-153
Physical Therapist Courses.....	257-258
Physics Courses	258-259
Placement Testing.....	12,13,25
Policies.....	59-67
Political Science Courses	259-260
Practical Nursing.....	149-150
Practical Nursing Bridge	150
Pre-Chiropractic	177
Pre-Journalism.....	176-177
Pre-Occupational Therapy	177-178
Pre-Optometry	178-179
Pre-Pharmacy	179
Pre-Physical Therapy.....	179-180
Pre-Physician Assistant.....	180
Pre-Veterinary	180-181
President's Letter	3
Probation, Academic	53,57-58
Procedures and Policies.....	53-67
Program Orientations.....	12,13
Psychology Courses	260-261
Psychology Transfer Plan	181

Q

Queer Straight Alliance	31
-------------------------------	----

R

Radio (See Audio)	
Reading (See Study Skills)	
Real Estate Courses.....	261
Records, Student, Release of.....	56
Recreational and Club Sports Program.....	30
Refunds	11,23
Registration	11-13

Registrar, Staged	11,24
Release of Records	56
Religion (See Philosophy and Religion)	
Renewable Energy Technician Option.....	113
Residency, Determination of.....	19-20
Resource Conservation Management Option.....	113-114
Respiratory Care Courses	261-263
Respiratory Care Program	153-155
Restaurant Ownership.....	133-134
Retail Management	155-158
Robotics (See Electronics, Industrial Maintenance)	

S

Schedule Changes	11,55
Scholarship Information	20
Security and Safety	67
Semiconductor Manufacturing (See Electronics)	
Senior Companion Program.....	274
Service Learning.....	18
Shielded Metal Arc Welder	120
Skills Testing	12,13,25
Small Business Development Center and Customized Employee Training	275
Small Business Management.....	275
Small Business Ownership.....	72-73
Social Security	55
Sociology Courses.....	263-264
Spanish (See Language Studies)	
Special Admission Programs	11
Specialized Support Services	274
Speech Communication Courses.....	264
Speech and Communication Studies	182
Spelling (See Writing)	
Sports and Fitness	30
Staged Registration	11,24
Steps to Enroll in Credit Classes	12,13
Student Code of Conduct.....	61-67
Student Complaint Procedure	59
Student Employment Service	26
Student Government.....	31
Student Legal Services.....	29
Student Life and Leadership Development	31-32
Student Magazine.....	32
Student Media	32
Student Newspaper.....	32
Student Outcomes Assessment	40
Student Policies and Complaint Procedures	59-67
Student Records	56
Student Rights and Responsibilities	61-67
Student Services.....	24-36
Student Service Associates	32
Student Snack Shack.....	32
Studio Art (See Art, Studio)	
Study Skills and College Preparation Courses	264-265
Substance Abuse Prevention Program	32

Substance Abuse Statement	60-61
Successful Aging Institute	274
Supervised Field Experience (See Cooperative Education)	
Sustainability Coordinator	158-159

T

Teacher Education Preparation.....	183-184
Telecourses.....	17
Telephone Numbers	7
Television (See Video Productions)	
Testing Services	12, 13, 25
Theatre Transfer Plan	184
Theatre Arts Courses.....	265-266
Theatre Productions	30
Titan Store	33
Torch	32
Transcripts	56
Transfer Credits.....	11
Transfer Hotline	52
Transfer majors.....	51
Transfer Plans	50, 162-185

Transitions To Success	35
Transportation, Bus	8
TRIO Program	33
Tuition	19
Tuition Payments	21-23
Tuition Refunds	23
Tutoring Courses	266
Tutoring Services	33-34

U

Umpqua Paralegal Studies	151
--------------------------------	-----

V

VA Educational Benefits	34-35
Veterans' Services	34-35
Video Production Courses	251
Video Conferencing	17
Vocabulary (See Writing)	

W

Water Conservation Courses	266-267
Water Conservation Technician	159-160
Watershed Science Courses	267
Watershed Science Technician	160-161
Web (See Business and Computers: Introduction)	
Web Design	146-147
Web Programming	85
Welcome Letter	3
Welding (See Fabrication and Welding)	
Welding Processes	120-121
Wire Drive Welder	120
Withdrawing from Classes, School	55
Women in Transition Courses	267-268
Women's Center	35
Women's Program	35
Women's Studies Transfer Plan.....	185
Women's Studies Courses	268
Workforce Development	277-278
Workforce Network.....	277-278
Writing Courses	269-270
Zoology (See Biology)	

Strategic Directions

Lane transforms students' lives through learning

- We acknowledge that students occupy many roles, including those of family members, workers, members of social groups, and citizens of an increasingly interconnected world.
- We provide educational experiences, support services and institutional structures that enhance student learning and success.
- In our work in and outside of the classroom, and in our daily interactions with students and one another, we aim to empower all students; we encourage students to grow, to take risks, and to assume responsibility for succeeding in all aspects of their lives.

A Liberal Education Approach for Student Learning

- Equip students to become global citizens with the broad knowledge and transferable skills characterizing a liberal education approach
- Expand application of the liberal education approach throughout the college's programs and services

Optimal Student Preparation, Progression and Completion

- Promote students' progression to goal completion by knowing our students and creating needed systems, processes and learning environments
- Support academically underprepared students' progression to college-level coursework by providing them with foundational skills, classes and support

Online Learning and Educational Resources

- Build capacity in faculty and staff to create high-quality, sustainable and innovative online learning and educational resources
- Provide the required tools, infrastructure and professional development to use emerging technologies for expanding online learning and educational resources
- Explore the effectiveness of online learning and educational resources

A Sustainable Learning and Working Environment

- Build understanding of sustainable ecological, social and economic systems and practices among the college communities
- Apply principles of sustainable economics, resource use, and social institutions to Lane's learning and working environments

A Diverse and Inclusive Learning and Working Environment

- Create a diverse and inclusive learning college
- Develop institutional capacity to respond effectively and respectfully to students, staff and community members of all cultures, languages, classes, races, genders, ethnic backgrounds, religious beliefs, sexual orientations, and abilities

A Safe Learning and Working Environment

- Maintain a safe learning and working environment
- Improve practices and resources that secure property
- Promote activities, practices and processes that encourage civil discourse and protect college communities from discrimination, harassment, threats, and harm

Lane Community College is committed to providing a working and learning environment that is free from discrimination, harassment and retaliation. Lane is committed to equal opportunity in education and employment, affirmative action, diversity, and compliance with the Americans with Disabilities Act. The college prohibits discrimination in admissions, employment and access to college programs, activities and services on the basis of race, color, national origin, sex, marital status, familial relationship, sexual orientation, pregnancy, age, disability, religion, expunged juvenile record, or veterans' status. This commitment is made by the college in accordance with federal, state, and local laws and regulations. Inquiries may be directed to the Chief Human Resource Officer, Lane Community College, 4000 East 30th Avenue, Eugene, Oregon 97405-0640, 541.463.5585. Inquiries regarding Title IX may be directed to the Women's Program Director, Building 1, Room 202, 541.463.5264. Inquiries regarding Section 504 may be directed to Nancy Hart, Disability Resources Director, Building 1, Room 218, 541.463.3010 or Dennis Carr, Chief Human Resource Officer and Section 504 Coordinator, Building 3, Room 114, 541.463.5585.

Student Success Starts Here

