Lane
Community College℠

Start Your Success Here!

Kevin Loder
Transfer Student
2013 Lane Graduate

School of Arts & Sciences

Lane is the smart start to your four-year degree! Save at least 50%* on your first two years at Lane, then transfer as a junior to the college or university of your choice. *Compared to the University of Oregon

Tanya Guidry, RN
2012 Lane Graduate

School of Professional & Technical Careers

Start your career at Lane! Choose from more than 40 professional and technical programs, and get started on the path to success.

Think • Engage • Create • Communicate • Apply

Think Critically

Definition: Critical thinking is an evaluation process that involves questioning, gathering, and analyzing opinions and information relevant to the topic or problem under consideration. Critical thinking can be applied to all subject areas and modes of analysis (historical, mathematical, social, psychological, scientific, aesthetic, literary, etc.). Students who think critically:

- Identify and define key issues
- Determine information need, find and cite relevant information
- Demonstrate knowledge of the context and complexity of the issue
- Integrate other relevant points of view of the issue
- Evaluate supporting information and evidence
- Construct appropriate and defensible reasoning to draw conclusions

Engage Diverse Values with Civic and Ethical Awareness

Definition: Engaged students actively participate as citizens of local, global and digital communities. Engaging requires recognizing and evaluating one's own views and the views of others. Engaged students are alert to how views and values impact individuals, circumstances, environments and communities. Students who engage:

- Recognize and clarify personal values and perspectives
- Evaluate diverse values and perspectives of others
- Describe the impact of diverse values and perspectives on individuals, communities, and the world
- Demonstrate knowledge of democratic values and practices
- Collaborate with others to achieve shared goals

Create Ideas and Solutions

Definition: Creative thinking is the ability and capacity to create new ideas, images and solutions, and combine and recombine existing images and solutions. In this process, students use theory, embrace ambiguity, take risks, test for validity, generate new questions, and persist with the problem when faced with resistance, obstacles, errors, and the possibility of failure. Students who create:

- Experiment with possibilities that move beyond traditional ideas or solutions. Embrace ambiguity and risk mistakes
- Explore or resolve innovative and/or divergent ideas and directions, including contradictory ideas
- Utilize technology to adapt to and create new media
- Invent or hypothesize new variations on a theme, unique solutions or products; transform and revise solution or project to completion
- Persist when faced with difficulties, resistance, or errors; assess failures or mistakes and rework
- Reflect on successes, failures, and obstacles

Communicate Effectively

Definition: To communicate effectively, students must be able to interact with diverse individuals and groups, and in many contexts of communication, from face-to-face to digital. Elements of effective communication vary by speaker, audience, purpose, language, culture, topic, and context. Effective communicators value and practice honesty and respect for others, exerting the effort required to listen and interact productively. Students who communicate effectively:

- Select an effective and appropriate medium (such as face-to-face, written, broadcast, or digital) for conveying the message
- Create and express messages with clear language and nonverbal forms appropriate to the audience and cultural context
- Organize the message to adapt to cultural norms, audience, purpose, and medium
- Support assertions with contextually appropriate and accurate examples, graphics, and quantitative information
- Attend to messages, check for shared meaning, identify sources of misunderstanding, and signal comprehension or non-comprehension
- Demonstrate honesty, openness to alternative views, and respect for others' freedom to dissent

Apply Learning

Definition: Applied learning occurs when students use their knowledge and skills to solve problems, often in new contexts. When students also reflect on their experiences, they deepen their learning. By applying learning, students act on their knowledge. Students who apply learning:

- Connect theory and practice to develop skills, deepen understanding of fields of study and broaden perspectives
- Apply skills, abilities, theories or methodologies gained in one situation to new situations to solve problems or explore issues
- Use mathematics and quantitative reasoning to solve problems
- Integrate and reflect on experiences and learning from multiple and diverse contexts

About Lane

Academic Calendar 2
Welcome to Lane 3
How to Get Started at Lane 5
Phone Numbers 7
Locations and Maps 8

College Transfer and Career Technical Programs

Credit Student Admissions and Registration 10
Steps to Enroll in Credit Classes 11
Overview of Academic Programs 12
Tuition, Fees, Financial Aid and Payment 16
Academic and Student Services 20
Degree and Certificate Overview 31
Career Technical Programs 54, 68
Procedures and Policies 55
Transfer Guides 53, 147
Course Descriptions 176

This information is available in an alternate format upon request by contacting Center for Accessible Resources:

541.463.5150 (voice)
TTY Relay: 711
email: *centerforaccessibleresources@lanecc.edu*

This catalog is published for informational purposes and every effort is made to ensure 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.

Community Education, Community Services and Business Education

Continuing Education 259
English as a Second Language 260
Adult Basic and Secondary Education 261
Community Services 261
Business and Workforce Development 263

This catalog was prepared with assistance from: Angela Miller, editor; Melanie Brown, curriculum specialist; Neil Isaacson and Bruce Nichols, graphic designers; cover design by Funk/Levis and Associates.

Governance and Staff

Governance 266
Instructional Staff 268
Index 278

Academic Calendar 2015-2016

Summer Term 2015 (session 201610)

Registration begins*	May 4-7 —7 a.m.
Open registration begins*	June 2 —7 a.m.
Summer term books available	June 15
Summer term classes begin	June 22
Independence Day observed, college closed	July 3
First four-week session	June 22-July 18
First six-week session	June 22-August 1
Eight-week session	June 22-August 15
Twelve-week session	June 22-September 12
Second four-week session	July 20-August 15
Second six-week session	August 3-September 12
Third four-week session	August 17-September 12
Labor Day, college closed	September 7

Fall Term 2015 (session 201620)

Registration begins*	May 18-21 —7 a.m.
Open registration begins*	September 9 —7 a.m.
Fall term books available	September 14
Inservice, college closed	September 24
Fall term classes begin	September 28
Last day to receive a tuition refund	October 4 —11:59 p.m.
Veterans' Day, college closed	November 11
Last day for schedule changes	November 20
Thanksgiving weekend, college closed	November 26-29
Finals week	December 7-12
Fall term ends	December 12
Winter break	December 13-January 3

Winter Term 2016 (session 201630)

Registration begins*	November 2-5 —7 a.m.
Open registration begins*	December 8 —7 a.m.
New Year's Day, college closed	January 1
Winter term books available	December 29
Winter term classes begin	January 4
Last day to receive a tuition refund	January 10, —11:59 p.m.
Martin Luther King Day, college closed	January 18
Presidents' Day, college closed	February 15
Last day for schedule changes	February 26
Finals week	March 14-19
Winter term ends	March 19
Spring break	March 20-27

Spring Term 2016 (session 201640)

Registration begins*	February 8-11 —7 a.m.
Open registration begins*	March 8 —7 a.m.
Spring term books available	March 21
Spring term classes begin	March 28
Last day to receive a tuition refund	April 3 —11:59 p.m.
Inservice, college closed	May 6
Last day for schedule changes	May 20
Memorial Day, college closed	May 30
Finals week	June 6-11
Spring term ends	June 11
Graduation	June 11

*For detailed registration information, visit lanecc.edu/calendars /registration-calendar.

June 2015

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Taking a class at Lane is easy!
Watch the Getting Started at Lane YouTube video at *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 the community's college. Lane is well known for our focus on student success. We are proud of our enduring national reputation as a college of excellence, quality, innovation and sustainability.

Our faculty are experts in their fields who bring the real world into students' lives. All have master's degrees and many have doctorates, as well as experience in the subjects they teach.

Our staff are dedicated to a successful experience for students. Students enjoy many resources and opportunities at Lane, from financial aid guidance to veterans services, student government, recreational sports, clubs, honor societies and more. Our student-centered mission and our small class sizes assure that no student is overlooked.

Our facilities are often state of the art. Our oldest building, the Center, will soon feature the Center for Learning and Student Success, or CLASS, offering wonderful new spaces to study, or to enjoy a meal, hang with friends, connect online and generally take care of the life of being a student. Part of this transformation, the new Titan Store, already is open.

Whether it's outstanding faculty, caring staff, opportunities to get involved, or great facilities, you can be assured of quality at Lane. In 2015, our accreditation was reaffirmed by the Northwest Commission on Colleges and Universities, an independent authority recognized by the U.S. Department of Education. The commission lauded Lane for its emphasis on student success, support services, programs of distinction, and more.

We are here for your success. Welcome to Lane.

Sincerely,

Mary Spilde, President

Welcome to
Lane Community College
Home of the Titans
TITANS

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 359,000 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 2013-14 academic year, 33,695 students enrolled in Lane Community College classes. The average age for all students was 36 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 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; membership: Northwest Diesel Industry Council and the Oregon Trucking Association
- 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.
- Flight Technology approved by the Federal Aviation Administration. 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.
- 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
- 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
- Paramedicine 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
- 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 2014-15 General Fund budgeted resources are $94,759,791 of which 54 percent came from intergovernmental, 40 percent from tuition and mandatory fees, and 6 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.

myLane

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

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 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 technical degree program. For detailed information about credit programs and courses, see Career Technical programs and Course Descriptions.

Noncredit Community Education Classes

Noncredit courses are not transferable to Lane's associate degrees and career technical degree programs or to other colleges. Information about these offerings begins on page 259.

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 related to attending Lane can be found as a search option at the top of each Lane webpage.

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 the Titan Store Bookstore at 541.463.5256. 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 academic advisor. Students also are encouraged to see a counselor or academic advisor early in their programs of study to obtain the most accurate information on their program requirements.

Class schedule The online class schedule is available on the web at *lanecc.edu* about one week before registration begins. 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-calendar.

The Continuing Education Class schedule which contains noncredit 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 Counseling and Advising Center.

Counseling services also are available at these off-campus centers: Lane Community College at Cottage Grove, 541.463.4202; and Lane Community College at Florence, 541.997.8444 or 541.463.4800.

Enrollment and Student Financial Services Building 1, First Floor (Lobby), *lanecc.edu/esfs/* 541.463.3100, 877.520.5391

Enrollment and Student Financial Services admits credit students and provides registration and billing assistance to all students.

Financial Aid Building 1, First Floor (Lobby), *lanecc.edu/finaid/*, 541.463.3400

Financial aid responds to all questions and issues regarding financial aid.

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

Titan Peer Associates Building 1, First Floor (Lobby)

Student peers are available to assist students to access online Enrollment and Student Financial Services and Financial Aid services.

Other Good Starting Places:

College centers and maps, pages 8-9
Center for Accessible Resources, pages 20-21
English as a Second Language, page 260
International Student Program, page 24
Multicultural Center, pages 26-27
Native American Program, page 27
TRiO Learning Center, pages 28-29
Veterans' Services, pages 29-30
Women's Center, page 30

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 CareerTechnical Programs y Course Descriptions.

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 259.

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 yeducación. 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. 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 aconsejaa los estudiantesrevisar 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 online clases está a su disposición en el Internet, en *lanecc.edu* aproximadamente una semana antes de que se inicie el registro. El registro usualmente inicia la cuarta 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 tambiénes 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 Counseling and Advising Center.

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

Downtown Campus, 541.463.5940 Lane Community College en Cottage Grove, 541.463.4202 Lane Community College en Florence, 541.997.8444 o 541.463.4800

Admisión/Enrollment and Student Financial Services Edificio 1, Primer piso, *lanecc.edu/esfs/*, 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-jueves, 9 a.m.-5 p.m. 4 y viernes, 9 a.m.-2 p.m. El colegio estará cerrado los Viernes durante el trimestre de Verano.

Financial Aid Edificio 1, Primer piso *lanecc.edu/finaid/*, 541.463.3400

Ayuda financiera responde a todas las preguntas y problemas de ayuda financiera.

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

Titan Peer Associates Edificio 1, Primer piso

Compañeros de estudio están disponibles para ayudar a los estudiantes de Inscripción en línea y acceso a servicios financieros para estudiantes ayuda financiera y servicios.

Otros Buenos Puntos de Partida

Centros del college, páginas 8-9

Centro de Recursos de acceso, páginas 20-21

Inglés como Segundo Idioma, página 260

Programa para Estudiantes Internacionales, página 24

Centro Multicultural, páginas 26-27

Programa Nativo Americano, página 27

Centro de Aprendizaje TRiO, páginas 28-29

Oficina de Veteranos, páginas 29-30

Centro para la Mujer y el programas Transiciones, página 30

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 and Student Financial Services	541.463.3100
Adult Basic and Secondary Education (ABSE)	541.463.5214
Downtown Campus	541.463.6180
ABSE Volunteer Tutor Program	541.463.6184
Affirmative Action	541.463.5801
Associated Students of Lane Community College (ASLCC)	541.463.5365
Athletics	541.463.5599
Bookstore	541.463.5256
Career and Employment Services	541.463.5167
Center for Accessible Resources	541.463.5150
Child and Family Center	541.463.5517
Child and Family Education	541.463.5519
Continuing Education	541.463.6100
Cooperative Education	541.463.5203
Cottage Grove Center*	541.942-4202
Counseling (Main Campus)	541.463.3200
Credit Instructional Departments	
Academic Learning Skills	541.463.5439
Advanced Technology	541.463.5380
Arts Division	541.463.5409
Aviation Academy	541.463.4195
Business Department	541.463.5221
Child and Family Education	541.463.3522
Computer Information Technology	541.463.5221
Cooperative Education	541.463.5203
Culinary Arts and Hospitality Management	541.463.3503
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
Dislocated Worker Program	541.463.5223
Downtown Campus	541.463.6250
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	541.463.5135
GED, Classes	541.463.5214
GED, Testing	541.463.5324
Health Clinic	541.463.5665
High School Connections	541.463.5521
Institute for Sustainable Practices	541.463.5594
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
Small Business Development Center	541.463.6200
Student Life and Leadership Development	541.463.5336
Student Financial Services	
Student Loan Payments (Perkins)	541.463.5610
Tuition and Other Payments	541.463.3100
Student Legal Services	541.463.5365
Student Records	541.463.3100
Student Resource Center	541.463.5342
Substance Abuse Prevention	541.463.5178
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	541.463.5684
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 new downtown campus in 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.

Lane's Aviation Academy offers two programs at its facilities at Eugene's Mahlon Sweet Airport: the Flight Technology Program offers ground/flight courses, and the Aviation Maintenance Technician Program offers advanced training at the Return-to-Service facility.

The college also offers classes via television and the Internet.

Bus Pass and Bus Transportation

Credit students, ABSE and ESL students at the main campus and Downtown Campus (DCA) are assessed a $27 per term* transportation fee which covers the cost of several transportation initiatives that benefit our students, including a Lane Transit District bus pass. Other students are assessed a $5 per term* transportation fee. For bus routes and bus pass information, log on to the LTD website at ltd.org or call LTD Customer Services at 541.687.5555 or 711 (TTY—Oregon Relay).

- Only one pass or sticker per term can be issued to eligible students.
- LCC Bus Passes are nontransferable, nonrefundable and nonreplaceable.
- Lost, stolen or misplaced LCC Bus Passes will not be replaced during the current term.

* subject to change

Parking

Main Campus

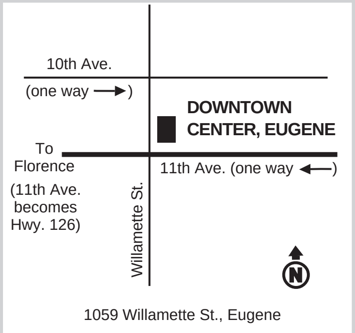
Parking is permitted in all parking lots on the main campus, hard surface and gravel. Parking is prohibited on main access roads at Gonyea Road and Eldon Schafer Drive. If parking is temporarily permitted in an area where parking is not normally permitted, the area will be clearly marked.

More information about motor vehicle regulations applicable-to Lane is available on Lane's website at lanecc.edu/copps/documents/vehicle-regulations or call 541.463.5558.

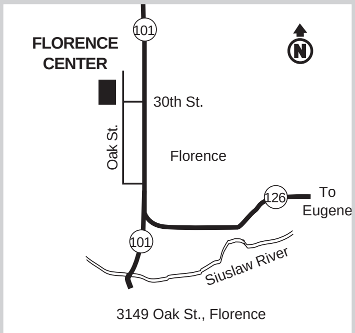
Downtown Campus

- The closest parking option is The Broadway garage, with entries on either side of Broadway along the west side of Charnelton. Parking here is free on weekends and after 6 p.m. with hourly parking available by machine (which accepts credit cards).
- Lane's Downtown Campus (DCA) students may obtain parking validation cards from the Titan Store and Market.
- Parking cards may be used in the Overpark and Parcade (not at The Broadway). Parking cards have no cash value.
- Parking is free on Saturday and Sunday in the Overpark and Parcade, for the first hour of parking Monday through Friday, and before 7 a.m. and after 6 p.m. Monday-Friday.
- For more information, call 541.463.6250, and for the latest information on all things related to our new Downtown Campus and the parking and transportation options available, see: lanecc.edu/facilities/transportation

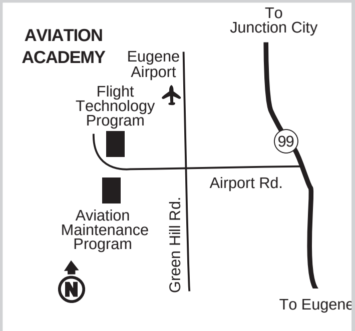
Maps to Lane Community College


10th Ave.
(one way ⟶)
DOWNTOWN CENTER, EUGENE
To Florence
(11th Ave. becomes Hwy. 126)
11th Ave. (one way ⟵)
Willamette St.
N

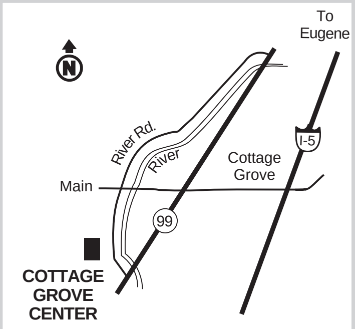
1059 Willamette St., Eugene


FLORENCE CENTER
101
N
30th St.
Oak St.
Florence
126
To Eugene
101
Siuslaw River

3149 Oak St., Florence


AVIATION ACADEMY
To Junction City
Eugene Airport
Flight Technology Program
99
Airport Rd.
Aviation Maintenance Program
Green Hill Rd.
N
To Eugene

28715 Airport Rd., Eugene

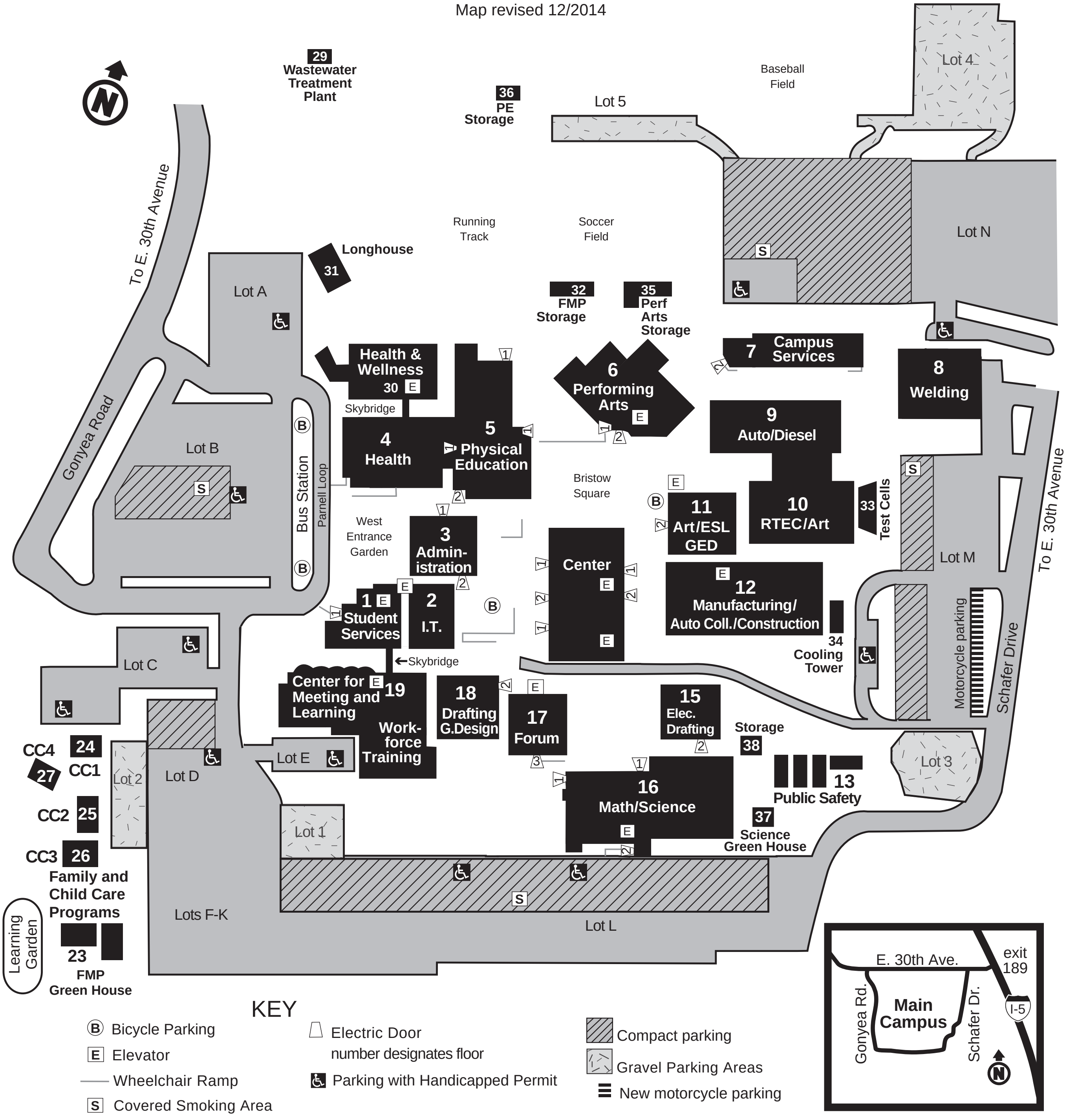

To Eugene
N
I-5
River Rd.
River
Cottage Grove
Main
99
COTTAGE GROVE CENTER

1275 S. River Rd., Cottage Grove

Lane Community College Main Campus

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

Map revised 12/2014


N
29 Wastewater Treatment Plant
36 PE Storage
Lot 5
Baseball Field
Lot 4
To E. 30th Avenue
Gonyea Road
Running Track
Soccer Field
Lot N
Longhouse 31
Lot A
32 FMP Storage
35 Perf Arts Storage
7 Campus Services
8 Welding
Health & Wellness 30 E
Skybridge
4 Health
5 Physical Education
6 Performing Arts E
9 Auto/Diesel
Lot B
S
B
Bus Station
Parnell Loop
Bristow Square
West Entrance Garden
3 Admin-istration
11 Art/ESL GED
10 RTEC/Art
33 Test Cells
To E. 30th Avenue
Lot M
Center E E
12 Manufacturing/ Auto Coll./Construction
34 Cooling Tower
1 E Student Services
2 I.T.
Lot C
Skybridge
Center for Meeting and Learning E 19 Work-force Training
18 Drafting G.Design
17 Forum
15 Elec. Drafting
Storage 38
Motorcycle parking
Schafer Drive
CC4 24 CC1
27
Lot 2
Lot D
Lot E
Lot 3
16 Math/Science E
13 Public Safety
37 Science Green House
CC2 25
Lot 1
CC3 26
Family and Child Care Programs
Learning Garden
Lots F-K
Lot L
23 FMP Green House
E. 30th Ave.
exit 189
Gonyea Rd.
Main Campus
Schafer Dr.
I-5
N
KEY
B Bicycle Parking
E Elevator
Wheelchair Ramp
S Covered Smoking Area
Electric Door number designates floor
Parking with Handicapped Permit
Compact parking
Gravel Parking Areas
New motorcycle parking

Building	Department
Center	Bookstore/Library/ Cafeteria
1	**Student Services**
2	IT
3	Administration
4	Health Professions
5	Physical Education
6	Performing Arts
7	Campus Services/Facilities/ Printing & Graphics
8	Welding
9	Auto/Diesel
10	RTEC/Art
11	Art/ESL/GED
12	Manufacturing/Auto Coll./ Construction
13	Annexes
13	**Public Safety**
15	Electronics/Drafting
16	Science/Math
17	Forum
18	Drafting/Graphic Design
18	**Health Clinic**
19	Business/CIT/Workforce/ Co-op Ed/CML
24	Family Connections/Child Development
25	Infant/Toddler Center
26	Preschool
30	Health and Wellness
31	Longhouse

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 and Student Financial 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/esfs/under-18-students*. 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.

myLane

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

Admissions

The admissions process at Lane is very easy. Simply complete the Admissions Process online at *lanecc.edu.*

International Programs Admissions

Building 11, Room 235, 541.463.3434

Lane welcomes students who want to come to the USA to study on student visas to both the International English Program (ESL) and college level programs. We are excited to be part of educating international students from over 40 different countries each term.

Students applying to Lane need to complete the international application online (processing fee required) and submit the following documents electronically: copy of passport, transcripts from most recent school attended and proof of financial support. Go to *lanecc.edu* to apply.

At Lane, a TOEFL score is not required for admission. All students will be tested for English proficiency upon arrival and class placement will be based on the results. Students will be placed in ESL courses or college level credit classes based on the outcome of the placement test. Students who complete all classes in level F of the ESL program with a C or higher, are eligible to take credit classes.

College major and International ESL students are admitted for fall, winter, and spring terms. For additional information on summer term please see *lanecc.edu/international.* International students must be at least 17 years of age to be admitted.

Students who are transferring to Lane from another college, university or language school need to have at least a 2.0 GPA and be eligible to transfer their I-20 to be admitted to our regular program. Students with less than a 2.0 GPA, or those who have been academically disqualified from their current school, will be enrolled in the International "Success Program." Success Program students will have additional requirements to ensure they get the support they need to succeed. Students who have earned more than 180 quarter credits need to identify a specific degree plan and specific number of credits needed to graduate before they can be admitted. All students must be in status with immigration. Students with a terminated I-20 are not eligible to transfer to Lane.

For more information about Lane's International ESL Program, see English As A Second Language.

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.

After arranging for official transcripts to be sent to Enrollment and Student Financial Services, students must complete the transcript evaluation tool at *lanecc.edu/esfs/request-transcript-evaluation.*

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 Policies and Procedures.

More information is available on Lane's transfer practices at *lanecc .edu.*

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
- Dental Hygiene
- Emergency Medical Technology/Paramedic
- Physical Therapist Assistant
- Practical Nursing
- Dental Assisting
- Health Records Technology
- Medical Office 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

Registration

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 under the myEnrollment tab and When Can I Register link. For more information, visit the website at *lanecc.edu/esfs/registration*. For questions, email *AskLane@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

From *lanecc.edu*, go to the Apply and Enroll tab at the top left, select Steps to Enroll as a New Credit Student. Choose the appropriate link and complete the steps.

Overview of Academic Programs

Lane Community College is a comprehensive community college offering career 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 Campus 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 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 Technical Programs

Career technical programs lead to certificates and Associate of Applied Science degrees. Many classes required to complete two-year degrees can be transferred to four-year colleges. Others do not transfer.

For a list of career technical programs offered at Lane, see pages 54-55. For information about specific programs, see Career and Technical Programs.

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 pages 53-54.

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

Associate of Science Oregon Transfer — Computer Science (ASOT-CS)

- Designed for students who want flexibility to transfer to any school in the Oregon University System with computer-focused general education requirements.
- ASOT - CS accepted to meet lower division general education requirements
- Ensures junior status for registration purposes
- Limited transferability of career technical courses

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
- 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
- Not eligible for federal financial aid
- 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 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 technical programs require co-op credits. Unless prior approval is received from the Cooperative Education Division dean, 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: *lanecc.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	Co-op Ed Coordinators
Accounting	Jamie Kelsch
Administrative Office Professional	Jamie Kelsch
Aerobics	Chuck Fike
Anthropology	John del Nero
Art & Applied Design	Teresa Hughes
Athletic Training	Chuck Fike
Athletics	Chuck Fike
Auto Body & Fender	Marv Clemons
Automotive Technology	Marv Clemons
Aviation Maintenance	Marv Clemons
Biology	Gerry Meenaghan
Business Management	Jamie Kelsch
Chemistry	Gerry Meenaghan
Coaching	Chuck Fike
Computer Network Operations	Gerry Meenaghan
Construction	Marv Clemons
Corrective Fitness	Chuck Fike
Criminal Justice	John del Nero
Culinary Arts	Joe McCully
Data Processing	Gerry Meenaghan
Dental Assisting	Leslie Greer
Dental Hygiene	Leslie Greer
Diesel Technology	Marv Clemons
Drafting	Marv Clemons
Early Childhood Education	Merrill Watrous
Education (K-14 Teacher Preparation)	Merrill Watrous
Electronics Technology	Marv Clemons
Emergency Medical Technician (EMT)	Tom Brokaw
Energy Management	Marv Clemons
Engineering (Transfer)	Gerry Meenaghan
English/Writing	Merrill Watrous
Environmental Studies	Gerry Meenaghan
Ethnic Studies	Beverly Farfan
Fitness	Chuck Fike
Fitness Management	Chuck Fike
Flight Technology	Marv Clemons
Florence Center: Most Programs	Brenda Kluhsman
French	Merrill Watrous
General Work Experience	Marv Clemons
Geography	John del Nero
Geology	Gerry Meenaghan
GIS	Lynn Songer
Graphic Design	Teresa Hughes
Health Informatics	Gerry Meenaghan
Health Occupations	Marv Clemons
Health Records Technology (HRT)	Chuck Fike
History	John del Nero
Hospitality Management	Joe McCully
Human Services	Garry Oldham
International Work Experience	Gerry Meenaghan
Japanese	Merrill Watrous
Journalism	Teresa Hughes
Landscape	Marv Clemons
Legal Office	Jamie Kelsch
Manufacturing Technology	Marv Clemons
Mathematics	Gerry Meenaghan
Medical Office Assistant (MOA)	Marti Pittman
Multimedia	Teresa Hughes
Music	Teresa Hughes
Nursing	Sara Barnes
Performing Arts	Teresa Hughes
Physical Education	Chuck Fike
Physical Therapist Assistant (Clinical Affiliation)	Beth Thorpe
Physics	Gerry Meenaghan
Political Science	Marv Clemons
Pre-Law	Marv Clemons
Programming	Gerry Meenaghan
Psychology	Beverly Farfan
Recreation	Chuck Fike
Respiratory Therapy	Norma Driscoll
Retail Management	Jamie Kelsch
Sales and Marketing	Jamie Kelsch
Science Technology	Gerry Meenaghan
Service Learning	Beverly Farfan
Service Learning Honors	Gerry Meenaghan
Simulation and Game Development	Gerry Meenaghan
Sociology	Beverly Farfan
Spanish	Merrill Watrous
Sustainability Coordinator	Marv Clemons
Systems Support	Gerry Meenaghan
Water Conservation Technician	Marv Clemons
Watershed Science Technology	Marv Clemons
Welding	Marv Clemons
Wellness	Chuck Fike

High School Connections

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 learning outcomes. 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 2015-16 academic year.

RTEC, Regional Technical and Early College, is a collaborative effort with local schools to provide early college opportunities to high school students. RTEC provides rigorous and relevant career technical training according to industry standards. These classes fill the gaps where high schools can no longer offer these courses. RTEC 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 online in a variety of career technical and academic areas.

The High School Connections office works with local school districts that want to sponsor their students for dual credit in career technical or academic classes. Additionally, school districts contract with Lane to provide college level classes directly at their location.

For more information about High School Connections programs, visit the website at *lanecc.edu/hsconnections* or call541.463.5521.

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 experiential learning opportunities, 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 recognition
- a competitive edge when applying for scholarships to 4-year universities
- articulation agreements with 4-year university honors programs

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.

Lane honors classes fulfill general education electives and requirements for transfer degrees. Lane currently offers the following three types of honors classes:

- Honors options: traditional classes in which students can elect to complete honors-level coursework; open to all students.
- Honors sections: each student in the class completes 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.

International Learning Opportunities

International Cooperative Education

The International Cooperative Education program, in partnership with IE3 Global, 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, visit *ie3global.org* or contact Gerry Meenaghan, Cooperative Education Division, Building 19/Room 231A, 541.463.5883.

LaneOnline

LaneOnline provides courses delivered through technology. The Associate of Arts Oregon Transfer, Associate of General Studies and Associate of Science degrees and significant coursework for other degrees and certificates can be completed through LaneOnline. There is an annual course schedule on the LaneOnline website to assist you in schedule planning.

In order to help easily locate them on the web schedule of classes, online and hybrid courses will have "online" or "hybrid" and the Online/Hybrid icon 🖥 listed next to the course title. All online courses can be viewed in one location by going to lanecc.edu/laneonline and clicking "Class Schedules" in the left-hand navigation bar, then choosing the appropriate term.

Online Courses Online courses are delivered on the web. Students may participate anytime, anywhere they have a computer with internet access. 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.

Hybrid Courses Hybrid courses combine traditional classroom activities with online learning so that time spent in the classroom is reduced but not eliminated. A portion of the class instruction is conducted online and the rest is conducted during regularly scheduled classroom meetings.

Telecourses Telecourses include weekly video programs, 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 streamed or purchased on DVD. Exams are usually taken on campus.

Live Interactive Courses Students enroll and participate by attending on campus or through videoconferencing at an off campus location. A few courses may be viewed live on cable television.

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

For more information about taking LaneOnline courses, call 541.463.5893 or see *lanecc.edu/laneonline*.

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 about learning communities at Lane, visit *lanecc.edu/lc.*

First Year Experience Learning Communities
New Students! Get a jump start on your core classes and learn the skills to succeed in college and in life. Take a First Year Learning Community and get connected. Learn proven strategies to make wise choices about school and life.

Sample learning communities include but are not limited to:

Fast Lane to Success

CG 100	College Success
WR 115	Introduction to College Writing

The Fast and the Curious

WR 121	Introduction to Academic Writing
RD 121	Academic Literacy

The Write Way to Learn

WR 115	Introduction to College Writing
EL 115	Effective Learning

Other Learning Communities

BioBonds: Building Blocks for Your Body

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

Reconnecting with Nature (spring term)

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

Women in Transition

CG 220	Life Transitions
CG 140T	Career and Life Planning

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 email *farfanb@lanecc.edu*

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

Noncredit Community Education Classes

For information about costs associated with Continuing Education and Small Business Development Center Classes, please contact the respective departments.

Credit Classes

Credit students pay the following charges:

Tuition	see below
Class fees	listed next to each class in the online class schedule
Technology fee	$5 per credit
Other fees	see below

Tuition*

Residents of Oregon	$98 per credit hour
Non-residents of Oregon	$239 per credit hour
International students:	
Fall, winter and spring terms	$233 per credit hour
Summer term	$153 per credit hour

*Subject to change pending Board approval

Other Credit Student Fees

ASLCC Student Activity Fee*

Credit students taking main campus classes	$54.30

Student Life (clubs) $1; ASLCC $7.44; BSU $.50; OSPIRG $3; Longhouse $3; International Student programs $2; SPA $.50; Childcare $1; Recreational Sports $12; TORCH $2.75; Women's Program $2; Learning Garden $1.50; Military/Vets Center $1; NASA $.65; MeCHA $.65; GSA $.65; APISU $.50; OSA $2.54; ASLCC Legal Services $4; Co-op $7.62

*This fee is subject to change pending ASLCC election results.

Credit by Examination and Credit by Assessment

Examination/assessment fee	$50 per review
First Time Credit Enrollment Fee	$30
Student Health Fee	$12

Transportation Fee (nonrefundable)

Credit students on main campus	$27 per term
All noncredit classes (included in the Registration fee) and credit classes not held on the main campus	$5 per term

For more information, see the Locations and Maps section on page 8. Fee is subject to annual increases.

International credit students also pay

International student fee	$12 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 from the Titan Store, Center Building.

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	$4,275
Books	$1,269
Special and Miscellaneous Fees (varies by program)	$341
Student Activity Fees	$151

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 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/Paramedicine, 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/esfs/enrollment-services-forms.* Students must hand the form directly to an Enrollment and Student Financial Services advisor at Enrollment and Student Financial Services, main campus. Residency requirements must be met prior to the date that a term begins, and residency changes must be made prior to the start of the term.

* 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, and residency changes must be made prior to the start of the term.

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.

Please note that residency requirements are different at Oregon University System schools. Students intending to transfer should research specific residency requirements at public or private schools to which they will transfer. For more information, visit *ous.edu.*

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 dependents who have established permanent residence inside the college district within 90 days prior to the first day of the term and within three years 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 dependents 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

Lane Community College recognizes that many individuals cannot assume the full financial burden of a college education. For this reason, financial aid is available to help bridge the gap between the costs of education and the available student and/or family resources.

To apply for financial aid, students must submit a Free Application for Federal Student Aid (FAFSA) each academic year—summer through spring. The FAFSA is available at fafsa.gov. Students should apply as early as possible after January 1 for the upcoming academic year.

Lane offers three basic types of financial aid to eligible students: grants, work-study and loans. Typically, students are offered a combination of these financial aid awards. Loans must be repaid. Grants, work-study and scholarships do not have to repaid as long as the student remains enrolled in the term they received funding.

To view eligibility requirements, see *lanecc.edu/finaid/eligible*.

To view further information regarding the financial aid process at Lane, see *lanecc.edu/finaid*.

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 "myFinances" 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 50850, Eugene, OR 97475-0099. 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. If you have questions, call 541.463.3011 or e-mail *SponsoredAccounts@lanecc.edu*.

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.

*By registering, you have automatically accepted the terms of Lane's Deffered Billing Agreement. See lanecc.edu/copps/documents/accounts-receivable-billing to access the Deferred Billing agreement. Futhermore, by registering for any class at Lane, you are agreeing to retrieve your 1098T form by accessing the electronic version in myLane. The college does not mail 1098T's.

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 past, present or 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 information and instructions on setting this up at *lanecc.edu/esfs/tuition-fees-and-payments*. 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 "myFinances" 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 will be moved to a collection agency.

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 collection agency for non-payment after four months*
- Oregon State Tax Return offset

* Students will be mailed a final notice for accounts that are overdue before the college assigns them to a collection agency which 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 Collection Agency After Four Months (120 days) Accounts will be turned over to a collection agency for non-payment after four months (120 days). Students will be mailed a final demand "pink" billing statement for past due accounts before the college assigns them to a collection agency. The collection agency will add their own fees and has the right to report past due accounts to a credit bureau. Failure to maintain a correct address in myLane will result in your account going to a collection agency if unpaid.

Past Due Accounts Must be Paid to 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 wanting to pay off outstanding debts owed to Lane cannot pay at Lane or in myLane and must contact the collection agency listed with the hold message in myLane to make payment arrangements.

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.

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 Refund Request online form available at *lanecc.edu/esfs/refund-request-form* 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 theRefund Request online form and submit it to Enrollment and Student Financial 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 a Refund Request 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.**

- Small Business Development Center, 101 W. 10th Avenue, Suite 304, Eugene OR 97401
- Continuing Education, 101 W. 10th Avenue, Eugene OR 97401
- 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 and policies
- 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
- 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 pages 53-54. A list of career technical programs, counselors and academic advisors appears on pages 54-55. A list of counselors and academic advisors for students who are undecided is located in Counseling and Advising Center.

Students can access their counselor or academic advisor through the reception desk in the center, by calling 541.463.3200, by directly contacting the counselor or academic advisor, or through online academic advising resources. Go 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 first term at Lane. These meetings 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 to meet with students considering transfer. 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/esfs/registration*. For questions, email *RegistrationInfo@lanecc.edu.*

Academic Learning Skills

Building 11, Room 245, 541.463.5439

Academic Learning Skills (ALS) offers courses to improve student success in lower division, career 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; Learning Communities; and Women in Transition.

Students who take courses offered by Academic Learning Skills gain confidence and abilities to be successful in college-level classes. Students improve their reading, writing, vocabulary, critical thinking, math, and learning/study skills.

Credit Courses Academic Learning Skills offers courses for college credit in lecture and online formats. 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; and Writing.

Developmental Credit Limit Most of the courses in Academic Learning Skills are considered developmental courses. Students may be eligible to receive financial aid for up to 45-quarter credits (or equivalent) to complete developmental courses. For more information, contact Financial Aid at 541.436.3400 or visit *lanecc.edu/finaid.*

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. Students must meet with the Guided Studies counselor/advisor to set up an academic plan.

Career and Employment Services

Career and Employment Services (CES) is now part of Lane's Career Center, located in Building 19, Room 266. For more information, please see Workforce Development.

Center for Accessible Resources

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

Center for Accessible 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 Progressive Integrative Fitness 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 screen reading software, and Dragon Naturally Speaking speech to text software. The library is also equipped with automatic doors and wheelchair accessible adjustable workstations.

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

Child Care

Child and Family Education Department Building 24, Room 114, 541.463.5517; *lanecc.edu/cfe/lcfc*

Lane Child and Family Center

The Lane Child and Family Center is state licensed and nationally accredited through the National Association for the Education of Young Children and rated five stars by Oregon's Quality Rating and Improvement System. The preschool/child care program is located on the main campus and provides child care for children 30 months to 5 years of age for student, staff and community families. The center is open 7 a.m.-5:30 p.m., Monday-Friday during the academic year and 7 a.m.-5:30 p.m., Monday-Thursday the first 10 weeks of summer term. The professional teaching staff has extensive education and training in Early Childhood Education. The center is a teacher preparation school for students in the Early Childhood Education program and a cooperative preschool where parents can volunteer in the classroom and reduce their child care fees.

Child care grant and subsidy assistance is available. Students with children enrolled in the Lane Child and Family Center may qualify to receive a CCAMPIS grant, reducing child care expenses by 80 percent. For additional information and fee schedules, contact the Child and Family Education Department office or visit the web, *lanecc.edu/cfe/lcfc.*

Family Connections of Lane and Douglas Counties, Building 24, 541.463.3954, or 800.222.3290

Family Connections 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. Family Connections 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 Español son ofrecidos y disponibles a todos, 541.463.3306.

Employers Family Connections 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.

Computer Labs

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

Open computing lab space is available in two locations. The IT Open Lab is in Building 2, Room 216. The Library, currently in Building 18, Room 218, offers laptop computers, and chromebooks, in addition to a computer lab. Software in both labs includes Microsoft Office, Creative Suite (Macintoshes) and various educational programs. During fall term 2015, the Library will move back to the Center Building, and the Library Open Lab will be incorporated into the new Learning Commons. Updated information about the Library and Learning Commons will be posted at *lanecc.edu/it/computer-labs* or call 541.463.5288.

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.

Human Development Classes The teaching component of Counseling is called Human Development.

Human Development classes help students with entering college, career and life planning, decision making, maintaining productive personal and work relationships, understanding families and children, and enhance parenting skills. 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.

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-Thrusday, 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.

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.

Enrollment and Student Financial Services

Building 1, First Floor, 541.463.3100, 877.520.5391, *lanecc.edu/esfs/ or Asklane@lanecc.edu*

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

- Admission assistance
- Cash payments
- Receiving documents from students
- Assistance with myLane on:
  - 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-Thursday, 9 a.m. - 5 p.m. and Friday 9 a.m - 2 p.m. The college is closed on Fridays during summer term.

Financial Aid

Building 1, First Floor (Lobby), 541.463.3400, *lanecc.edu/finaid,* email *finaid@lanecc.edu*

Financial aid provides assistance to new and returning students in accessing federal and state funding resources to help meet the cost of their educational goals. Staff is available by email, telephone, or in person to help students understand and navigate the financial aid process. Visit *lanecc.edu/finaid* for office hours and more information about the financial aid process.

Food Services

Foodservices provides several dining options located throughout campus for students, faculty, staff, and visitors.

The Cafeteria and main dining operation is located on the first floor of the Center Building and provides a wide assortment of options for breakfast, lunch and dinner including fresh-from-the-oven pizzas and calzones, made-to-order sandwiches, garden-crisp salads, and fresh homemade soups. You will also find Asian inspired entrees at our Pan-Asia station and vegetarian/vegan entrees at the VeggieVille station. Our Carver's Station features daily entrée specials just like "mom" used to make. You can also find a variety of grab-n-go items such as pre-made sandwiches, sushi, and wraps, along with an assortment of snacks and drinks. The Cafeteria accepts cash, all major credit cards (except American Express), and LCC Dining Cards as payment. LCC Dining cards, a fast and convenient method of payment, are sold in $50 increments and can be purchased at the Titan Bookstore.

Blenders Espresso Bar, also located in the Center Building, offers a variety of coffee drinks, smoothies, pre-made sandwiches, salads, grab-n-go items, and fresh pastries from our in-house bakery. Blenders features Global Delights coffee, which is fair-traded and 100% organic. Blenders Espresso Bar accepts cash, all major credit cards (except American Express) and LCC Dining Cards.

The Juice Bar, located in Building 30, features organic coffee drinks, real fruit smoothies, homemade soups, garden-fresh salads, fresh-baked pastries, and a selection of healthy grab-n-go items. The Juice Bar accepts cash and all major credit cards (except American Express), and LCC Dining Cards.

The Terrace Café, located in Building 16, offers drip coffee, fresh pastries and a variety of grab-n-go items. The Terrace Café accepts cash and all major credit cards including American Express.

For your convenience, a full line of vending machines, stocked with traditional vending and healthy grab-n-go items, are located throughout campus.

Throughout the 2014-15 school year, major renovations will be taking place in and around The Center Building. During this period of construction and renovations, LCC's Foodservices Department will have a number of mobile food trucks located throughout campus for your convenience. Locations and hours of operation will be updated regularly on Lane's website and Facebook page.

Health Clinic

Building 18, Room 101, 541.463.5665

Health Clinic Staff Our staff includes nurse practitioners, physicians, clinic administrator, administrative specialist, schedulers, administrative medical assistants, medical office assistants, Earn and Learn and Work Study students.

Services The Lane Health Clinic provides a broad range of health care services available to eligible Lane students and employees alike. We offer services including treatment for acute illnesses, minor injuries, and chronic conditions. Appointments are preferred; Drop-in visits are accommodated when possible although we cannot guarantee same-day service for walk-ins. We provide information and referrals to community resources. All services are confidential.

Our clinic has a particular interest in providing holistic care, appreciating the diversity of our student and staff population, including international students, LGTBQ students, all cultures and age ranges. We encourage our patients to focus on self-care, education, and healthy lifestyle choices. Office visits are free of charge to all eligible students and staff. (Lane Community College does not sell health insurance). Services include, but are not limited to:

- Diagnosis and treatment of most acute and chronic illnesses
- Allergy/asthma/colds/flu
- Ear pain
- Sore throat/Strep throat
- Diabetes management
- Hypertension
- Hyperlipidemia
- Wellness exams
- Sexual and reproductive health care
- Preventative (annual exams for men and women)
- Student program physicals, immunizations, and titers*
- Lab tests*
- EKG's*
- Prescriptions (see refill policy our website)
- Tobacco cessation
- Treatment of minor trauma including sprains, strains, cuts, abrasions
- Minor surgeries*
- Lesion removal*
- Behavioral health concerns including depression, anxiety, stress management, and insomnia
- Suicide prevention
- Substance abuse
- Resource and referral to specialty providers (patients are responsible for all costs incurred by specialists and outside facilities).
- Emergencies: If an ambulance is required for emergency transport, the patient will be responsible for costs incurred.

*Health Clinic additional services, not included as part of the student/employee fee at substantially lower costs.

Confidentiality All services provided are confidential. A confidential electronic medical record is established for each patient and is protected by Federal and State laws governing the release of these records. The electronic records are stored on a network and servers that are not a part of Lane Community College IT network. The records are only accessible by Health Clinic staff and not by any other department on campus (subject to Federal and State statutes).

Services available to individuals with disabilities

- Limited personal care assistance
- Limited medication assistance accessing pharmaceutical company assistance programs

Payment Methods The Health Clinic bills Trillium and DMAP for all services covered by the Oregon Health Plan. Payments for our fee-based services are due at the time of service (cash, check, or to an open LCC account). Lab costs will bill directly to your insurance or directly to you by PeaceHealth Labs if you do not have insurance coverage.

Clinic Hours Fall, winter, and spring terms the clinic is open on all days classes are in session; summer term hours may vary and the campus, including the health clinic, is closed on Fridays during the summer.

Monday – Wednesday	8 a.m.-4:45 p.m.
Thursday	10 a.m.-4:45 p.m.
Friday	8 a.m. -4:45 p.m.

We close everyday for lunch from 11:40 a.m.-12:40 p.m.

We are closed Saturday, Sunday, holidays, and any other time the campus is closed. There may be unscheduled closings due to inclement weather or other unforeseen circumstances.

If you have an emergency while on campus, please call Public Safety at 541.463.5555.

Housing

Titan Court is a 6-story apartment community located in Downtown Eugene, Oregon. This certified LEED Gold community features Studio, 2 bedroom shared, and 4 bedroom apartments with an all-inclusive utility package. These apartment homes are leased individually by the bedroom and come fully furnished for an easier move. The brand new building includes upgraded lighting, enhanced cabinetry, brand new appliances, high-end finishes, and a card access entry system. In addition, each unit is furnished with a 32" flat-panel HDTV with cable service. All residents are able to take advantage of the properties amenities which include the multimedia room with the large screen projector, on-site high efficiency laundry machines, quiet study lounges, computer lab with free printing, game room with Xbox One and PS4, free bike loan program, indoor bike storage and free onsite trash and recycling areas. Titan Court is within walking distance to many downtown attractions including the public library, bus station and many restaurants. Titan Court offers an engaging students first program filled with resident events to encourage social interaction and academic success. For more information, visit *titancourt.com* or call 541.344.2828.

The following options also 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.

The Student Life and Leadership Development department is not responsible for housing referrals. You must contact each complex individually.

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/studentlife/housing-information*.

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

International Programs

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

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

Director: Jennifer Falzerano

Associate Director: Carla Anderson

Administration: Christine Marshall, Shi Nae DeCoster

Admissions/SEVIS Information: Jane Marshall, Colby Sheldon, Beata Gierymski

Academic Advising/Student Services: Tomomi Kurosaki, Brad Owen, Beth Schenderlein

More than 400 international students from over 40 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. International Programs helps students create positive and successful educational experiences that include orientation to the college and community, immigration advising, academic advising, transfer planning, 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 and other cultures.

International Programs supports students in maintaining their F-1 status and with SEVIS rules. SEVIS requirements mandate that international students successfully complete 12 credits/18 hours per term with a 2.0 GPA. Support is provided to international students with difficulty meeting this requirement through the International Success Program, which includes tutoring, required classes and extra advising. This is offered to help students meet their academic goals and stay in status with immigration rules and regulations. Students who do not meet these requirements have their SEVIS status terminated and must return home or transfer. For information about the SEVIS rules see lanecc.edu/international/immigration-policies.

Legal Services

Building 1, Room 206, 541.463.5365

Legal advice is free and available to all credit students on main campus through the mandatory student activity fee. An attorney is available 20 hours per week with limited hours during summer term. Appointments may be made through the Access the Law office, 541.686.4890, 245 W. 13th Avenue, Eugene.

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.

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.

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 the Titan Store on 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 the Titan Store at 541.463.5256.

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 health and fitness. Staff and students gain access to the center during open hours by registering for Fitness Education: Introduction and Fitness Education: Orientation. Students and staff may continue to take the course by registering for Fitness Education: Returning. 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 Conference (NWAC) with 35 other Oregon, Washington, and Canadian colleges. The NWAC 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 seven student staff positions (appointed, nonvoting 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 $54.30 student activity fee.*

Contact the ASLCC president (541.463.5335), vice president (541.463.3197) 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 office. Groups or individuals interested in forming clubs and organizations should contact the ASLCC Campus Events Director at 541.463.5330.

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.

Asian Pacific Islander Student Union, Building 1, Room 201F, 541.463.3245

The Asian Pacific Islander Student Union (APISU) mission is to offer a safe space for Asian and Pacific Islander students at Lane Community College (LCC) to meet and network in order to educate, promote, and encourage awareness of Asian Pacific Islander cultures and traditions at LCC and within our community locally, nationally, and internationally.

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 requires a commitment to the BSU mission. BSU is committed to the development of cross-cultural ties with all groups on campus and in the community at-large. The faculty advisor is Greg Evans.

Gender and Sexuality 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.

Movimiento Estudiantil Chicano de Aztlán (MEChA), Building 1, Room 201, 541.463.5144

MEChA is a student organization that promotes higher education, cultura, and historia. MEChA was founded on the principles of self-determination for the liberation of our people. We believe that political involvement and education is the avenue for change in society.

Each word in MEChA symbolizes a great concept in terms of la causa. Movimiento means that the organization is dedicated to the movement to gain self-determination for our people. Estudiantil identifies the organization as a student group for we are part of our Raza's future. At the heart of the name is the use of the identity: Chicano. At first seen as a negative word, it is now taken for a badge of honor. In adopting a new identity, the students committed to return to the barrios, colonias, or campos and together, struggle against the forces that oppress their gente. Lastly, the affirmation that we are Indigenous people to this land by placing our movement in Aztlan, the homeland of all peoples from Anahuak.

Movimiento Estudiantil Chicano de Azatlán (MEChA), Edificio 1, Cuarto 201, 541.463.5144

MEChA es una organización estudiantil que promueve la educación superior, histórico y cultural. MEChA fue fundada en los principios de autodeterminación para la liberación de nuestro pueblo. Creemos que la educación y participación política es la vía para el cambio en la sociedad.

Cada palabra de MEChA simboliza un gran concepto en términos de la causa. Movimiento significa que la organización está dedicada a la circulación para obtener la autodeterminación de nuestro pueblo. "Directorio Estudiantil Revolucionario" identifica a la organización como un grupo de estudiantes para nosotros somos una parte de nuestra Raza del futuro. En el corazón de la denominación es el uso de la identidad Chicana. A primera vista como una palabra negativa, ahora se toma por una placa de honor. En la adopción de una nueva identidad, los estudiantes comprometidos a regresar a los barrios, colonias o campos y juntos, luchan contra las fuerzas que oprimen a su pueblo. Por último, la afirmación de que somos personas indígenas a esta tierra mediante la colocación de nuestro movimiento en Azatlán, la patria de todas las personas de Anahuak.

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 relagese, socialice y disfrute te o cafe 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 assistirle 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,guarderias, y servicios de salud medica y dental.

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 Help Desk (SHeD)

Building 2, Room 122, 541.463.3333, *shed@lanecc.edu*; *lanecc.edu/atc/student-help-desk*; live online chat and online knowledgebase at *help.lanecc.edu*

Knowledgeable staff are ready to provide immediate assistance to students with Moodle, myLane, wireless access and other academic technologies. Call, email, drop by, or use the online chat tool. The SHeD is open Monday-Friday, 8 a.m.-5 p.m. The Self-Help Knowledgebase has answers to many commonly asked questions and is available anytime.

Student Publications

Denali Literary and Arts Magazine, Center Building, Room 457, 541.463.5419

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.

Denali operates under the guidelines of the LCC Media Commission. A student editor is selected through a competitive hiring process in late spring. The editor may elect to work with a faculty advisor and editorial board. The magazine is published in spring of the following year and distributed free of charge to Lane Community College students and staff, and to the Lane County community.

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 Cooperative Education at 541.463.5203.

Torch, Center Building, Room 008, 541.463.5656

The Torch is an award-winning, student-produced, weekly campus newspaper with an average circulation of 2,200 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 reporters, photographers or designers may contact Charlie Dietz news and editorial advisor, at 541.463.5654 or Dorothy Wearne, production advisor, at 541.463.5656.

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, candy, chips, fruit, yogurt, coffee, hot dogs, fresh sandwiches, etc. for students on a daily basis. Hours vary from 8 a.m.- 3:30 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/counseling/substance-abuse-prevention.*

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.
- Equiping 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. Associate of Applied Science degrees are:

- Energy Management Technician
- Building Controls Technician Option
- Renewable Energy Technician Option
- Sustainability Coordinator
- Water Conservation Technician
- Watershed Science 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: Learning Garden Specialist at 541.463.5899 or *learninggarden@lanecc.edu*
- 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.*

Testing Office

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. The Testing Office provides 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 the Testing Office, 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 General Education Development (GED) tests, screening exams conducted for various departments, or the placement tests for new students in reading, writing and math. Federal Aviation Administration (FAA) tests require authorizations in most cases.

Many kinds of tests and assessments are available:

- Placement tests in reading, writing, and math (Main Campus, Cottage Grove Center and Florence Center).
- GED tests (Main Campus).
- Vocational interest surveys (Main Campus, Cottage Grove Center and Florence Center).
- Personality inventories (Main Campus, Cottage Grove Center and Florence Center).
- FAA tests for airplane pilots and mechanics (Main Campus).

Placement tests Placement tests also are available on Main Campus and at the Cottage Grove and Florence centers, and many local high schools. Placement tests are given in reading, writing, and math.

Titan Store (Bookstore)

Main Campus: Center Building, 1st floor, 541.463.5256, *titanstore.lanecc.edu.*

Downtown Campus Titan Store and Market: 975 Charnelton St., Eugene, 541.463.6156, titanstore.lanecc.edu

The Titan Store carries course materials, including textbooks, e-books, textbook rentals, general books, art supplies, computer hardware and software. Students may also purchase clothing, gifts and school supplies at the Titan Store. Course materials are available online at *titanstore.lanecc.edu.*

Visit *titanstore.lanecc.edu* for store hours and additional information.

TRiO Programs

TRiO Regular

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

TRiO STEM (Science/Technology/Engineering/Math)

Building 12, Room 201, 541.463.3138, *lanecc.edu/triostem*

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 if desired 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 programs offer 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 full-time toward a degree at Lane 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 more clear. For assistance in specific areas, visit the tutoring centers listed below. For general questions, contact Liz Coleman, Tutoring Services Coordinator by email at *colemanl@lanecc.edu.*

Tutor Central will be part of the Center Building when construction is complete. Meanwhile, visit *lanecc.edu/tutor/tutor-central* for updated hours and locations for tutors assisting students in writing, math 10/20 and computer skills classes.

Business Resource Center, Building 19, Room 249, 541.463.5799 (Sharon Braaten)

The Business Resource Center provides assistance in Accounting and Business courses. Hours: Monday, 8 am-4 pm; Tuesday-Thursday, 8 am-6 pm; Friday, 8 am-4 pm; Saturday, 10 am-2 pm. Summer term, Monday-Thursday, 10 am-2 pm.

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. *lanecc.edu/cit/computer-lab*

Foreign Languages, Center 450

French: Contact Karin Almquist, almquistk@lanecc.edu, 541.463.5140

Spanish: Contact Sylvie Matalon-Florendo, florendos@lanecc.edu, 541.463.5143

Math Resource Rooms, MTH 10 - MTH 97, Building 16, Room 163; MTH 105 and up, Building 16, Room 177 (Kristina Holton) 541.463.5399

Peer and professional tutors are available. *lanecc.edu/math/math-resource-center*

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/mdta-resource-center*

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. *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 Campus. 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 541.463.6184. 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.

Veterans Services

Building 19, Room 233

VA Educational Benefits

Building 19, Room 233A, 541-463-5663, *lanecc.edu/va/va-educational-benefits*

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.

Lane's Robert D. Maxwell Student Veterans Center
Building 19, Room 233B

The Maxwell Student Veteran Center provides a spot where Lane student veterans can take a breather, study, get questions answered, and make connections with fellow Lane student veterans. The center offers PC and Mac computer stations, Wifi, printer, FAX/copier, study area, dedicated quiet space, and notebook computer loan program, as well as a lounge with hospitality service, current College and community resource information, used textbook and DVD lending library, telephone for local calls, and current veteran-related magazines, periodicals, and literature. The center also serves as home base for the Lane Student Veterans Club.

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, Transiciones, and individual advising.

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, referrals, 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
- limited assistance with tuition and books
- individual and small group advising
- follow-up services
- evening classes offered some terms
- a follow-up Life Transitions 2 class
- a follow-up Career and Life Planning 2 class
- a follow-up Life Transitions 3 class

Transiciones is a program that assists Spanish-speaking women in exploring career and life planning options and facilitates their entry into college, as well as providing student advising, community outreach, and workshops. For more information, call 541.463.3253.

El programa de transiciones ayuda a las mujeres de habla hispana explorer opciones de planificacion de Carrera y vida, y facilita su entrada al colegio. Tambien ofrece consejeria estudiantil, alcance comunitario y talleres. Para mas informacion, llame al 541.463.3253.

Career and Technical Education Advising The Career and Technical Education (CTE) advisor provides and coordinates supplemental training, outreach, opportunity, leadership, and support to recruit and retain women students in CTE programs of study that lead to "high demand, high wage" occupations. Additional support is given to recruiting and retaining women students to any of the programs of study that are also considered "non-traditional" for women (where women represent less than 25 percent of the workers in that occupational category).

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.

myLane

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

Degree and Certificate Overview

Lane operates on the quarter system. The catalog is published and dated with each academic year, which begins summer term and ends with the following spring term. Students' catalog year is defined as the term and year students first enroll in Lane credit classes. Students can use the degree requirements of their catalog year as long as they can complete their associate degrees or two-year certificates within five years or complete their one-year certificates within three years. Students also may use the requirements for any subsequent catalog year. Students must graduate by June 30, 2019 to use the 2015-16 requirements for Associate Degrees and Two-Year Certificates and by June 30, 2017 for One-Year Certificates.

A student's catalog year changes automatically under three conditions and students must meet the requirements of the current catalog when:

1. Students are accepted into a limited enrollment program.
2. Students do not enroll for four terms or more and re-apply to Lane. Students who re-apply to Lane must meet the requirements of the current catalog year at the time of re-admission.
3. Students change to a new program of study or major.

An edition of the catalog is valid for five academic years for Associate Degree and Two-year Certificate programs, and three years for One-year Certificate and Career Pathways programs. However, some program coordinators may impose shorter time limits on accepting credits for AAS degree or certificate requirements. Occasionally, the college may change courses and course numbers within a program. Students should work closely with counselors, academic advisors, and program coordinators in their major department to meet appropriate and current degree and certificate requirements.

While every effort is made to ensure the accuracy of the information in this catalog, Lane has the right to make changes at any time without prior notice. This catalog is not a contract between Lane and current or prospective students.

Degrees Lane confers the following associate degrees for satisfactory completion of prescribed credit programs:

Associate of Arts Oregon Transfer (AAOT)
Associate of Science Oregon Transfer: Business (ASOT-Business)
Associate of Science Oregon Transfer: Computer Science (ASOT-Computer Science)
Associate of General Studies (AGS)
Associate of Science (AS)
AS Direct Transfer to Oregon State University
AS Direct Transfer to University of Oregon
Associate of Applied Science (AAS)

Certificates Lane confers three kinds of certificates for satisfactory completion of prescribed credit programs:

One-year Certificate of Completion
Two-year Certificate of Completion
Career Pathways Certificate of Completion

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

Associate Degree or Certificate Requirements Candidates for an associate degree or certificate 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 Community College
- **Grade Point Average** Earn a cumulative GPA of not less than 2.00 at Lane
- **Pass/No Pass** Students may select P/NP option for 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

Waiver of Program Requirements Lane does not authorize individual departments to waive degree requirements of Foundational Skills and Discipline Studies requirements, or certificate requirements of communication, computation, and human relations. The Academic Requirements Review Committee will consider petitions to substitute a college General Education requirement. Petitions are available on the web at *lanecc.edu/esfs/enrollment-services-forms.*

Earning a Second Degree As of the 2014-15 academic year, there is no longer a requirement for students to complete an additional 24 credit hours of coursework to earn a second degree. Lane requires students to complete 24 Lane credits to graduate with one or more degree(s) or certificate(s). Career Pathways Certificates are not held to the 24 Lane credits requirement and can be earned with fewer than 24 credits.

Recognition awards 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 sequence of courses. However, a recognition award is different from a degree or certificate in a career technical major issued by the Lane Board of Education and approved by the Oregon Department of Education.

To Apply for a Degree or Certificate Students apply for their degrees or certificates the term they intend to complete. Application forms are submitted online at *lanecc.edu/esfs/application-degree* or through myLane. Review for degree/certificate completion takes approximately 20 business days following the end of each term.

Graduation and Commencement Ceremony

What is the difference between graduation and the commencement ceremony?

Commencement is the symbolic ceremony marking the close of your academic career where you receive commendation for your hard work at Lane. It is an opportunity for you, your family, friends, and the Lane community to celebrate your accomplishment. Detailed information about the commencement ceremony is available from the office of Student Life and Leadership Development, *lanecc.edu/studentlife/.*

Graduation means actually finishing and completely fulfilling your degree requirements resulting in a diploma. In other words, graduation is the technical obtainment of credits to receive a degree and/or certificate. Please apply for your degree(s) and/or certificate(s) beginning on the first day of the term for which you wish to earn the degree or certificate. If you apply prior to your last term, your application will not be cleared and you will need to apply again. Applicants must apply online through myLane by the 8th week of spring term to ensure being listed in the commencement booklet. The commencement booklet will list students who have been awarded their degree during the 2015-16 school year.

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

Students transferring to Lane and seeking a Lane degree or certificate must complete the Request for Transcript Evaluation form at *lanecc.edu/esfs/general-information-transferring-credits* to obtain an official evaluation by a Lane degree evaluator. Current Lane Community College students enrolled in six credits or more may have transcripts reviewed. Evaluation of credits may only be started when Lane receives your official transcripts(s). Students will be notified by mail when an evaluation has been completed. All documents submitted to Lane become the property of Lane and are subject to federal law, as well as the Family Education Rights and Privacy Act. Courses may transfer even if Lane does not offer an identical course. Not all transfer course work is eligible to meet defined degree or certificate requirements.

For an unofficial or non-Lane degree/certificate transcript evaluation, students can meet with the program/major academic advising team. These evaluations are completed using official or unofficial prior college transcripts and typically completed while the student is meeting with the academic advisor or counselor for the program/major. There may be required follow-up to complete the evaluation.

U.S. Transfer Credits

- 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 regionally accredited or be a candidate for regional accreditation when the coursework was taken. See list above.

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 with basic training completion.

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 2010 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/institutional-research or from Institutional Research, Assessment and Planning, 541.463.5576.

From a cohort of 766 full-time, first-time in college, degree/certificate-seeking students enrolled fall term 2010: 74 had completed a degree or certificate by August 2013 (10%); 129 had completed a degree or certificate by August 2014 (17%); 98 had transferred to another Oregon higher education institution by August 2013 (13%); 180 were still enrolled at Lane (23%).

In spring 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% achieved their goals at Lane.
- 72% of students from career-technical programs were employed after leaving Lane.
- 91% of these career-technical students reported Lane's courses were "Very Relevant" or "Relevant" to their jobs.
- 75% of students from transfer programs were continuing their education after leaving Lane.
- 70% of these transfer students reported Lane prepared them "Well" or "Very Well" for classes at their new institution.

Oregon Outcomes for AAOT, ASOT-Business, ASOT-Computer Science,OTM

Students earning the AAOT, ASOT-Business, ASOT-Computer Science, or the OTM will complete coursework with the following General Education Outcomes:

Writing Outcomes

- 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.

Information Literacy Outcomes

- 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.

Mathematics Outcomes

- 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.

Speech/Oral Communication Outcomes

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

Arts and Letters Outcomes

- 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.

Social Science Outcomes

- 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.

Science or Computer Science Outcomes

- 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.

Cultural Literacy Outcomes

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

Human Relations Outcomes for AAS and Certificates

Associates of Applied Science degrees and 1-year and 2-year certificates require students to successfully complete a course qualifying for human relations requirements. Courses on the Human Relations Courses list require students to meet at least three of the following eight outcomes:

1. Describe and use appropriate communication skills including non-verbal communication and active listening, barriers to communication and how to overcome them, assertive behavior and how it differs from passive and aggressive behavior.
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. Describe and demonstrate customer satisfaction skills for "internal" and "external" customers.
6. Identify character traits associated with being an ethical person and use a systematic method for making ethical decisions and behaving ethically in the workplace, in what sexual harassment is, how to prevent it, and how to deal with it if it occurs.
7. Describe and give examples of how to effectively manage workplace stress and anger.
8. Identify their individual work style and personality (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.

Associate of Arts Oregon Transfer Degree

The Associate of Arts Oregon Transfer (AAOT) degree is designed for students who want to complete the first two years of a college education, with flexibility to transfer to any institution within the Oregon University System (OUS). The AAOT is a block-transfer degree, which means a student with an AAOT is guaranteed to have met lower-division (100- and 200-level) general education requirements at any OUS institution. AAOT degree recipients are considered juniors for purposes of registration at OUS institutions.

A student selecting this transfer option still must meet the receiving university's admission requirements, including course standing, grade point average and foreign language. The AAOT does not guarantee admission to an OUS institution, or admission to a competitive major, or junior standing in a major. Some transfer institutions also require additional upper-division general education courses.

NOTE: Each student is strongly encouraged to work with an academic advisor or counselor to match career and major goals, with an appropriate program, and to select appropriate courses for a major at an intended transfer institution.

Guidelines

Complete a total of 90 credits with a minimum of 24 credits earned at Lane to be awarded the AAOT.

Foundational Skills 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-," "P" or better. Maximum 16 credits "P" may be used toward degree. This limit does not include courses only offered P/NP.

Cumulative GPA must be at least 2.0 at the time the Associate of Arts Oregon Transfer is awarded.

I. Foundational Skills

Each student must see an academic advisor or counselor to determine which course(s) will best meet the requirements of an intended transfer institution.

Writing

2 courses: Students must take WR 121 and either WR 122 or 227. Meets the Information Literacy requirement.

Oral Communication

One course in the fundamentals of Speech/Oral Communication from the following Speech/Oral Communication list.

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 following Health/Wellness/Fitness list.

II. Discipline Studies

In addition to courses used for Foundational Skills, students must select additional courses in the areas identified below.

Cultural Literacy

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

Arts/Letters

Three courses chosen from two or more disciplines from the following Arts and Letters list.

Social Science

Four courses chosen from two or more disciplines from the following Social Science list.

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 following Science/Math/Computer Science lists.

Electives

Any college-level courses that bring total credits to 90 quarter hours including:

- Policies on accepting career technical credits vary at the four-year colleges in Oregon. Consult an academic advisor about taking career technical courses as electives for transfer to a four-year institution.
- Up to 18 credits of Cooperative Education may be included as electives. See Cooperative Education/Internships in the Course Descriptions.
- Up to 12 credits of Individual Music Lessons (MUP) may be included as electives.
- 12 credits of Physical Education activity may be included within the entire degree (Electives and Health/Wellness Fitness).
- WR 115 may be included in the AAOT degree if completed summer 1999 or later.
- up to 12 credits of Career Technical Education. See the index for Career Technical course prefixes.

Notes

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. Course numbers 001-099 identify these courses (e.g., RD 090 or WR 080). Additionally, the following courses are considered developmental: MTH 010, ENG 110, 116, 117; RD 115; WR 110, 115 (taken before summer 1999) and 120.
2. Foundational Skills are open to demonstration of proficiency. For information on waiver testing or credit for prior learning contact a counselor or Academic advisor. Waiver testing is not the same as placement testing.
3. Second year foreign language courses, but not first year, may be included among courses that count toward the Arts and Letters requirement.
4. 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.
5. Credit-by-Exam and Credit-by-Assessment may comprise up to 25% of total degree credits.
6. Some courses may be repeatable. Repeatable courses may be used once to meet a Discipline Studies requirement. Any additional allowable repeats may be used to meet Elective requirements. Repeating courses may not help you progress toward program completion. Read the course description to understand how many times the course may be repeated. Most Independent Study courses and all PE activity courses may be repeated.
7. Lower-division college level courses (100 and 200-level) taken at Lane may not meet the requirements of an upper-division course with a similar title and content offered by an Oregon University System institution. In such cases, the courses in question will normally transfer as electives.

Approved courses for Oregon Transfer degrees

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

Arts and Letters

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

ART 111	Introduction to Visual Arts
ART 113,213	History of Photography 1,2
ART 115	Basic Design: Fundamentals
ART 115GD	Graphic Design
ART 115_H	Basic Design Fundamentals-Honors
ART 116	Basic Design: Color
ART 117	Basic Design: 3-Dimensional
ART 118	Artist's Books
ART 120	Intermediate Artists Books and Pop Up
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 203_H	Survey of American Indian Art and Architecture: North and Central America-Honors
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	Advanced Silkscreen
ART 291	Sculpture: Metal Casting
ART 293	Sculpture: Figure
ART 294,295	Watercolor: Introduction; Intermediate
COMM 100	Basic Communication
COMM 105	Listening and Critical Thinking
COMM 111	Fundamentals of Public Speaking
COMM 112	Persuasive Speech
COMM 115*	Introduction to Intercultural Communication
COMM 130	Business and Professional Speech
COMM 218	Interpersonal Communication
COMM 219	Small Group Discussion
COMM 220*	Communication, Gender and Culture
COMM 262	Voice and Articulation
CW 201,202,203	Chinuk WaWa
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 217	Digital Humanities
ENG 218*	Literature of the Islamic World
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 160*	World Religions
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 211	Introduction to the Bible
REL 230	Christian Beginnings
REL 231*	Buddhist Meditation Traditions
REL 243	Nature, Religion and Ecology
SPAN 201,202,203	Spanish, Second Year
TA 140	Acting Shakespeare
TA 141,142,143	Acting 1,2,3
TA 144	Improvisational Theatre 1
TA 241,242,243	Intermediate Acting
TA 272*	Introduction to Theater
WR 240	Creative Nonfiction
WR 241	Introduction to Imaginative Writing: Fiction
WR 242	Introduction to Imaginative Writing: Poetry

Social Science

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

ANTH 101	Physical Anthropology
ANTH 102*	World Archaeology
ANTH 102_H	World Archaeology-Honors
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 244*	Native American Story Telling
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
GEOG 223	Geography of the Muslim World
GIS/GEOG 151	Digital Earth
GIS 245	GIS 1
GIS 246	GIS 2
GIS 249	Raster Analysis and Remote Sensing
GIS 260	Applications in GIS
HE 255*	Global Health and Sustainability
HST 101,102,103	History of Western Civilization
HST 104*,105*,106*	World History
HST 155	History of Islam
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 205_H*	Contemporary Moral Issues-Honors
PHL 221	Critical Thinking
PHL 221_H	Critical Thinking-Honors
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
PS 297_H	Environmental Politics-Honors
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 160*	World Religions
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 231*	Buddhist Meditation Traditions
REL 243	Nature, Religion, and Ecology
SLD 103*	Post-Racial America: Challenges and Opportunities
SLD 121*	African American Leadership: History, Philosophy and Practice
SOC 108*	Selected Topics: Women's Studies
SOC 108A*	Selected Topics: Women's Studies: Women's Bodies, Women's Selves
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 will meet the Science/Math/Computer Science requirements for any Lane degree. Any additional BI 101, 102, or 103 course credits will count 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 101_H, 102_H	General Biology-Honors
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 +L
ASTR 121	Astronomy of the Solar System +L
ASTR 122	Stellar Astronomy +L
ASTR 123	Cosmology and the Universe +L
CH 104	Introductory Chemistry 1
CH 114	Introduction to Forensics
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 148	Geologic Hazards
G 201	Earth Materials and Plate Tectonics
G 202	Earth's Surface Systems
G 203	Evolution of the Earth
GIS/GEOG 151	Digital Earth
GIS 245	GIS 1
GIS 246	GIS 2
GIS 249	Raster Analysis and Remote Sensing
GIS 260	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
PH 101,102,103	Fundamentals of Physics
PH 190	Physics Investigative Lab +L
PH 201,202,203	General Physics
PH 211,212,213	General Physics with Calculus
WST 230	Watersheds and Hydrology

+L must be taken for four credits to include lab, exception is PH 190 which is a science lab with three credits

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

ANTH 101	Physical Anthropology
ASTR 107	Astronomy

CH 112	Chemistry for Health Occupations
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
GEOG 141	Natural Environment
GS 142	Earth Science: Earth Revealed
GS 147	Oceanography
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 following 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

COMM 100	Basic Communication
COMM 111	Fundamentals of Public Speaking
COMM 112	Persuasive Speech
COMM 130	Business and Professional Speech
COMM 218	Interpersonal Communication
COMM 219	Group Discussion

Health/Wellness/Fitness

EXMS 214+	Physiology of Exercise and Healthy Aging
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 Heath
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
HE 290	Comprehensive Approaches to Weight Management
HI 101+	Introduction to Health Care and Public Health in the U.S.

+Note: Career Technical courses fulfilling Health/Wellness/Fitness requirements will not be counted in the 12-credit limit on CT courses.

Or a combination of 3 credits of PE and/or D Activity classes – The same Dance (D) courses listed under both Health/Wellness requirement and Arts and Letters category can only be used to fulfill one of these degree requirements.

D 152	Dance Basics
D 153, D 154	Pilates Mat Work
D 160	Dance Composition
D 161	Spiral Strength, Stretch & Tone: Gyro
D 169	Musical Theatre
D 171	Contact Improvisation
D 172	Dancing the Fluid Body
D 173	African Dance
D 175	Tap Dance Beginning
D 176	Fluid Yoga
D 177, D 178, D 179	Modern Dance 1, 2 and 3
D 183	Body-mind Stretch and Relaxation
D 184, D 194	Hip Hop 1, 2
D185, D186, D187	Ballet 1, 2, and 3
D 188, D189	Jazz Dance 1, 2
D 196	Balinese Dance
D 251	Lookingat Dance
D 256	Body Fundamentals/Body as Knowledge
D 257	Dance Improvisation
D 260	Group Choreography
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	Progressive Integrative Exercise
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

The Associate of Science Oregon Transfer in Business (ASOT- Business) degree has business-focused lower division general education requirements accepted by any institution in the Oregon University System (OUS), and electives tailored for requirements at each intended transfer institution. Students transferring with this degree will have junior standing for registration purposes.

The ASOT-Business degree does not guarantee admission to an OUS institution, or admission to a competitive business major, or junior standing in a major. Course, class standing, or GPA requirements for specific majors, departments, or schools are not necessarily satisfied by an ASOT-Business degree.

Each student is strongly encouraged to work with an academic advisor or counselor to select degree requirement courses that align with requirements at an intended transfer institution. Careful advising especially is needed for this degree program, as requirements at OUS institutions vary, and elective choices differ depending on the intended transfer institution. 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.

Guidelines

1. Complete a total of 90 credits with a minimum of 24 credits earned at Lane to be awarded the ASOT-Business.
2. All courses should be aligned with the student's program of study and the degree requirements of the intended transfer institution. Transfer students are encouraged to work with an academic advisor or counselor in the selection of courses.
3. All Foundational and Discipline Studies courses must be a minimum of 3 credits. All Elective courses may be any number of credits
4. All courses must be passed with a grade of "C-" or better or P grade. Maximum 16 credits "P" may be used toward degree. This limit does not include courses only offered P/NP.
5. Cumulative Lane GPA must be at least 2.0 at the time the Associate of Science Oregon Transfer-Business degree is awarded.

I. Foundational Skills

Each student must see an academic advisor or counselor to determine which course(s) will best meet the requirements of an intended transfer institution.

Writing
9 credits of WR121 or WR121_H, WR122 or WR122_H, and WR227, OR

8 credits of WR121 or WR121_H and either WR122 or WR122_H or WR227.

Meets the Information Literacy requirement.

Oral Communications
One course in the fundamentals of speech: COMM 100, 105, 111, 112, 115, 130, 218, 219, 220, 262.

Mathematics
3 courses 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. CIS 101, CS 120.

II. Discipline Studies

In addition to courses used for Foundational Skills, students must select additional courses in the areas identified below.

Arts/Letters
3 courses from the previous approved list chosen from at least two disciplines.

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

Science
4 courses from at least two disciplines including at least three laboratory courses in the biological and/or physical sciences from the previous approved AAOT list.

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

III. Business-Specific Requirements

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

Any college-level courses that will bring total credits to 90 quarter hours including up to 12 credits of Career Technical Education. See the index for Career Technical course prefixes.

- Policies on accepting career technical credits vary at the four-year colleges in Oregon. Consult an academic advisor about taking career technical courses as electives for transfer to a four-year institution.
- Up to 18 credits of Cooperative Education may be included as electives. See Cooperative Education/Internships in the course descriptions.
- Up to 12 credits of Individual Music Lessons (MUP) may be included as electives.
- Up to 12 credits of Physical Education activity may be included within the entire degree (Electives and Health/Wellness Fitness).
- WR 115 may be included in the degree as an elective if completed summer 1999 or later.

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.

Notes

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 ASOT-Business. 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; MTH 100; RD 115; WR 110, 115 (taken before summer 1999) or 120.
2. Foundational Skills are open to demonstration of proficiency. For information on waiver testing or credit for prior learning, contact a counselor or academic advisor. Waiver testing is not the same as placement testing.
3. Second year foreign language courses, but not 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. 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.
5. Credit-by-Exam and Credit-by-Assessment may comprise up to 22 credits of degree.
6. Some courses may be repeatable. Repeatable courses may be used once to meet a Discipline Studies requirement. Any additional allowable repeats may be used to meet Elective requirements. Repeating courses may not help you progress toward program completion. Read the course description to understand how many times the course may be repeated. Most Independent Study courses and all PE activity courses may be repeated. Read your program of study to understand if and how a repeat will be applied to your program.
7. Lower-division college level courses (100 and 200-level) taken at Lane may not meet the requirements of an upper-division course with a similar title and content offered by an Oregon University System institution. In such cases, the courses in question will normally transfer as electives.
8. Courses numbered 199, 280, 298, or 299 count as electives, and do not meet Discipline Studies requirements. Courses numbered 199 and 299 are experimental, and may later be reviewed and approved for Discipline Studies. Consult an academic advisor or counselor.

Associate of Science Oregon Transfer: Computer Science

The ASOT-CS (Associate of Science Oregon Transfer: Computer Science) degree was created in 2013/2014 through collaboration between members of Oregon Council of Computer Chairs (OCCC) which includes Oregon community college faculty and administration, and Oregon public university computer science chairs and faculty. It was adopted by Joint Boards Articulation Commission November 2014 and Approved Higher Education Coordinating Commission December 2014.

The Associate of Science Oregon Transfer in Computer Science (ASOT-CS) degree has computer science-focused lower division general education requirements accepted by any institution in the Oregon University System (OUS), and electives tailored for requirements at each intended transfer institution.

Any student who holds an Oregon community college Associate of Science Oregon Transfer degree in Computer Science (ASOT-CS) that conforms to the guidelines set forth below, and who transfers to one of the Oregon public universities, will have met the lower division general education requirements of baccalaureate degree programs of any Oregon public university institution.

GPA and course requirements for entry into the major are not necessarily satisfied by the ASOT-CS degree. Once admitted to the university and computer science program, students transferring under this agreement will have junior standing for both the computer science major and university registration purposes. Course, class standing, or GPA requirements for specific majors, departments, or schools are not necessarily satisfied by an ASOT-CS degree. Junior standing is for registration purposes only. Program admission is a separate process. Students and advisors should be aware of the opportunities created by the ASOT-CS, but should also be mindful of its limitations, as summarized in the explanatory notes that follow the description of the degree itself.

Guidelines

1. A student must complete a total of 90 quarter credits or more to be awarded the ASOT-CS.
2. All courses should be aligned with the student's intended program of study and the degree requirements of the baccalaureate institution and program to which the student plans to transfer. A student is encouraged to work with an advisor in the selection of elective courses within the ASOT-CS degree for alignment to the institution the student intends to transfer.
3. 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 AS/OTCS is awarded. (note: many CS programs have competitive admission, minimum GPA and grades will not generally be high enough to gain admission to competitive programs)

I. Foundational Skills

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. (Note: WR227 will meet additional requirements at some CS baccalaureate programs)

Oral Communication

One course in the fundamentals of speech: COMM 100, 105, 111, 112, 115, 130, 218, 219, 220, 262.

Mathematics

Must include at minimum Mth251 Differential Calculus and Mth252 Integral Calculus.

Health/Wellness/Fitness

One or more courses totaling at least three credits.

II. Discipline Studies

Arts and Letters

Three courses chosen from two or more disciplines.

Social Sciences

Four courses chosen from two or more disciplines.

Science/Math/Computer Science

Four courses from at least two disciplines including at least three laboratory courses in biological and/or physical science from approved courses for Oregon Transfer Programs (page 37) (1. see program specific requirements as some programs require physics; 2. note that the CS and Math core required courses will meet the requirement for 1 of the 4 required courses, so normally only 3 science courses outside of CS/Math are needed)

Cultural Literacy

Students must select one course with an asterisk (*) designation chosen from Arts and Letters OR Social Sciences OR Sciences (The credits for this course will only be counted once).

Computer Science Specific Requirements

A minimum of sixteen credits in Computer science consisting of the following courses:

Each course in this section must be completed with a grade of "C" or better (note: many CS programs have competitive admission, minimum GPA and grades will not generally be high enough to gain admission to competitive programs).

Required courses are:

- CS 160: Introduction to Computer Science
- CS 161: Computer Science 1
- CS 162: Computer Science 2
- CS 260: Data Structures

Electives

Complete additional courses to bring the total number of credits to at least 90; varies depending on the student's selection of courses to meet the requirements above. Please carefully plan this in consultation with university specific CS program requirements. A current guide for university specific, lower division CS requirements is maintained at occcwiki.org or consult with an advisor from the target university program. 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 public university Computer Science program. In such cases, the courses in question will normally transfer as electives. The ASOT-CS degree may include up to 12 approved professional /technical credits as electives.

Notes & Clarifications

[The following notes are not intended to be part of the "Guidelines" (above) but, rather, serve to clarify them.]

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 ASOT-CS. 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; MTH 100; RD 115; WR 110, 115 (taken before summer 1999) or 120.
2. However, it is recommended that students and advisors note that grades earned in developmental courses will likely count in the cumulative grade point average (GPA) at the community college. It is also advised to work early with the receiving 4year institution and determine what policy/practice is in place in calculating cumulative GPA upon transfer (since developmental courses will not transfer).
3. The "Foundational Requirements" above represent minimal skill competencies. As such, they may be open to demonstration of competency.
4. For information on waiver testing or credit for prior learning, contact a counselor or advisor. Waiver testing is not the same as placement testing.
5. 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.
6. WR 115 may be included in the ASOT-CS degree as an elective providing that the WR 115 course at the community college has been approved by the Department of Community Colleges and Workforce Development as meeting statewide learning outcomes for the course.
7. The principal advantage of the ASOT-CS is that it fulfills the lower division (freshman / sophomore) General Education requirements for baccalaureate degrees at all Oregon public university institutions. It does not necessarily meet all of the degree requirements that an Oregon public university institution might have beyond the requirements for majors. The ASOT-CS guarantees that all General Education credits that a student earned will be accepted as the General Education requirements at the receiving institution.
8. Students may also be able to use ASOT-CS general education courses to meet certain lower-division requirements in their intended major. Students who intend to major in Computer Science and also wish to maximize the amount of ASOT-CS coursework that will count toward graduation, should work closely with an academic adviser and make use of the ATLAS system when designing their ASOT-CS degrees.
9. Because the amount of coursework required for an ASOT-CS degree corresponds to two 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 ASOT-CS does not guarantee that two additional years will suffice to earn a baccalaureate degree. That is because the ASOT-CS does not give students junior standing for program admission purposes in their majors. Neither does it guarantee entrance into a competitive major; minimum GPA and grades will not generally be high enough to gain admission to competitive programs. 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.
10. Students and academic advisers should recognize that although the ASOT-CS provides an excellent structure for many students intending on pursuing a computer science four year degree, it is not ideal for everyone. Students should consult closely with a computer science advisor at both their community college and the four year transfer institution.
11. All courses must be passed with a C or better.
12. For purposes of the Oregon ASOT-CS degree, no student with a disability shall be denied the degree or the benefits flowing there with respect to admission and matriculation at a state university because the student has been granted an academic adjustment or program modification in any course required for the ASOT-CS degree. This provision includes course substitutions when granted as a disability accommodation in the manner prescribed by the student's community college. This provision may not necessarily apply to major specific course requirements or prerequisites. Oregon Community Colleges will consider a course substitution request on a case-by-case basis, based on the student's disability as determined by documentation as long as there is no substantial change to the course learning outcomes. Before considering a course substitution, assistive technology, tutoring, or other reasonable accommodations will be considered in an effort to enable the student to succeed in standard course work. However, nothing in these guidelines should be interpreted as requiring the student to attempt and fail a standard course, including one made more accessible through reasonable accommodation, before consideration will be given to a request for course substitution. A course substitution will not automatically be made simply because the student has documentation of a disability impacting a particular area of academics. Requesting a course substitution should follow the process listed below.

a. The student must request a disability-related course substitution through the designated Disability Services representative and provide appropriate documentation.

b. The Disability Services Office will contact the vice president or college designee to determine whether the substitution course would result in a substantial change in the course learning outcomes.

c. If the substitution would result in a substantial change in the course learning outcomes, the substitution will be denied. If the substitution does not result in a substantial change in the course learning outcomes it will be approved.

Computer Science transfer specific notes:

1. Computer Science, Pro School/Program Admission: Admission to Computer Science or Professional school/program of any Oregon public university institution is not guaranteed upon completion of the Associate of Science Oregon Transfer in Computer Science (ASOT-CS) degree. It is strongly recommended that students contact the specific Oregon public university campus' Computer Science school/program early in the first year of their ASOT-CS program to be advised about additional requirements and procedures for admission consideration to the Oregon public university institution and the Computer Science school/program.

Associate of Science Degree

For students intending to transfer, the Associate of Science (AS) degree may best match pre-major requirements of some four-year colleges or universities. Requirements of the AS include a rigorous general education program balanced with electives.

A student selecting this transfer option still must meet the receiving university's admission requirements, including course standing, grade point average and foreign language.

Each student is strongly encouraged to work with an academic advisor or counselor to match career goals with an appropriate majors/programs and to select appropriate courses for a major at an intended transfer institution.

Guidelines

1. Complete a total of 90 credits with a minimum of 24 credits earned at Lane to be awarded the Associate of Science degree.
2. Foundational Skills and Discipline Studies courses must be a minimum of 3 credits, except for Health/PE courses, which may be any number of credits.
3. Pass all Foundational Skills courses with a grade of "C-" or "P" or better.
4. All Elective courses may be any number of credits.
5. Cumulative GPA must be at least 2.0 when the Associate of Science degree is awarded.

I. Foundational Skills

Each student must see an academic advisor or counselor to determine which course(s) will best meet the requirements of an intended transfer institution.

English Composition
2 courses (minimum 3 credits each): WR 115 (summer 1999 or after), WR 121, 122, 123, 227

Mathematics
4 credits MTH 105 or higher

Physical Education or Health

Physical Education
3 credits: one course required from the AAOT list of activity classes under Health/Wellness/Fitness, plus two additional credits from PE 181-298. One credit from PE 186W accepted to meet this requirement.

OR

Health Education
One course from this list: EXMS 214, FN 225, HE 152, 209, 222, 240, 250, 255, 262, 275 or 290; or HE 125, 252 (summer 1997 or later), HI 101

II. Discipline Studies

In addition to courses used for Foundational Skills, students must select additional courses in the areas identified below. Two courses in each discipline area below must be a minimum of 3 credits.

Arts/Letters
3 courses from the following: Art, Communication, Dance, Effective Learning, Film Arts, Foreign Language, Humanities, Journalism, Literature, Music, Philosophy, Religion, Theater Arts, Writing, CW 201-203, ES 244

Social Science
3 courses from the following: Anthropology, Career Guidance, Economics, Ethnic Studies, Geographic Information Science, Geography, History, Human Development, Human Services, Philosophy, Political Science, Psychology, Religion, Sociology, Women's Studies.

Science/Math/Computer Science
9 courses from the following: Biology (see Note on page 38 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), Physical Science (GS prefix), Physics, Zoology; ANTH 101, CJA 214, DA 110, DRF 205, DRF 207, ET 129, ET 130, ET 131, ET 145, ET 146, ET 151, ET 152, FT 113, GEOG 141, HO 150, HO 152, PSY 217, WST 230.

Career Technical courses fulfilling this requirement are not counted toward the 12-credit limit for the AS degree.

III. Electives

Electives may include any college-level course that would bring total credits to 90 quarter hours, including up to 12 credits of Career Technical Education. See the index for Career Technical course prefixes.

- Policies on accepting career technical credits vary at four-year colleges. Consult an academic advisor about taking career technical courses as electives for transfer to a four-year institution.
- Up to 18 credits of Cooperative Education may be included as electives. See Cooperative Education/Internships in the Course Descriptions.
- Up to 12 credits of Individual Music Lessons (MUP) may be included as electives.
- Up to 12 credits of Physical Education activity may be included within the entire degree (Electives and Health/Wellness Fitness).

Notes

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 AS. Course numbers 001-099 identify these courses (e.g., RD 090 or WR 080). Additionally, the following courses are considered developmental: MTH100, ENG 110, 116, 117; RD 115; WR 110, 115 (taken before summer 1999) or 120.

2. Foundational Skills are open to demonstration of proficiency. For information on waiver testing or credit for prior learning, contact a counselor or academic advisor. Waiver testing is not the same as placement testing.
3. Maximum 16 credits P grade may be used when P grade is equivalent to C- or higher. Courses only offered for P grade option are not included in this maximum.
4. 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.
5. Credit-by-Exam and Credit-by-Assessment may comprise up to 22 credits of the degree.
6. Some courses may be repeatable. Repeatable courses may be used once to meet a Discipline Studies requirement. Any additional allowable repeats may be used to meet Elective requirements. Repeating courses may not help you progress toward program completion. Read the course description to understand how many times the course may be repeated. Most Independent Study courses and all PE activity courses may be repeated. Read your program of study to understand if and how a repeat will be applied to your program.
7. Lower-division college level courses (100 and 200-level) taken at Lane may not meet the requirements of an upper-division course with a similar title and content offered by an Oregon University System institution. In such cases, the courses in question will normally transfer as electives.
8. Courses numbered 199, 280, 298, or 299 count as electives, and do not meet Discipline Studies requirements. Courses numbered 199 and 299 are experimental, and may later be reviewed and approved for Discipline Studies. Consult an academic advisor or counselor.

Associate of Science Degree - Direct Transfer University of Oregon

For students intending to transfer, the following Associate of Science (AS) degree may best match general education requirements for the University of Oregon (UO). Requirements of the AS degree include a rigorous general education program balanced with electives.

Each student is strongly encouraged to work with an academic advisor or counselor to match career goals with appropriate majors/programs and to select appropriate courses for a major at the UO.

Guidelines

1. Complete a total of 90 credits with a minimum of 24 credits earned at Lane to be awarded the Associate of Science degree.
2. Foundational Skills and Discipline Studies courses must be a minimum of 3 credits.
3. Maximum 16 credits P grade may be used when P grade is equivalent to C- or higher. Courses only offered for P grade option are not included in this maximum.
4. All Elective courses may be any number of credits.
5. Cumulative GPA must be at least 2.0 when the Associate of Science degree is awarded.

I. Foundational Skills

Each student must see an academic advisor or counselor to determine which course(s) will best meet the requirements of an intended transfer institution.

English Composition
2 courses (minimum 3 credits each): WR 121 or WR 121_H and either WR 122 or WR 122_H or WR 123

Mathematics
1 course MTH 105 or higher

II. Discipline Studies

In addition to courses used for Foundational Skills in section I, students must select additional courses in the Discipline Studies areas identified below.

Each Discipline Studies area must include:

1. At least two courses from one subject area and at least two different subject areas
2. No more then three courses from the same subject area.

Arts/Letters
15 credits, chosen from the following approved Arts & Letters list

Social Science
15 credits, chosen from the following approved Social Science list

Science/Math/Computer Science
15 credits, chosen from the following approved Science/Math/Computer Science list

Notes
Courses numbered 199, 280, 298, or 299 count as electives, and do not meet Discipline Studies requirements. Courses numbered 199 and 299 are experimental, and may later be reviewed and approved for Discipline Studies. Consult an academic advisor or counselor.

III. Electives

Electives may include any college-level course that would bring total credits to 90 quarter hours. No more than 24 total credits of electives may be used from the following areas, with no more than 12 credits in any one area:

1. Career Technical courses. See the index for Career Technical course prefixes.
2. PE and dance activity courses (Dance majors see Academic Advising team for limitations in major requirements)
3. Studio instruction in music – MUP (Music majors see Academic Advising team for limitations in major requirements)
4. Co-operative Education and supervised field experience
5. WR 115 may be included in the degree as an elective if completed summer 1999 or later.

Notes

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 degree. Course numbers 001-099 identify developmental courses (e.g., RD 090 or WR 080). Additionally, the following courses are considered developmental: MATH 100, ENG 110, 115, 116, 117; RD 115; WR 110, 115 (taken before summer 1999) and 120.

2. A student selecting this transfer option still must meet the UO admission requirements, including course standing, grade point average and foreign language.

   Note: UO requires a minimum 2.25 GPA in all transfer credits for Oregon Residents (2.5 for nonresidents) for admission purposes.
3. 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.
4. Credit-by-Exam and Credit-by-Assessment may comprise up to 22 credits of the degree.
5. Some courses may be repeatable (see limitations under Electives for maximum credits allowed for subject categories and see catalog for number of times repeatable.)
6. Lower-division college level courses (100 and 200-level) taken at Lane may not meet the requirements of an upper-division course with a similar title and content offered by an Oregon University System institution. In such cases, the courses in question will normally transfer as electives.
7. To earn a bachelor's degree at the UO, students are also required to complete two courses chosen from areas on the UO Multicultural Requirement list. Many of these courses will also satisfy the Discipline Studies areas of the AS degree. Consult an academic advisor or counselor for advice on course selection to meet these requirements. See Transfer Majors for a list of majors and academic advisors.
8. The UO only allows one course in a student's major subject to count in a Discipline area. Example: Biology majors can only count one Biology course in the Science/Math/CS area at the UO.

Group I: ARTS AND LETTERS

* Courses used to fulfill the Arts and Letters group requirements cannot also be used to meet the foreign language requirements for the B.A. degree

**Transfer as ENG courses

American Indian Language

AIL 201, 202, 203*	Chinuk Wawa

Art History

ART 111	Intro to Visual Arts
ART 113	History of Photography 1
ART 200	Graphic Design History
ART 202	Survey of Western Art
ART 203 [m, ac]	Surv American Indian Art & Arch
ART 203_H	Surv American Indian Art & Arch-Honors
ART 204, 205, 206	History of Western Art
ART 207 [m, ic]	Arts of India
ART 208 [m, ic]	Arts of China
ART 209 [m, ic]	Arts of Japan
ART 211, 212	Survey of Visual Arts: Modern Art
ART 213	History of Photography 2
ART 214	Arts of the United States
ART 217 [m, ic]	Islamic Art

Communication

COMM 100	Basic Communication
COMM 111	Public Speaking
COMM 115 [m, ip]	Intro Intercultural Communication

Dance

D 251	Looking at Dance

English

ENG 100	Children's Literature
ENG 104, 105, 106	Introduction to Literature
ENG 107 [m, ic]	Survey of World Literature
ENG 109 [m, ic]	Survey of World Literature
ENG 121	Detective Fiction
ENG 151 [m, ac]	Black American Literature
ENG 194	Literature of Comedy
ENG 195, 196, 197	Intro to Film Studies
ENG 201, 203	Shakespeare
ENG 204, 205	Survey of British Literature
ENG 213 [m, ic]	Survey of Asian Literature
ENG 215 [m, ic]	Latino/a Literature
ENG 222 [m, ip]	Literature and Gender
ENG 232 [m, ac]	Native American Literature
ENG 240	Nature Literature
ENG 243 [m, ac]	Native American Autobiography
ENG 244 [m, ic]	Asian American Literature
ENG 250 [m, ip]	Intro. to Folklore & Mythology
ENG 253, 254	Survey of American Literature
ENG 257	American Working Class Lit./Film
ENG 259 [m, ac]	Afr.-Amer. Poetry, Plays, and Film
ENG 260 [m, ip]	Intro. to Women Writers
ENG 261	Science Fiction
ENG 270	Bob Dylan: American Poet
ENG 271, 272, 273	Film: Horror/Comedy/Film Noir

Film Arts

FA 255**	Underst Movies: American Cinema
FA 263**	Film in the Fifties
FA 264** [m, ip]	Women Make Movies

French

FR 201, 202, 203*	Second Year French

Humanities

HUM 100	Humanities Through the Arts

Music

MUS 101	Music Fundamentals
MUS 102 [m, ac]	Jazz Fundamentals
MUS 201, 202, 203	Intro to Music and Its Literature
MUS 205 [m, ac]	Intro to Jazz History
MUS 261, 262, 263	Music History

Philosophy

PHL 201	Ethics
PHL 202	Theories of Knowledge
PHL 203	Theories of Reality
PHL 205	Contemporary Moral Issues
PHL 221	Critical Thinking

Religious Studies (also listed under Social Science)

REL 160 [m, ic]	World Religions
REL 201 [m, ic]	Religions of India
REL 202 [m, ic]	Religions of China & Japan
REL 203 [m, ip]	Religions of Middle East
REL 211	Intro to the Bible
REL 231 [m, ic]	Buddhist Meditation Traditions

Spanish

SPAN 201, 202, 203*	Second Year Spanish

Group II: SOCIAL SCIENCE

Anthropology

ANTH 102	World Archaeology
ANTH 102_H	World Archaeology-Honors
ANTH 103 [m, ic]	Cultural Anthropology
ANTH 227 [m, ic]	Prehistory of Mexico
ANTH 228 [m, ic]	Cultures of Mexico
ANTH 229 [m, ac]	Chicano Culture
ANTH 231 [m, ac]	American Indian Studies
ANTH 232 [m, ac]	American Indian Studies
ANTH 233 [m, ac]	American Indian Studies

Business

BA 101	Introduction to Business

Communication

COMM 220 $^{m, ip}$	Communication, Gender & Culture

Economics

ECON 200	Introduction to Economics
ECON 201, 202	Intro to Micro/Macroeconomics
ECON 204	Intro to International Economics
ECON 250 $^{m, ip}$	Class, Race, GenderUS Econ
ECON 260	Intro.Environ. & Nat. Resources

Ethnic Studies

ES 101 $^{m, ac}$, 102 $^{m, ac}$	Hist/Contemp Racial/Ethnic Issues
ES 211 $^{m, ac}$, 212 $^{m, ac}$	Chicano/Latino Experience
ES 213 $^{m, ip}$	Chicano/Latino Experience
ES 221 $^{m, ac}$	African American Experience
ES 222 $^{m, ac}$	African American Experience
ES 223 $^{m, ac}$	African American Experience
ES 231 $^{m, ac}$	Asian American Experience
ES 232 $^{m, ac}$	Asian American Experience
ES 233 $^{m, ac}$	Asian American Experience
ES 241 $^{m, ac}$	Native American Experience
ES 242 $^{m, ac}$	Native American Experience
ES 243 $^{m, ac}$	Native American Experience
ES 244 $^{m, ac}$	Native American Story Telling
ES 250 $^{m, ip}$	Class/Race/Gender in US Econ

Geography / Geographic Information Systems (GIS)

GEOG 142 $^{m, ic}$	Intro to Human Geography
GEOG 201 $^{m, ic}$	World Regional Geography
GEOG 216 $^{m, ic}$	Geography of Pacific Asia
GIS 151	Digital Earth

History

HST 101, 102, 103	History of Western Civilization
HST 104, 105, 106 ^{m,ic}	World History
HST 155 $^{m, ip}$	History of Islam
HST 195 $^{m, ip}$	History of the Vietnam War
HST 201, 202, 203	History of the United States
HST 207	History of the American West
HST 208	US History Since 1945
HST 209	American History: The Civil War
HST 266 $^{m, ip}$	US Women's History

Political Science

PS 104	Problems in US Politics / Film 1
PS 105	Problems in US Politics / Film 2
PS 201, 202	American Gov & Politics
PS 203	State and Local Government
PS 204	Intro to Comparative Politics
PS 205	International Relations
PS 208	Intro to Political Theory
PS 211, 212, 213	Peace/Conflict: Global/National/Local
PS 225	Political Ideology
PS 275	Legal Processes

Psychology

PSY 203	General Psychology
PSY 214	Intro to Personality
PSY 215	Lifespan Develop Psychology
PSY 216	Social Psychology
PSY 218 $^{m, ic}$	Multicultural Psychology
PSY 231	Human Sexual Behavior
PSY 235	Human Development I
PSY 239	Intro to Abnormal Psychology

Religious Studies

REL 201 $^{m, ic}$	Religions of India
REL 202 $^{m, ic}$	Religions of China & Japan
REL 203 $^{m, ip}$	Religions of Middle East
REL 230	Christian Beginnings
REL 243	Nature, Religion & Ecology

Sociology

SOC 108A $^{m, ip}$	Select Topics; Women's Studies/Bodies/Selves
SOC 204	Introduction to Sociology
SOC 205 $^{m, ip}$	Social Stratification and Social Systems
SOC 206	Institutions & Social Change
SOC 207 $^{m, ip}$	Women and Work
SOC 208	Sport and Society
SOC 210	Marriage, Family & Intimate Relations
SOC 211	Social Deviance
SOC 213 $^{m, ip}$	Race & Ethnicity
SOC 215 $^{m, ip}$	Social Class
SOC 216 $^{m, ic}$	Global Social Movements
SOC 218 $^{m, ip}$	Sociology of Gender
SOC 225 $^{m, ac}$	Social Problems

Women's Studies

WS 101 $^{m, ip}$	Intro to Women's Studies

GROUP III: SCIENCE/MATH/COMPUTER SCIENCE

Anthropology

ANTH 101	Physical Anthropology

Astronomy

ASTR 107	Astronomy
ASTR 121	Astronomy of Solar System
ASTR 122	Stellar Astronomy
ASTR 123	Cosmology and the Universe

Biology

BI101 E to K	General Biology
BI101_H	General Biology-Honors
BI102 B to J	General Biology
BI102_H	General Biology-Honors
BI103 A to M	General Biology
BI112	Cell Biology for Health Occupations
BI211, 212	Principles of Biology 1, 2
BI231, 232, 233	Human Anatomy & Physiology 1, 2, 3
BI234	Introductory Microbiology
BOT213	Principles of Botany
Z 213	Principles of Zoology

Chemistry

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 1, 2, 3

Computer and Information Science**

CS 160	Orientation to Programming
CS 161 C+	Beginning C++ Game Programming
CS 161J, 162J	Computer Science 1, 2
CS 162 C+	Intermediate C++ Game Programming
CS 234G	Advance C++ Game Programming
CS 260	Data Structures 1

Environmental Science

ENVS 181, 182, 183	Environ:Terrestrial/Atmoshpere/Aquatic
ENVS 184	Global Climate Change

Geography

GEOG 141	Natural Environment

Geology

G 101, 102, 103	Geology: Earth Interior/Surface/Evolving
G 146	Rocks and Minerals
G 147	National Parks Geology
G 148	Geologic Hazards
G 201, 202, 203	Geology: Earth Mat./Surface/Evolution

General Sciences

GS 101	General Science: Nature of the NW
GS 104, 105, 106	Physical Science
GS 109	Meteorology
GS 142	Earth Science: Earth Revealed
GS 147	Oceanography

Health Occupations

HO 150	Human Body Systems 1
HO 152	Human Body Systems 2

Mathematics**

MTH 105	Intro to Contemporary Math
MTH 211, 212, 213	Fund of Elementary Math 1, 2, 3
MTH 231, 232, 233	Discrete Mathematics
MTH 241, 242*	Elementary Calculus 1, 2
MTH 243	Intro to Probability and Statistics
MTH 251, 252, 253*	Calculus 1, 2, 3
MTH 265	Statistics for Scientists / Engineers

Physics

PH 101, 102, 103	Fundamentals of Physics
PH 201, 202, 203	General Physics
PH 211, 212, 213	General Physics with Calculus

Psychology

PSY 201, 202	General Psychology
PSY 212	Theoretical Principles of Learning
PSY 217	Intro to Experimental Psychology

* Students may receive credit for only one Calculus 1 class and one Calculus 2 class.

** Courses used to fulfill the Science group requirement cannot also be used to meet mathematics or computer and information science requirements for the B.S. degree.

MULTICULTURAL REQUIREMENT

Bachelor's degree candidates at the University of Oregon, including those with Associate of Arts Oregon Transfer degrees, must complete one course in two of the following categories:(A) American Cultures [AC]; (B) Identity, Pluralism and Tolerance [IP]; and (C) International Cultures [IC].A minimum of 6 credits in approved courses must be earned.Courses that satisfy this requirement are listed below.

Area A: American Cultures

ANTH 229	Chicano Culture
ANTH 231, 232, 233	American Indian Studies
ART 203	Surv American Indian Art & Arch
ENG 151	Black American Literature
ENG 232	Native American Literature
ENG 259	Afr-Amer. Poetry, Plays and Film
ES 101, 102	Historical/Contemporary Racial Ethnic
ES 211, 212	Chicano/Latino Experience
ES 221, 222, 223	African American Experience
ES 231, 232, 233	Asian American Experience
ES 241, 242, 243	Native American Experience
ES 244	Native American Story Telling
MUS 102	Jazz Fundamentals
MUS 205	Intro to Jazz History
MUS 264, 265, 266	History of Rock Music I, II, III
SOC 225	Social Problems

Area B: Identity, Pluralism and Tolerance

COMM 115	Intro to Intercultural Communications
COMM 220	Communication, Gender & Culture
ECON 250	Class, Race, & Gender U.S. Economy
ENG 222	Literature and Gender
ENG 250	Introduction to Folklore & Myth
ENG 260	Introduction to Women Writers
ES 213	Chicano/Latino Experience
ES 250	Class, Race, & Gender U.S. Economy
FA 264	Women Make Movies
HST 155	History of Islam
HST 195	History of the Vietnam War
HST 266	US Women's History
REL 203	Religions of Middle East
SOC 108/A	Selected Topics in Women's Studies
SOC 205	Social Stratification & Social Systems
SOC 207	Women and Work
SOC 213	Race and Ethnicity
SOC 215	Social Class
SOC 218	Sociology of Gender
WS 101	Introduction to Women's Studies

Area C: International Cultures

ANTH 103	Cultural Anthropology
ANTH 227	Prehistory of Mexico
ANTH 228	Cultures of Mexico
ART 207, 208, 209	History of Asian Art
ART 217	Islamic Art
ENG 107, 109	Survey of World Literature
ENG 213	Survey of Asian Literature
ENG 215	Latino/a Literature
ENG 244	Asian American Literature
GEOG 142	Intro Human Geography
GEOG 201	World Regional Geography
GEOG 216	Geography of Pacific Asia
HST 104, 105, 106	World History
PSY 218	Multicultural Psychology
REL 160	World Religions
REL 201	Religions of India
REL 202	Religions of China and Japan
SOC 216	Global Social Movements

m, ac = meets multicultural requirement for American Cultures

m, ip = meets multicultural requirement for Identity, Pluralism & Tolerance

m, ic = meets multicultural requirement for International Cultures

Associate of Science Degree - Direct Transfer Oregon State University

For students intending to transfer, the following Associate of Science (AS) degree may best match general education requirements for Oregon State University (OSU). Requirements of the AS degree include a rigorous general education program balanced with electives.

Each student is strongly encouraged to work with an academic advisor or counselor to match career goals with appropriate majors/programs and to select appropriate courses for a major at OSU.

Guidelines

1. Complete a total of 90 credits with a minimum of 24 credits earned at Lane to be awarded the Associate of Science degree.
2. Foundational Skills and Discipline Studies courses must be a minimum of 3 credits.
3. No single course can be used to satisfy more then one area of the Foundational Skills or Discipline Studies, even though some courses are approved for more then one area.
4. Maximum 16 credits P grade may be used when P grade is equivalent to C- or higher. Courses only offered for P grade option are not included in this maximum.
5. All Elective courses may be any number of credits.
6. Cumulative GPA must be at least 2.0 when the Associate of Science degree is awarded.

I. Foundational Skills

Each student must see an academic advisor or counselor to determine which course(s) will best meet the requirements of an intended transfer institution.

1. Writing I (3 credits) -- see the following list
2. Writing II (3 credits) -- see the following list
3. Writing III/Speech (3 credits) -- see the following list
4. Mathematics (3 credits) -- see the following list
5. Health/Fitness (3 credits) -- see the following list

II. Discipline Studies

No more than two courses from any one department may be used to satisfy the Discipline Studies area.

In addition to courses used for Foundational Skills in section I, students must select additional courses in each of the areas identified below:

1. Physical Science with lab (4 credits) -- see the following list
2. Biological Science with lab (4 credits) -- see the following list
3. Choice of an additional Physical or Biological Science with lab (4 credits) -- see the following list
4. Western Culture (3 credits) -- see the following list
5. Cultural Diversity (3 credits) -- see the following list
6. Literature and the Arts (3 credits) -- see the following list
7. Social Processes and Institutions (3 credits) -- see the following list
8. Difference, Power, and Discrimination (3 credits) -- see the following list

Notes: Courses numbered 199, 280, 298, or 299 count as electives, and do not meet Discipline Studies requirements. Courses numbered 199 and 299 are experimental, and may later be reviewed and approved for Discipline Studies. Consult an academic advisor or counselor.

III. Electives

Electives may include any college-level course that would bring total credits to 90 quarter hours. Limitations include:

1. Career and technical courses --12 credit maximum. See the index for Career Technical course prefixes.
2. PE and dance activity courses -- 11 credit maximum (Dance majors see Academic Advising team for limitations in major requirements)
3. Studio instruction in music (MUP) -- 12 credit maximum (Music majors see Academic Advising team for limitations in major requirements)
4. Co-operative Education and supervised field experience --12 credits maximum.
5. WR 115 may be included in the degree as an elective if completed summer 1999 or later.

Notes

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 degree. Course numbers 001-099 identify developmental courses (e.g., RD 090 or WR 080). Additionally, the following courses are considered developmental: MTH100, ENG 110, 115, 116, 117; RD 115; WR 110, 115 (taken before summer 1999) and 120.
2. A student selecting this transfer option must still meet OSU admission requirements, including course standing, grade point average and foreign language.

   Note: OSU requires a minimum 2.25 GPA in college-level transfer credits for admission processes.
3. 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.
4. Credit-by-Exam and Credit-by-Assessment may comprise up to 22 credits of the degree.
5. Some courses may be repeatable (see limitations under Electives for maximum credits allowed for subject categories and see catalog for number of times repeatable.)
6. Only the highest grade for a repeated course will be calculated in the GPA for the purposes of admissions to OSU.
7. Lower-division college level courses (100 and 200-level) taken at Lane may not meet the requirements of an upper-division course with a similar title and content offered by an Oregon University System institution. In such cases, the courses in question will normally transfer as electives.
8. OSU requires an additional 9 credits of junior or senior year courses to satisfy general education (“Baccalaureate Core”) requirements for all bachelor’s degrees.These credits must be taken at OSU.

Skill Courses

Writing I

WR 121	Intro To Academic Writing
WR 121_H	Intro To Academic Writing-Honors

Writing II

BA 214	Business Communications
J216	Newswriting I
WR 122	Argument, Style And Research
WR 122_H	Argument, Style And Research-Honors
WR 123	Composition: Research
WR 227	Technical Writing
WR 240	Creative Nonfiction
WR 241	Intro To Imag Writing: Fiction
WR 242	Intro To Imag Writing: Poetry
WR 255	Poet In The City

Writing III

COMM 111	Fund Of Public Speaking
COMM 112	Persuasive Speech
COMM 218	Interpersonal Communication
COMM 219	Small Group Discussion

Mathematics

MTH105	Intro To Contemporary Math
MTH106	Intro To Contemporary Math 2
MTH111	College Algebra
MTH112	Trigonometry
MTH113	Precalculus
MTH211	Funds Of Elementary Math 1
MTH241	Elementary Calculus 1
MTH251	Calculus 1 - Differential Calc

Fitness

HE 275	Lifetime Health & Fitness

Perspectives Courses

Physical Science

CH 104	Introductory Chemistry 1
CH 110	Chemistry In Everyday Life
CH 114	Forensic Chemistry
CH 221	General Chemistry 1
CH 222	General Chemistry 2
CH 223	General Chemistry 3
CH 224	General Chemistry 1
ENVS 181	Terrestrial Environment
ENVS 182	Atmospheric Environment & 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 Geology
G 160	Regional Geologic Field Studies
G 201	Earth Materials & Plate Tectonics
G 202	Earth’s Surface Systems
G 203	Evolution Of The Earth
GS 104	Physical Science
GS 105	Physical Science
GS 106	Physical Science

PH 101	Fund Physics
PH 102	Fund Of Physics
PH 103	Fund Of Physics
PH 201	General Physics
PH 202	General Physics
PH 203	General Physics
PH 211	Gen Physics With Calculus
PH 212	Gen Physics With Calculus
PH 213	Gen Physics With Calculus

Biological Science

BI 101	General Biology
BI 101_H	General Biology-Honors
BI 101E	Gen Bio - Ocean Life Foundation
BI 101F	Gen Biology-Survey Of Biology
BI 101I	Gen Bio - Botanical Beginnings
BI 101J	Gen Bio - Unseen Life On Earth
BI 101K	Gen Biology: Intro To Genetics
BI 102	General Biology
BI 102_H	General Biology-Honors
BI 102B	Gen Biology-Jungle Biology
BI 102C	Gen Biology-Marine Biology
BI 102D	Gen Biology-Survey Of Biology
BI 102E	Gen Biology-Animal Biology
BI 102G	Gen Biology-Genetics & Society
BI 102H	Gen Biology-Forest Biology
BI 102I	General Biology-Human Biology
BI 102J	General Biology - Ethnobotany
BI 103	General Biology
BI 103A	Gen Biology-Birds Of Oregon
BI 103B	Gen Biology-Field Biology
BI 103D	Gen Biology-Sea Birds/Mammals
BI 103E	Gen Biology-Survey Of Biology
BI 103F	Gen Bio - Wildflowers Of Oregon
BI 103G	Gen Biology-Global Ecology
BI 103H	Gen Biology-Mushrooms
BI 103K	Gen Biology-Animal Behavior
BI 103L	Gen Bio - Evolution & Diversity
BI 103M	Gen Bi - Biodiv & Sustainability
BI 103U	Gen Bio: Sea Birds/Mammals
BI 211	Principles Of Biology
BI 212	Principles Of Biology
BI 234	Introductory Microbiology
BOT 213	Principles Of Botany
Z 213	Principles Of Zoology

Western Culture

ART 202	Survey Of Western Art
ART 204	History Of Western Art
ART 205	History Of Western Art
ART 206	History Of Western Art
ENG 107	Survey Of World Literature
ENG 108	Survey Of World Literature
ENG 109	Survey Of World Literature
ENG 195	Intro To Film Studies
ENG 196	Intro To Film Studies
ENG 197	Intro To Film Studies
ENG 201	Shakespeare
ENG 203	Shakespeare
ENG 204	Survey Of British Literature
ENG 205	Survey Of British Literature
ENG 250	Intro To Folklore And Myth
ENG 253	Survey Of American Lit
ENG 254	Survey Of American Lit
FA 255	Understd Movies: Amer Cinema
GEOG 201	World Regional Geography
GEOG 202	Geography Of Europe
HST 101	History Western Civilization
HST 102	History Western Civilization
HST 103	History Western Civilization
HST 104	World History
HST 105	World History
HST 106	World History
HST 201	History Of The United States
HST 202	History Of The United States
HST 203	History Of The United States
HST 207	History Of The American West
HST 208	Us History Since 1945
PHL 201	Intro Philosophy: Ethics
PHL 205	Contemporary Moral Issues
PHL 205_H	Contemporary Moral Issues-Honors
PS 208	Intro To Political Theory
REL 211	Introduction To The Bible
REL 230	Christian Beginnings

Cultural Diversity

ANTH 227	Prehistory Of Mexico
ANTH 228	Cultures Of Mexico
ANTH 231	American Indian Studies
ANTH 232	American Indian Studies
ANTH 233	American Indian Studies
ART 203	Surv Amer Indian Art/Architect
ART 203_H	Surv Amer Indian Art/Architect-Honors
ART 207	History Of Asian Art: India
ART 208	History Of Asian Art: China
ART 209	History Of Asian Art: Japan
ENG 231	Native American Literature
ENG 232	Native American Literature
ENG 243	Native American Autobiography
ENG 244	Asian American Literature
ES 101	Historical Racial & Ethnic Iss
ES 211	Chicano/Latino Experience
ES 222	African-American Experience
ES 223	African-American Experience
ES 231	Asian American Experience
ES 233	Asian American Experience
ES 241	The Native American Experience
GEOG 142	Intro To Human Geography
GEOG 201	World Regional Geography
HST 104	World History
HST 105	World History
HST 106	World History
MUS 108	Music In World Cultures
REL 201	Religions India: Hindu/Buddh
REL 202	Religions China & Japan
REL 203	Religions Middle East

Literature and the Arts

ART 111	Introduction To Visual Arts
ART 202	Survey Of Western Art
ART 204	History Of Western Art
ART 205	History Of Western Art
ART 206	History Of Western Art
ART 207	History Of Asian Art: India
ART 208	History Of Asian Art: China
ART 209	History Of Asian Art: Japan
ART 211	Surv Visual Arts: Early Modern
ENG 104	Intro To Literature: Fiction
ENG 105	Intro To Literature: Drama
ENG 106	Intro To Literature: Poetry
ENG 107	Survey Of World Literature
ENG 108	Survey Of World Literature
ENG 121	Detective Fiction
ENG 151	Black American Literature
ENG 195	Intro To Film Studies
ENG 196	Intro To Film Studies
ENG 197	Intro To Film Studies
ENG 201	Shakespeare
ENG 204	Survey Of British Literature
ENG 205	Survey Of British Literature
ENG 213	Survey Of Asian Literature
ENG 215	Latino/A Literature
ENG 222	Literature And Gender
ENG 250	Intro To Folklore And Myth

ENG 253	Survey Of American Lit
ENG 254	Survey Of American Lit
ENG 257	The American Working Class
ENG 258	World Working Class Literature
ENG 259	African Amer Poetry/Plays/Film
ENG 260	Intro To Women Writers
FA 255	Understd Movies: Amer Cinema
FA 263	Film In The Fifties
FA 264	Women Make Movies
FA 265	African American Film Images
HUM 100	Humanities Through The Arts
MUS 201	Intro Music And Its Lit
MUS 202	Intro To Music & Its Lit
MUS 203	Intro Music And Its Lit
MUS 205	Intro Jazz History
MUS 261	Music History
MUS 262	Music History
MUS 263	Music History
MUS 264	History Of Rock Music 1
MUS 265	History Of Rock Music 2
MUS 266	History Of Rock Music 3

Social Processes and Institutions

ANTH 103	Cultural Anthropology
EC 201	Prin Of Econ: Microeconomics
EC 202	Prin Of Econ: Macroeconomics
ECON 201	Prin Econ: Microeconomics
ECON 202	Prin Econ: Macroeconomics
ECON 204	Intro To International Econ
ECON 260	Environ. Natural Resource Ec
HE 209	Human Sexuality
HST 101	History Western Civilization
HST 102	History Western Civilization
HST 103	History Western Civilization
PS 201	American Govt & Politics
PS 202	American Govt & Politics
PS 204	Intro Comparative Politics
PS 205	International Relations
PSY 201	General Psychology
PSY 202	General Psychology
PSY 203	General Psychology
SOC 204	Introduction To Sociology
SOC 205	Social Stratificatn & Soc Sys
SOC 206	Institutions & Social Change

Difference Power and Discrimination

ES 212	Chicano/Latino Experience
ES 213	Chicano/Latino Experience
ES 221	African-American Experience
ES 223	African-American Experience
ES 232	Asian American Experience
HST 201	History Of The United States
HST 202	History Of The United States
HST 203	History Of The United States
SOC 213	Race And Ethnicity
SOC 215	Social Class
SOC 225	Social Problems

Associate of General Studies

The Associate of General Studies degree provides an alternative for students pursuing some transfer programs to meet individual goals, balancing general education and elective transfer or career technical coursework. Award of this degree does not guarantee admission to a state four-year institution, or that all lower division general education requirements have been met, nor does it ensure junior status at a state four-year institution.

A student selecting this option still must meet the receiving university's admission requirements, including course standing, grade point average and foreign language.

All courses should be aligned with the student's intended program of study and the degree requirements at the intended transfer institution.

Each student is strongly encouraged to work with an academic advisor or counselor to match career goals with an appropriate program, and to select appropriate courses for a major at an intended transfer institution.

Guidelines

1. Complete a total of 90 credits with a minimum of 24 credits earned at Lane to be awarded the Associate of General Studies degree.
2. Foundational Skills and Discipline Studies courses must be a minimum of 3 credits, except for Health/PE courses, which may be any number of credits.
3. Pass all Foundational Skills courses with a grade of "C-" or "P" or better.
4. All Elective courses may be any number of credits.
5. Cumulative GPA must be at least 2.0 when the Associate of General Studies degree is awarded.

I. Foundational Skills

Each student must see an academic advisor or counselor to determine which course(s) will best meet the requirements of an intended transfer institution.

English Composition

2 courses (minimum 3 credits each): WR 115 (summer 1999 or after), WR 121 or WR 121_H, WR 122 or WR 122_H, WR 123, WR 227

Mathematics

4 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

3 credits, one course required from the list of activity classes from the AAOT, plus additional credits from PE 181-298 or the listing to total three credits. One credit from PE 186W accepted to meet this requirement.

OR

3 credits EXMS 214, FN 225, HE 152, 209, 222, 240, 250, 255, 262, 275 or 290; or HE 125, 252 (summer 1997 or later), HI 101.

II. Discipline Studies

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

Arts/Letters

12 credits from the following: Art, Communications, Dance, Effective Learning, Film Arts, Foreign Language, Humanities, Journalism, Literature, Music, Philosophy, Religion, Theater Arts, Writing, CW 201-203, ES 244

Social Science

12 credits choose from the following: Anthropology, Career Guidance (CG), Economics, Ethnic Studies, Geographic Information Science

(GIS), Geography, History, Human Development (HD), Human Services (HS), Philosophy, Political Science, Psychology, Religion, Sociology, Women's Studies, HUM 100

Science/Math/Computer Science
14 credits 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), Physical Science (GS prefix), Physics, Zoology; ANTH 101, CJA 214, DA 110, DRF 205, DRF 207, ET 129, ET 130, ET 131, ET 145, ET 146, ET 151, ET 152, FT 113, GEOG 141, HO 150, HO 152, PSY 217, WST 230.

III. Electives

Electives may include any college-level course that would bring total credits to 90 quarter hours:

- Policies on accepting career technical credits vary at four-year colleges. Consult an academic advisor about taking career technical courses as electives for transfer to a four-year institution.
- Up to 18 credits of Cooperative Education may be included as electives. See lists on page 205-206.
- Up to 12 credits of Individual Music Lessons (MUP) may be included as electives.
- Up to 12 credits of Physical Education activity may be included within the entire degree (Electives and Health/Wellness Fitness).

Notes

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 AGS. 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; MTH 100; RD 115; WR 110, 115 (taken before summer 1999) or 120.
2. Foundational Skills are open to demonstration of proficiency. For information on waiver testing or credit for prior learning, contact a counselor or academic advisor.
3. Maximum 16 credits P grade may be used when P grade is equivalent to C- or higher. Courses only offered for P grade option are not included in this maximum.
4. 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.
5. Credit-by-Exam and Credit-by-Assessment may comprise up to 25% of total degree credits.
6. Some courses may be repeatable. Repeatable courses may be used once to meet a Discipline Studies requirement. Any additional allowable repeats may be used to meet Elective requirements. Repeating courses may not help you progress toward program completion. Read the course description to understand how many times the course may be repeated. Most Independent Study courses and all PE activity courses may be repeated. Read your program of study to understand if and how a repeat will be applied to your program.
7. Lower-division college level courses (100 and 200-level) taken at Lane may not meet the requirements of an upper-division course with a similar title and content offered by an Oregon University System institution. In such cases, the courses in question will normally transfer as electives.
8. Courses numbered 199, 280, 298, or 299 count as electives, and do not meet Discipline Studies requirements. Courses numbered 199 and 299 are experimental, and may later be reviewed and approved for Discipline Studies. Consult an advisor or counselor.

Associate of Applied Science

Associate of Applied Science degrees train graduates for immediate employment and direct entry into the workforce. Many career technical programs require cooperative education or internships and may require licensure exams or certifications. Career Technical courses do not necessarily transfer to other institutions. See the index for Career Technical course prefixes.

Students who wish to pursue an AAS degree must choose a career technical program and follow the requirements listed for that program (see Career Technical programs for specific curriculum).

Each student is strongly encouraged to work with a Lane academic advisor or counselor to match career goals with an appropriate program. Each AAS degree has specific program requirements. The following information is provided only as an overview of the AAS degree.

Guidelines

1. Total credits for an AAS degree range from 90-108 credits, depending on program requirements. Complete program with a minimum of 24 credits earned at Lane.
2. Foundational Skills and Discipline Studies courses must be a minimum of 3 credits, except for Health/PE courses, which may be any number of credits.
3. Pass all Foundational Skills and Discipline Studies courses with a grade of "C-" or "P" or better.
4. Pass all required program core courses with a letter grade of "C-" or better, unless your AAS program has different requirements.
5. Developmental courses may not be used unless specified in the program.
6. Cumulative GPA must be at least 2.0 when the Associate of Applied Science degree is awarded.

I. Foundational Skills

Each student must see an academic advisor or counselor to determine which course(s) will best meet the requirements of an intended transfer institution.

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 academic advisor. Waiver testing is not the same as placement testing.

Writing
3 credits (one class). See your program for the specific required class. If none is listed, you must take one course, WR 115 (Summer 1999 or after) or higher.

Mathematics
One course, minimum 3 credits. See your program for the specific required class. If none is listed, take one course, MTH 025 or higher.

Physical Education or Health
3 credits, of any PE activity class.

OR

3 credits EXMS 214, FN 225, HE 152, 209, 222, 240, 250, 255, 262, 275 or 290; or HE 125, 252 (summer 1997 or later), HI 101

II. Discipline Studies

In addition to courses used for Foundational Skills in section 1, twelve additional credits are required with 3 credits minimum from Arts and Letters; 3 credits minimum from Human Relations, 3 credits minimum from Science/Math/Computer Science; and remaining credits from any of the 4 disciplines.

Arts/Letters

3 credits minimum from one subject prefix as specified by program, or if not specified, chosen from Art, Communication, Dance, Effective Learning, English, Film Arts, Foreign Language, Humanities, Journalism, Literature, Music, Philosophy, Religion, Theater Arts, Writing, CW 201-203, or ES 244.

Human Relations

One course, 3 credits minimum. See your program for the specific required class. If none is listed, you may choose from the following list.

Social Science

See your program for a specific required class. If none is listed, you may take any course from the following: Anthropology, Career Guidance (CG), Economics, Ethnic Studies, Geographic Information Science (GIS), Geography, History, Philosophy, Human Development (HD), Human Services (HS), Political Science, Psychology, Religion, Sociology, Women's Studies; CJA 214, HUM 100, SLD 103, SLD 121

Science/Math/Computer Science

3 credits minimum as specified by program, or if not specified, chosen from Astronomy, Biology, Botany, Chemistry, Computer Science (CS prefix only, not CIS), Engineering, Geographic Information Science, Geology (G or ENVS), Mathematics (must be a higher level course than the minimum required by the program), Physical Science (GS prefix), Physics, Zoology; ANTH 101, CJA 214, DA 110, DRF 205, DRF 207, ET 129, ET 130, ET 131, ET 145, ET 146, ET 151, ET 152, FT 113, GEOG 141, HO 150, HO 152, or PSY 217.

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.

Human Relations Courses

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

ANTH 103	Cultural Anthropology
BA 278	Leadership and Team Dynamics
BT 112	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
COMM 130	Business and Professional Communication
COMM 218	Interpersonal Communication
COMM 219	Small Group Discussion
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
PHL 205_H	Contemporary Moral Issues-Honors
PS 204	Introduction to Comparative Politics
PS 213	Peace and Conflict Studies: Local
PSY 110	Exploring Psychology
PSY 205	Applied Psychology
SOC 108, 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

AAS Programs at Lane

Curriculum for the following programs may be found in the Career Technical program descriptions and are listed in alphabetical order.

Accounting
Administrative Office Professional
Automotive Technology
Aviation Maintenance Technician
Computer Information Systems
Computer Information Systems - Health Informatics
Computer Network Operations
Computer Programming
Computer Simulation and Game Development
Construction Technology
Construction Trades, General Apprenticeship
Culinary Arts and Food Service Management
Dental Hygiene
Diesel Technology
Drafting
Early Childhood Education
Electrician Apprenticeship Technologies
Energy Management Technician
Energy Management – Building Controls Technician Option
Energy Management - Renewable Energy Technician Option
Exercise and Movement Science
Fabrication/Welding Technology
Flight Technology
Graphic Design
Hospitality Management
Human Services
Human Services - Criminal Justice
Industrial Mechanics and Maintenance Technology Apprenticeship
Manufacturing Technology
Manufacturing Technology - CNC Technician Option
Multimedia Design
Nursing
Paramedicine
Physical Therapist Assistant
Respiratory Care
Sustainability Coordinator
Water Conservation Technician
Watershed Science Technician

Career Technical Courses

Students may include up to twelve career technical elective credits in the Associate of Arts Oregon Transfer (AAOT), Associate of Science Oregon Transfer: Business (ASOT: Business), Associate of Science Oregon Transfer: Computer Science (ASOT: Computer Science), and Associate of Science degrees from Lane Community College. Policies on accepting career technical credits vary at the four-year colleges in Oregon. Consult an academic advisor about taking career technical courses as electives for transfer to a four-year institution.

Career Technical courses currently offered at Lane are identified by the following subject codes:

AB	Auto Body
AM	Automotive
APR	Apprenticeship
AS	Aerospace Science
AUD	Audio Production
AV	Aviation Maintenance

BT	Business Technology
CA	Culinary Arts
CSK	Career Skills
CST	Construction
DA	Dental Assisting
DH	Dental Hygiene
DRF	Drafting
DS	Diesel
ECE	Early Childhood Education
EMT	Emergency Medical Technology
ET	Electronic Technology
EXMS	Exercise and Movement Science
FN	Food and Nutrition
FT	Flight Technology
GD	Graphic Design
GWE	General Work Experience
HDFS	Human Development and Family Studies
HI	Health Informatics
HIM	Health Information Management
HIT	Health Information Technology
HO	Health Occupations
HRTM	Hotel, Restaurant, Tourism Management
HS	Human Services
LA	Legal Assistant
LAT	Landscape Technology
MA	Medical Assisting
MDP	Multimedia Production
MFG	Manufacturing
MUL	Multimedia
NRG	Energy
NRS	Nursing
OST	Occupational Skills Training
PN	Practical Nursing
PTA	Physical Therapist Assistant
RT	Respiratory Therapy
RTEC	Regional Technology Education Consortium
SUST	Sustainability
VP	Video Production
WATR	Water Conservation
WLD	Welding
WST	Water Shed Technologies

Career Technical subject codes previously used by Lane include: AVN, APPR, BVDP, CSP, EET, ELT, IT, LE, LGL, MMT, MO, MS, NUR, OA, PA, PGS, PST, PTV, RE, RH, RVS, SS.

Career Technical Certificates

Students are encouraged to contact an academic 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 technical degrees. Refer to the individual programs for more specific requirements.

Students should check with their major academic advising team for possible associate degree options.

I. Foundational Skills

Each student must see an academic advisor or counselor to determine which course(s) will best meet the requirements of an intended transfer institution.

Students must complete all 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.

Writing

One course, minimum 3 credits as specified by the program, or if not specified, WR 115W, WR 115 (Summer 1999 or after) or higher.

Mathematics

One course, minimum 3 credits as specified by the program, or if not specified, MTH 025 or higher.

Human Relations

3 credits (one course) as specified by program, or if not specified from the previous approved list.

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.

- The requirements listed in Section I are minimums. Some career 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/esfs/enrollment-services-forms.*
- Programs may have specific courses listed to fulfill the Foundational Skills 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 under the Cooperative Education/Internships in the course descriptions may be used.
- A maximum of 12 credits of Physical Education list from the AAOT under Health/Wellness/Fitness 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.

One- and Two-year Certificates offered at Lane

Curriculum for the following certificates may be found in the Career Technical program descriptions. The certificates are listed in alphabetical order.

Automotive Technology, 2-year
Aviation Maintenance Technician , 2-year
Basic Manufacturing/Machining Technician, 1-year
Business Assistant, 1-year
Construction Technology, 1-year
Construction Trades, General Apprenticeship, 1-year
Dental Assisting, 1-year
Diesel Technology, 2-year
Drafting, 1-year
Early Childhood Education, 1-year
Electrician Apprenticeship Technologies, 1-year
Emergency Medical Technician, 1-year
Fitness Specialist Level 1, 1-year
Fitness Specialist Level 2, 2-year
Fabrication/Welding Technology, 1-year
Health Records Technology, 1-year
Human Services: Juvenile Corrections, 1-year

Industrial Mechanics and Maintenance Technology
Apprenticeship, 1-year
Manufacturing Technology, 2-year
Medical Office Assistant, 1-year
Multimedia Design, 1-year
Occupational Skills, 1-year
Practical Nursing, 1-year
Retail Management, 1-year
Web Design, 1-year
Welding Processes, 1-year

Oregon Transfer Module

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

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.

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. Oregon Transfer Module credits also may not match program requirements in the receiving school. Students are encouraged to meet with a counselor or academic advisor for planning their courses. The Oregon Transfer Module includes 45 credits of course work, equivalent to 3 academic quarters.

I. Foundational Skills

Each student must see an academic advisor or counselor to determine which course(s) will best meet the requirements of an intended transfer institution.

Writing
Two courses of college-level composition (WR 121 and WR 122, WR 123, or WR 227)

Oral Communications
One course of fundamentals of speech or communication (COMM 100, 111, 112, 130, 218, 219)

Mathematics
One course of college-level mathematics, for which at least MTH 095 is a prerequisite (MTH 105 or higher)

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

II. Discipline Studies (must be at least 3 credits each)

Arts and Letters
3 courses from approved list under the AAOT degree

Social Sciences
3 courses from approved list under the AAOT degree

Science/Math/Computer Science
3 courses from the approved list under the AAOT degree 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). 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.

General education and graduation requirements for specific majors vary among colleges and universities. Lane's Counseling and Advising Center, a complete resource for students who plan to transfer credit from Lane, has information on colleges and universities and the degree programs they offer. Counselors and academic 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. In addition to information presented here, please be sure to consult with a counselor or academic advisor.

Students who have a major in mind, and also want to optimize the amount of coursework that will count toward it, should work closely with an academic advisor. General transfer information is available at *ous.edu/stucoun/transfer/planning*.

For students intending to become teachers, specific recommendations on structuring their AAOT degrees are given at: How to become an Oregon Teacher, *ous.edu/stucoun/prospstu/teached*.

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 academic advisor at Lane. Direct transfer does not qualify for federal financial aid.

Each student planning to transfer must learn the program requirements of the intended transfer school. Transfer requirements change often. 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 (OSU) 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. Regardless of the number of credits, the financial aid is administered by OSU.

Degrees

For information about degrees and limitation, see the Degree and Certificate Overview section.

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, and there may be additional majors not listed here.*)

Major	**Counselor/Academic Advisor**
Agriculture	Debby Ganser/Deidre Lyons
Anthropology	Susan Shipp/Cindy Lott
Architecture	Christina Salter/Judy Gates
Area and Ethnic Studies	Susan Shipp/Cindy Lott
Art	Christina Salter/Judy Gates
Biology	Debby Ganser/Deidre Lyons
Business Administration	Leslie Sariano/Jackie Bryson
Chemistry	Debby Ganser/Deidre Lyons
Computer and Information Sciences	Deb Hupcey
Criminal Justice	Susan Shipp/Cindy Lott
Dance	Christina Salter/Judy Gates
Dental Hygiene	See Counseling Dept.
Dentistry	Debby Ganser/Deidre Lyons
Drama, see Theatre Arts	
Early Childhood Education	Leslie Sariano/Jackie Bryson
Economics	Susan Shipp/Cindy Lott
Elementary Education	Leslie Sariano/Jackie Bryson
Engineering; Engineering Tech.	Debby Ganser/Deidre Lyons
English	Susan Shipp/Cindy Lott
Environmental Sciences	Debby Ganser/Deidre Lyons
Exercise Sci/Movement	See Counseling Dept.
Foreign Languages	Susan Shipp/Cindy Lott
Forestry	Debby Ganser/Deidre Lyons
General Physical Science	Debby Ganser/Deidre Lyons
General Social Science	Susan Shipp/Cindy Lott
Geographic Information Science	Susan Shipp/Cindy Lott
Geography	Susan Shipp/Cindy Lott
Geology	Debby Ganser/Deidre Lyons
Health and Health Education; Health Care Administration	See Counseling Dept.
History	Susan Shipp/Cindy Lott
Home Economics	See Counseling Dept.
Hotel, Restaurant and Tourism Management	Carolyn Litty/Claudia Riumallo
Journalism	Christina Salter/Judy Gates
Law (pre-professional)	Susan Shipp/Cindy Lott
Life Sciences (biology, botany, zoology)	Debby Ganser/Deidre Lyons
Literature (English)	Susan Shipp/Cindy Lott
Mathematics	Debby Ganser/Deidre Lyons
Medicine (pre-professional)	Debby Ganser/Deidre Lyons

Medical Technology (pre-professional)	Debby Ganser/Deidre Lyons
Music	Christina Salter/Judy Gates
Nursing (four-year degree)	See Counseling Department
Occupational Therapy (pre-professional)	Debby Ganser/Deidre Lyons
Performing Arts (dance, music, theatre)	Christina Salter/Judy Gates
Pharmacy (pre-professional)	Debby Ganser/Deidre Lyons
Philosophy	Susan Shipp/Cindy Lott
Physical Education	See Counseling Dept.
Physical Therapy (pre-professional program)	Debby Ganser/Deidre Lyons
Physics	Debby Ganser/Deidre Lyons
Political Science	Susan Shipp/Cindy Lott
Psychology	Susan Shipp/Cindy Lott
Public Administration	See Counseling Dept.
Recreation	See Counseling Dept.
Religion	Susan Shipp/Cindy Lott
Secondary Education	Counseling Staff
Social Science	Susan Shipp/Cindy Lott
Sociology	Susan Shipp/Cindy Lott
Speech	Susan Shipp/Cindy Lott
Sustainability	Carolyn Litty/Claudia Riumallo
Theatre Arts	Christina Salter/Judy Gates
Veterinary Medicine (pre-professional program)	Debby Ganser/Deidre Lyons

Transfer Hotline If a student has a problem in transferring classes to an Oregon University System institution, the student should first try to resolve it with his or her academic advisor or counselor. 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.

Career Technical Programs

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 Moodle site at *classes.lanecc.edu,* choose Academic Advising, and Undeclared.

Curriculum and descriptions for the following programs may be found in the Career Technical program descriptions and 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 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 also offers noncredit opportunities for career training and continuing education. See Continuing Education.

The notations next to each program indicate the following:

AAS	Two-year Associate of Applied Science Degree Program
1-yr cert	One-year Certificate of Completion Program
2-yr cert	Two-year Certificate of Completion Program
CPC	Career Pathways Certificate

Program	**Counselor/Advisor**
Accounting (AAS)	Leslie Sariano/Jackie Bryson
Administrative Office Professional (AAS)	Leslie Sariano/Jackie Bryson
Legal Office Skills (CPC)	Leslie Sariano/Jackie Bryson
Office Software Specialist (CPC)	Leslie Sariano/Jackie Bryson
Small Business Ownership (CPC)	Leslie Sariano/Jackie Bryson
Customer Service (CPC)	Leslie Sariano/Jackie Bryson
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)	Leslie Sariano/Jackie Bryson
Computer Information Systems (AAS)	Deb Hupcey
Computer Information Systems - Health Informatics (AAS)	Deb Hupcey
Data Specialist (CPC)	Deb Hupcey
Health Information Technology Specialist (CPC)	Deb Hupcey
Computer Network Operations (AAS)	Deb Hupcey
Computer Network Security (CPC)	Deb Hupcey
Computer Network Monitoring and Management (CPC)	Deb Hupcey
Computer Programming (AAS)	Deb Hupcey
Mobile Application Development (CPC)	Deb Hupcey
Computer Simulation and Game Development (AAS, CPC)	Deb Hupcey
Computer Game Programming in C++ (CPC)	Deb Hupcey
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
Dental Assisting (1-yr cert)	See Counseling Dept.
Dental Hygiene (AAS)	See Counseling Dept.
Diesel Technology (AAS, 2-yr cert)	Carolyn Litty/Claudia Riumallo
Drafting (AAS, 1-yr cert)	Carolyn Litty/Claudia Riumallo
Early Childhood Education (AAS and 1-yr cert)	Leslie Sariano/Jackie Bryson
Guidance and Curriculum (CPC)	
Infant and Toddler (CPC)	
Electrician Apprenticeship Technologies (AAS, cert)	See Counseling Dept.
Limited Electrician Apprenticeship Technologies (cert)	
Energy Management Technician (AAS)	Debby Ganser/Deidre Lyons
Renewable Energy Technician Option (AAS)	Debby Ganser/Deidre Lyons
Building Controls Technician Option (AAS)	Debby Ganser/Deidre Lyons
Exercise and Movement Science (AAS)	See Counseling Dept.
Fitness Specialist Level 1 (1-yr cert)	See Counseling Dept.
Fitness Specialist Level 2 (2-yr cert)	See Counseling Dept.
Group Exercise Instructor (CPC)	See Counseling Dept.

Fabrication/Welding Technology (AAS and 1-yr.cert)	Carolyn Litty/Claudia Riumallo
Welding Processes (1-yr cert)	Carolyn Litty/Claudia Riumallo
Wire Drive Welder (CPC)	Carolyn Litty/Claudia Riumallo
Shielded Metal Arc Welder (CPC)	Carolyn Litty/Claudia Riumallo
Flight Technology (AAS)	Carolyn Litty/Claudia Riumallo
Geographic Information Systems (Cert)	Susan Shipp/Cindy Lott
Graphic Design (AAS)	Christina Salter/Judy Gates
Health Records Technology (1-yr cert)	See Counseling Dept.
Medical Coding (CPC)	See Counseling Dept.
Basic Health Care (CPC)	See Counseling Dept.
Hospitality Management (AAS)	Carolyn Litty/Claudia Riumallo
Meeting, Convention, and Special Events Manager (CPC)	Carolyn Litty/Claudia Riumallo
Human Services (AAS)	Susan Shipp/Cindy Lott
Adult Development and Aging (CPC)	Susan Shipp/Cindy Lott
Community Health Worker (CPC)	Susan Shipp/Cindy Lott
Human Services: Criminal Justice (AAS)	Susan Shipp/Cindy Lott
Human Services: Juvenile Corrections (1-yr cert)	Susan Shipp/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)	Carolyn Litty/Claudia Riumallo
Basic Manufacturing/Machining Technician (Cert.)	Carolyn Litty/Claudia Riumallo
Medical Office Assistant (1-yr cert)	See Counseling Dept.
Multimedia Design (AAS, 1-yr cert)	Christina Salter/Judy Gates
Web Design (1-yr cert)	Christina Salter/Judy Gates
Nursing (AAS)	See Counseling Dept.
Practical Nursing (cert)	See Counseling Dept.
Occupational Skills Training (1-yr cert)	Co-op
Paramedicine (AAS)	See Counseling Dept.
Emergency Medical Technician (1-yr cert)	See Counseling Dept.
Physical Therapist Assistant (AAS)	See Counseling Dept.
Respiratory Care (AAS)	See Counseling Dept.
Retail Management (1-yr cert)	See Counseling Dept.
Sustainability Coordinator (AAS)	See Counseling Dept.
Water Conservation Technician (AAS)	Debby Ganser/Deidre Lyons
Watershed Science Technician (AAS)	Debby Ganser/Deidre Lyons

Noncredit Options

For noncredit training options, see Continuing Education and Small Business Development Center.

Policies and Procedures

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 committee is to ensure 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/esfs/enrollment-services-forms.*

Academic Standards and Probation A student who does not achieve satisfactory academic progress (SAP) 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. See Academic Standards and Alert System in the index.

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. Through Lane's No Show Drop Procedure, students must attend at least one full class session during the first week of the class and for online classes participate in at least one meaningful class activity. Failure to comply will result in the instructor notifying the academic department to process a "No Show Drop." College instructors may allow visits to one or two class sessions at their own discretion. For more than two visits by the same individual, the written approval of the appropriate department chair/director is required.

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 registration begins. 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 Credit Process in the Degree and Certificate Overview Section.

Students are encouraged to use the Transfer Course Evaluation tool *(lanecc.edu/esfs/general-information-transferring-credits)* in order to see how credits from other institutions transfer to Lane. The evaluations provided 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 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 the opportunity to learn on-the-job while earning 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 Dean, 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.
- **Developmental credit courses** have numbers below 100. Pre-college courses may be required as prerequisites to college level courses or as part of a career technical certificate or applied degree. Developmental 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 technical credit courses** count toward Associate of Applied Science degrees or certificates. With some limits, career technical courses may count as electives for transfer degrees. Career technical courses are not automatically accepted for transfer by other institutions. See the index Career Technical course prefixes.
- **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.

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.

The names of students in the graduation ceremony keepsake brochures reflect those who have earned a degree or certificate summer, fall and winter terms. Those who have been cleared to graduate spring term, pending successful completion of classes will have their names published, as well. Students participating in the ceremony graduating after spring term will have their names published in the next year's brochure.

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.

Progress Reports Lane students may view their progress toward degree and certification completion in myLane under the myGradPlan tab.

Oregon Transfer Module The Oregon Transfer Module and OTM designation will be posted in the student's transcript by request and upon completion.

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

Processes online admissions, provides registration and billing assistance to all students.

Financial Aid Building 1, First Floor (Lobby), 541.463.3400

Financial Aid responds to all questions and issues regarding financial aid.

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.

* Notated on official transcripts

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 Career Technical program is state approved curriculum arranged to provide career 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 (adds/drops, pass/nopass, audit options) to full-term classes is midnight Friday of the eighth week of the term. A "full term" is 11 to 12 weeks. Exceptions to this are classes that begin and end at times other than the first and last week 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).

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.

No Show Drop Students will 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 one class session of all class meetings the first week of the term. This period coincides with the refund period. Significant changes to the No Show Drop went into effect fall 2014. Refer to lanecc.edu/esfs/administrative-withdrawals 2014 for complete details.

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. You must provide and accurate Social Security number to be eligible for a 1098-T.

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 and Student Financial 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 contacing 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 and Student Financial 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 and Student Financial 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 and Student Financial 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. Students wishing to have transfer work evaluated must submit the online transcript evaluation form at lanecc.edu/esfs/request-transcript-evaluation.

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

** Note: The NC grade is scheduled for possible elimination. Review current status at lanecc.edu/copps/documents/grades-definition.

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
A = 4.00
A- = 3.70
B+ = 3.30
B = 3.00
B- = 2.70
C+ = 2.30
C = 2.00
C- = 1.70
D+ = 1.30
D = 1.00
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 Progress Standards and Alert System The college has a responsibility to help certificate and degree seeking credit students achieve their educational goals. To meet this responsibility, the college tracks students' progress and provides assistance to students who, for whatever reason, do not meet the college's minimum Academic Progress Standards (APS). These standards are different from the Financial Aid Satisfactory Academic Progress Standards (SAP) (lanecc.edu/finaid/satisfactory-academic-progress) and apply to all students.

Academic Progress Standards (APS) Academic Progress Standards are based on academic performance for each term. Students are required to attain a minimum GPA of 2.0 and complete at least 67% of the credits that they enroll in each term.

Special Note: Attempted credits include all credits a student is enrolled in at the beginning of the second week of the term, after the Refund Deadline. Refund deadlines for summer terms can vary. Check the Refund Schedule (lanecc.edu/esfs/refund-drop-schedule-change-deadline-information) for details.

Term	GPA	Completion Rate	Academic Standing	Intervention
1st	Less than 2.0	Less than 67%	Alert 1	Requires completion of Keys to Success Workshop (online) accessed on your Moodle page
2nd	Less than 2.0	Less than 67%	Alert 2	Requires Keys to Success Workshop (in-person) *lanecc.edu/counseling/keys-success-workshop*
3rd	Less than 2.0	Less than 67%	Alert 3	Requires enrollment in College Success: Back On Course (1 credit) *lanecc.edu/counseling/keys-success-workshop*
4th	Less than 2.0	Less than 67%	Dismissal	Requires out for two terms a completed petition to return *lanecc.edu/counseling/keys-success-workshop*

Petitions to return to Lane Students who do not meet the Academic Progress Standards for a fourth term will be dismissed from college credit classes and programs for a minimum of two academic terms. To be reinstated, students will submit a completed Petition to Return to Lane available from Enrollment and Student Financial Services at *lanecc.edu/esfs/enrollment-services-forms* and must be turned in a minimum of six weeks prior to the beginning of the academic term the student wants to return.

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/esfs/enrollment-services-forms*. 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.

NOTE: Many institutions will not recognize Petition to Absolve 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

Student Services—Global Directions BP720

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 BP630

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 BP410

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 BP420

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 *lanecc.edu/copps/documents/alcoholic-beverages-campus);* 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.

Admissions for Credit Students PB705

Lane Community College accepts all students who are 18 or over or have a high school diploma or GED. Students who are under 18 and have not graduated may still attend if they follow the guidelines for Under 18 Students. 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, mental or physical disability, religion, expunged record, veterans' status or association with any member of these protected groups.

Tuition BP725

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).

For adjustments:

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. Prior to approval of the tuition increase, the board will review the index options, affordability and access for students, and the revenue requirements of the college.

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

- Coordinator, 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:** Center for Accessible Resources, Building 1, Room 218, 541.463.5059, TTY Relay: 711
- **Problems with access to Lane's facilities:** Todd Smith, Interim Director, Facilities Management and Planning, Building 7, Room 204B, 541.463.5566
- **Employee workplace accommodations:** Sharon Daniel, Human Resources, Building 3, Room 114, 541.463.5589
- **Disability related complaints/Section 504 Coordinators:** Center for Accessible 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:** Kerry Levett, 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 Diethlamide (“LSD,” “Acid”), Mescaline, MDA, MDMA, DMT, STP, Psilocybinhallucinations; 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.) Opiumlethargy; 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 Inhalantsdamage to brain, lungs; convulsions; death.

Alcohol A sedative drugtolerance; 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 in district 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, affirmative 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. Accommodations for Access

Center for Accessible 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 Center for Accessible 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 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 progressive alerts and eventual dismissal from the College.

H. Complaint Procedures See Student Policies and Complaint Procedures.

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 Campus, 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 grievance procedures: The Student Code of Conduct, Student Complaint Procedure, and the Student Sexual Misconduct and Harassment Procedure. These procedures are available on the college’s website, myLane, and OrgSync. Contact Office of Academic and Student Affairs, 541.463.5732.

V. Discipline

The Student Code of Conduct and the student conduct process apply to the conduct of individual students and all College affiliated student organizations. For the purposes of student conduct, a student (a) is enrolled as a student and/or registered for one or more credit hours including dually enrolled students in multiple institutions; (b) is enrolled in a non-credit program or (c) was enrolled under (a) or (b) within four proceeding terms is considered a “Student” for purposes of the procedure or (d) if the person has submitted an application for admission, financial aid or any other service provided by the College that requires student status.

The Student Code of Conduct is not applicable to students enrolled only in College Now courses on their local high school campuses. Lane Community College reserves the right to clarify appropriate students to whom the Student Code of Conduct is applicable.

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, staff 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. Dismissal as a result of faculty action is counted toward the maximum number of absences allowed in the class.

If a student is dismissed for inappropriate behavior, faculty may 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 through the processes outlined in the Student Code of Conduct.

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 Campus, 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

Lane Community College is a community learning institution committed to fostering a campus environment conducive to academic inquiry, a productive campus life, and thoughtful study and discourse. The student conduct program, within the Office of Academic and Student Affairs, is committed to an educational and developmental process that balances the interests of individual students with the interests of the College community.

A community exists on the basis of shared values and principles. At the College, student members of the community are expected to uphold and abide by certain standards of conduct that form the basis of the Student Code of Conduct. These standards are embodied within a set of core values that include integrity, social justice, respect, community, and responsibility.

Each member of the College community bears responsibility for their individual conduct and is expected to assume reasonable responsibility for the behavior of others. When members of the community fail to exemplify these five values by engaging in violation of the rules below, campus conduct proceedings are used to assert and uphold the Student Code of Conduct.

The student conduct process at Lane Community College is not intended to punish students; rather, it exists to protect the interests of the community and to challenge those whose behavior is not in accordance with the college's policies and procedures. Sanctions are intended to challenge students' moral and ethical decision-making and to help bring behavior into accord with community expectations. When a student is unable to conform their behavior to community expectations, the student conduct process may determine the student should no longer share in the privilege of participating in this community.

The purpose of this Student Code of Conduct is to protect the individual rights of students and employees 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 employees, property protection, record security, and other education-related services.

Through this Student 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 should be aware that the student conduct process is quite different from criminal and civil court proceedings. Procedures and rights in student conduct procedures are conducted with fairness to all, but do not include the same protections of due process afforded by the courts. Due process, as defined within these procedures, assures written notice and a Student Conduct Conference before an objective decision-maker. No student will be found in violation of College policy or procedure without information showing it is more likely than not (preponderance of evidence) that a violation occurred, and any sanctions will be proportionate to the severity of the violation and to the cumulative conduct history of the student. This determination does not require a standard beyond a reasonable doubt, and the technical rules of evidence applicable to civil and criminal procedures shall not apply.

Students cited with code violation are entitled to due process as described in the code and may appeal certain consequences of violations.

NOTE: At the time of the catalog publication, the Student Code of Conduct was in the process of revision. The Student Code of Conduct can be found on the college's website, myLane, and OrgSync. For a written copy of the Student Code of Conduct, please contact the Executive Dean of Student Affairs, 541.463.5725.

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/public-safety-services* 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, Downtown Campus, Downtown Center. The Cottage Grove and Florence campuses and Lane's Aviation Academy are served by their local law enforcement agencies, which report incidents at college sites to the college's Public Safety department. Public Safety provides services at the Downtown Campus including the Titan Court residential facility 7 days a week. To contact an officer, call 541.463.4949.

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 share reports with other 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, Law Enforcement Data System (LEDS).

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, sexual assault prevention and other criminal justice and safety topics.

Intoxicants Drugs and intoxicants are not permitted on campus, except under very specific circumstances which are detailed 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 the 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 Campus. These emergency phones automatically ring in the Public Safety department when the receiver is lifted

Blue Telephones There are a small number of "blue" emergency phones located in outside areas of the campus. These phones connect directly to Public Safety Emergency (5555)..

All emergency phones are checked periodically to ensure that they function.

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.

Campus Elevators All call boxes in elevator cars connect to Public Safety Emergency (5555).

Emergency Car Services Emergency car booster packs are offered 24 hours a day. Call or visit Public Safety. Individuals must pick up the packs at Public Safety, Bldg. 13, Rm. 107. 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, taken into custody, or both. Public Safety Officers may facilitate contact between the 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, access control system maintenance, alarm monitoring and response, safety escorts, copies of accident reports, 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-compliance-information*.

For more information about Lane's Public Safety Department, contact 541.463.5558.

Career
Technical
Programs

Accounting

Offered by the Business Department, 541.463.5221

Two-Year Associate of Applied Science Degree, Accounting

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.

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.
- apply critical thinking and analytical skills in decision-making and problem solving.
- 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.
- create and present professional documents, work papers, and presentations for both internal and external users.
- work independently within diverse business environments; apply individual strengths and critical thinking to collaborative efforts.
- perform on the job in ways that reflect professional ethics, legal standards, and organizational expectations.
- 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.
- 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.
- plan, budget and evaluate financial performance.
- understand and monitor the financial, tax, payroll, legal, and other compliance requirements for a variety of organizational entities.

Job Openings Projected through 2022

Lane County openings - 37 annually
Statewide openings - 425 annually

Wages

Lane County average hourly - $17.87; average annual - $37,165
Oregon average hourly - $18.11; average annual - $37,679

Costs (Estimate based on 2014-15 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees	$11,188
Books and materials	$3,440
Laptop computer	$1,500
Total Estimate	$16,128

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 academic 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*

Course Requirements

1. Students must place at least into WR 121 or WR 121_H and MTH 095, or take classes to reach these levels before enrolling in program courses. Consult course descriptions for prerequisites on other courses.
2. 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. Contact the Business Resource Center at 541-463-5799.
3. Before enrolling in BA 214 Business Communications students must pass BT 108 Business Proofreading and Editing.
4. An approved 3-credit Health class can be substituted for the PE requirements. Please speak with your academic advisor.
5. BT 020 must be taken for a letter grade, not P/NP.
6. All program core courses (BA, BT) must be taken for a letter grade, and must be completed with a grade of "C" or better to meet program requirements. See course listings for prerequisites.
7. Foundational Requirements (writing, math, communication and Health/Wellness/Fitness courses) may be completed with a grade of "C-" or a "Pass".

Required Prerequisite

BT 108 Business Proofreading and Editing	4
BT 020 10-Key Calculator	1
Total Required Prerequisite Credits	5

First Year	**Fall**
CG 203 Human Relations at Work	3
BT 120 MS WORD for Business	4
MTH 095 Intermediate Algebra or higher	5
Choice of: WR 121 Introduction to Academic Writing WR 121_H Introduction to Academic Writing	4
Physical Education requirement	1
Total Credits	17
	Winter
BA 101 Introduction to Business	4
BT 123 MS EXCEL for Business	4
BT 165 Introduction to the Accounting Cycle	4
BA 214 Business Communications	4
Total Credits	16
	Spring
BT 163 QuickBooks	4
BT 206 Co-op Ed: Business Seminar	2
MTH 105 Math in Society	4
Physical Education requirement	1
BA 281 Personal Finance	4
Total Credits	15

Second Year	**Fall**
BA 211 Financial Accounting	4
BT 170 Payroll Records and Accounting	4
BT 223 MS EXCEL for Business – Expert	4
BT 272 Tax Concepts and Preparation	4
Total Credits	16
	Winter
BA 278 Leadership and Team Dynamics	4
BA 226 Business Law	4

BT 221 Budgeting for Managers	4
Physical Education requirement	1
Communication course	4
Total Credits	17
Spring	
BA 280AC Co-op Ed: Accounting	3
BT 276 Automated Accounting Information	4
BT 286 Professional Bookkeeping	4
Total Credits	11

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

Career Pathway Certificate of Completion, Customer Service Certificate

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 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, 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 2022
Lane County openings - 30 annually
Statewide openings - 370 annually

Wages
Lane County average hourly - $16.39; average annual - $34,107
Oregon average hourly - $16.74; average annual - $34,810

Costs (Estimate based on 2014-15 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees	$10,982
Personal Computer	$1,500
Books and supplies	$3,214
Total Estimate	$15,696

Administrative Office Professional 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) 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*

Course Requirements

1. Prerequisites are required for some courses. See course descriptions.
2. All Business Department majors must have a computer that meets minimum system requirements. Contact the department or academic advisor for details.
3. All program core courses (BA, BT, CS) must be taken for a letter grade, and must be completed with a grade of "C" or better to meet program requirements. See course listings for prerequisites.
4. Foundational Requirements (writing, math, communication and Health/Wellness/Fitness courses) may be completed with a grade of "C-" or "Pass".
5. Students must place at least into WR 121 or WR 121_H and MTH 065, or take classes to reach these levels before enrolling in program core courses.
6. 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. Contact the Business Resource Center 541-463-5799.
7. Before enrolling in BA 214 Business Communications, students must pass BT 108 Business Proofreading and Editing.
8. The AOP program has graded keyboarding skill levels built into several courses. For details: *lanecc.edu/business /testing/ keyboarding-skill-competency-recommendations*.

Administrative Office Professional

Two-Year Associate of Applied Science Degree

Required Prerequisite

BT 108 Business Proofreading and Editing	4
Total Required Prerequisite Credits	4

First Year	**Fall**
CG 203 Human Relations at Work	3
BT 120 MS WORD for Business	4
CS 120 Concepts of Computing: Information Processing	4
Choice of: WR 121 Introduction to Academic Writing WR 121_H Introduction to Academic Writing	4
Total Credits	15
	Winter
BA 101 Introduction to Business	4
BT 123 MS EXCEL for Business	4
BT 165 Introduction to the Accounting Cycle	4
MTH 065 Elementary Algebra or higher	4
Total Credits	16
	Spring
BA 206 Management Fundamentals	3
BA 214 Business Communications	4
BT 144 Administrative Procedures	4
BT 163 QuickBooks	4
BT 206 Co-op Ed: Business Seminar	2
Total Credits	17

Second Year	**Fall**
BA 224 Human Resource Management	3
BT 220 MS WORD for Business – Expert	3
Directed Elective	3-8
Communication course	4
Choice of: Physical Education Activity requirement Health requirement	3
Total Credits	16-21
	Winter
BA 226 Business Law	4
BT 228 Integrated Office Applications	4
BT 230 Paperless Office Practices	4
Directed Elective	4-8
Total Credits	16-20
	Spring
BA 278 Leadership and Team Dynamics	4
BA 280AA Co-op Ed: Administrative Office	3
Directed Elective	4-8
BT 271 Administrative Professional Practicum	4
Total Credits	15-19

Directed Electives

Payroll

BT 170 Payroll Records and Accounting	4
BT 221 Budgeting for Managers	4
BT 223 MS EXCEL for Business – Expert	4

Legal Office

BA 211 Financial Accounting	4
LA 100 Legal Procedures	4
LA 101 Introduction to Paralegal Studies	3
LA 102 Legal Terminology	3
LA 105 Civil Litigation	3
LA 128 Legal Procedures 2	4
LA 132 Ethics for the Legal Professional	3

Medical Office

HO 100 Medical Terminology 1	3
HO 110 Admin Medical Office Assistant	3
HO 112 Medical Insurance Procedures	3

Customer Service

BA 223 Marketing	4
BA 280CS Co-op Ed: Customer Service	3
BT 181 Customer Service	3
CIS101 Computer Fundamentals	3

Additional Electives

BT 150 Business Web Pages with WordPress	3
BT 253 Internet Marketing	4
BA 250 Small Business Management	4
BA 280AA Co-op Ed: Admin Office	3
BA 281 Personal Finance	4
BT 122 MS POWERPOINT for Business	3
CIS125D Software Tools 1: Databases	4

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.

The partnership between Lane and Umpqua allows students to work toward their Legal Office Certificate while at Lane, and if they choose to continue their education, they can transfer that certificate to Umpqua to begin second year classes of the AAS in Paralegal Studies. Federal regulations prohibit students from majoring in a degree not awarded from the institution they are attending. Please see your academic advisor to discuss major options while you are attending Lane.

Federal regulations also prohibit receiving financial aid for the same term at more than one institution. Students who plan to transfer to Umpqua to pursue an AAS in Paralegal Studies will need to stop receiving financial aid from Lane and apply for financial aid from Umpqua when they transfer.

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.
- use research and analytical skills to support the activities of the organization.

Course Requirements

1. Prerequisites are required for some courses. See course descriptions.
2. All courses must be taken for a letter grade, and must be completed with a grade of "C" or better or repeated to meet program requirements.
3. Students are expected to have the ability to accurately type 40 words per minute before taking LA 100. 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. Contact the Business Resource Center 541-463-5799.

	Fall
LA 100 Legal Procedures	4
LA 102 Legal Terminology	3
BT 108 Business Proofreading and Editing	4
Choice of:	4
WR 121 Introduction to Academic Writing	
WR 121_H Introduction to Academic Writing	
Total Credits	15

	Winter
CS 120 Concepts of Computing: Information Processing	4
LA 101 Introduction to Paralegal Studies	3
LA 128 Legal Procedures 2	4
MTH 065 Elementary Algebra or higher	4
Total Credits	15

	Spring
BA 214 Business Communications	4
LA 105 Civil Litigation	3
LA 132 Ethics for the Legal Professional	3
Choice of::	4
COMM 105 Listening and Critical Thinking	
COMM 218 Interpersonal Communication	
COMM 219 Small Group Discussion	
Total Credits	14

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.

Course Requirements

1. Prerequisites are required for some courses. See course descriptions.
2. All Business Department majors must have a computer that meets minimum system requirements. Contact the department or academic advisor for details.
3. All courses must be taken for a letter grade, and must be completed with a grade of "C" or better to meet program requirements. See course listings for prerequisites.
4. Students must place at least into WR 121 or WR 121H and MTH 065, or take classes to reach these levels before enrolling in program core courses. WR 121 or WR 121_H and MTH 065 must be taken for a letter grade, and must be completed with a grade of "C-" or better to meet program requirements.
5. 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/keyboarding-skill-competency-recommendations*
6. The AOP program has graded keyboarding skill levels built into several courses. For details: *lanecc.edu/business/testing/keyboarding-skill-competency-recommendations.*

Courses	**Credits**
BT 120 MS WORD for Business	4
BT 122 MS POWERPOINT for Business	3
BT 123 MS EXCEL for Business	4
BT 220 MS WORD for Business – Expert	3
BT 223 MS EXCEL for Business – Expert	4
BT 228 Integrated Office Applications	4
CIS125D Software Tools 1: Databases	4
Total Credits	26

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
BT 123 MS EXCEL for Business	4
BT 165 Introduction to the Accounting Cycle	4
	Winter
BA 223 Marketing	4
BA 226 Business Law	4
BT 221 Budgeting for Managers	4
BT 150 Business Web Pages with WordPress	3
	Spring
BA 206 Management Fundamentals	3
BA 250 Small Business Management	4
BT 163 QuickBooks	4
Total Credits	38

Customer Service Certificate

Career Pathway Certificate of Completion

Purpose This Career Pathway Certificate is designed for individuals who are interested in employment or advance opportunities in the various customer service fields. Students may find employment in call centers, customer service centers, or departments within businesses that have a significant customer service component.

Learning Outcomes The graduate of the Customer Service Certificate of Completion will be able to:

- utilize keyboarding and business software skills to help support customers.
- communicate in written and verbal forms to help serve customers.
- work effective as an individual and within teams to help meet customer needs.
- deliver effective initial customer service and promote customer satisfaction

	Fall
CG 203 Human Relations at Work	3
Choice of:	3-4
CIS101 Computer Fundamentals	
CS 120 Concepts of Computing: Information Processing	
	Winter
COMM 218 Interpersonal Communications	4
BT 120 MS Word for Business	4
	Spring
BT 181 Customer Service	4
Choice of:	3-4
BA 280CS Co-op Ed; Customer Service	
BA 101 Intro to Business	
Total Credits	21-23

Students may be able to substitute an alternative survey course from disciplines outside of business. Please see an academic advisor to arrange pre-approved substitutions.

Auto Collision

This program is being discontinued. Students currently enrolled in the program should contact Counseling and Advising at 541.463.3200 for information about completing core courses.

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 2022
Lane County openings - 21 annually
Statewide openings - 208 annually

Wages
Lane County average hourly - $18.24; average annual - $37,947
Oregon average hourly - $20.27; average annual - $42,174

Costs (Estimate based on 2014-15 tuition and fees. Consult Lane’s website for updated tuition.)

Resident Tuition and Student Fees	$11,118
Differential Fees*	$2,467
Other Course/Program Costs	$720

Tools	$1,500
Books and supplies	$1,300
Total Estimate	$17,105

*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 RD 087 AND EL115, OR prior college. A high school diploma or equivalent is recommended for all applicants to this program.

Admission Information See *lanecc.edu/advtech/at/admission-information* 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 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. 19, Rm. 231D, 541.463.3158, *clemonsm@lanecc.edu*

Course Requirements

1. All AM and MTH courses must be taken for a letter grade, not P/NP, and must be passed with a "C-" or better to fulfill program requirements.
2. WR 115W and the PE/Health requirement must be passed with a "C-" or better to fulfill program requirements.
3. See course descriptions for prerequisite information.
4. For choices in Foundational Skills and Discipline Studies, see AAS degree description.

Two-Year Associate of Applied Science Degree

First Year	**Fall**
AM 243 Electrical and Electronic Systems	12
MTH 085 Applied Geometry for Technicians or higher mathematics	4
Total Credits	16

	Winter
AM 145 Engine Repair	12
WLD 121 Shielded Metal Arc Welding 1	4
PE/Health requirement	3
Total Credits	19

	Spring
AM147 Suspension and Steering	6
AM 149 Manual Drive Trains and Transaxles	6
WR 115W Introduction to College Writing: Workplace Emphasis or higher writing	3
Total Credits	15

Second Year	**Fall**
AM143 Brakes	8
AM246 Heating and Air Conditioning	4
CS 120 Concepts of Computing: Information Processing or higher computer science	4
Choice of: Science or Computer Science course ET 129 Electrical Theory 1	4
Total Credits	20

	Winter
AM 244 Engine Performance	12
CG 203 Human Relations at Work	3
Choice of: COMM 100 Basic Communications COMM 105 Listening and Critical Thinking COMM 218 Interpersonal Communications	4
Total Credits	19

	Spring
AM 242 Automatic Transmissions/Transaxles	12
AM 245 Introduction to Hybrid Electric Vehicles (optional elective)	4
AM 280 Co-op Ed: Automotive	3
Total Credits	15-19

Automotive Technology

Two-Year Certificate of Completion

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.

Gainful Employment Disclosure

Standard Occupational Classification: 49-3023.01

Go to the Department of Labor's O*Net website for a profile of this occupation:

Automotive Master Mechanics
onetonline.org/link/summary/49-3023.01
Or check on these O*Net Related Occupations:
Automotive Specialty Technicians *onetonline.org/link/summary/49-3023.02*

How many students complete the Automotive Technology 2-year Certificate?

In academic year 2013-14, 19 students completed this certificate.

What was the on-time graduation rate for these students?

Of students who completed this certificate in the 2013-14 academic year 5% completed on time.

The federally required method for calculating this rate assumes students will enroll full-time, declare a major immediately, and enroll in it continuously until certificate completion. In reality, many community college students attend part-time, explore several majors, stop out for a term or more, change majors, or brush-up academic skills to be better prepared for college level courses, affecting this narrowly defined on-time graduation rate.

Job Openings Projected through 2022

Lane County: 21 positions
Statewide: 208 positions

What wages are forecast for this occupation?

Lane County average hourly - $18.24; average annual - $37,947
Oregon average hourly - $20.27; average annual - $42,174

How much will the program cost?

(Estimates based on 2013-14 data for full-time students. Students attending part-time will incur additional term fees. Consult Lane's website for updated tuition and fees.)

Resident tuition and fees	$9,944
Differential Fees*	$2,431
Books, supplies, program costs	$3,175
On-Campus room and board	Not offered
Total Estimate	$15,550

*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.

What's included?

Program Costs: *lanecc.edu/esfs/credit-fees-and-expenses*

What is the median loan debt incurred by students who completed the program in 2014?

Federal Loans	$23,167
Institutional financing	$50

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 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. 19, Rm. 231D, 541.463.3158, *clemonsm@lanecc.edu*

Course Requirements

1. All AM and MTH courses must be completed with a letter grade, not P/NP, and must be passed with a "C-" or better to fulfill program requirements.
2. WR 115W and the PE/Health courses must be completed with a Pass or "C-" or better to fulfill program requirements.
3. See course descriptions for prerequisite information.

Two-Year Certificate of Completion

First Year	**Fall**
AM 145 Engine Repair	12
MTH 085 Applied Geometry for Technicians or higher mathematics	4
Total Credits	16
	Winter
AM 149 Manual Drive Trains and Axles	6
AM 147 Suspension and Steering	6
WLD 121 Shielded Metal Arc Welding 1	4
Total Credits	16
	Spring
AM 243 Electrical and Electronic Systems	12
PE/Health elective	3
Total Credits	15
Second Year	**Fall**
AM 143 Brakes	8
AM 246 Heating and Air Conditioning	4
WR 115W Introduction to College Writing: Workplace Emphasis or higher writing	3
Total Credits	15
	Winter
AM 244 Engine Performance	12
CG 203 Human Relations at Work	3
Total Credits	15
	Spring
AM 242 Automatic Transmissions/Transaxles	12
AM 245 Introduction to Hybrid Electric Vehicles (optional elective)	4
AM 280 Co-op Ed: Automotive	3
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 2022

Lane County openings - 5 annually

Statewide openings - 34 annually

Wages

Lane County average hourly - $25.81average annual - $53,678

Oregon average hourly - $26.75; average annual - $55,629

Costs (Estimate based on 2013-14 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees	$11,817
Other Course/Program Costs	$3,270
Tools	$2,100
Books and supplies	$500
Total Estimate	$17,687

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 RD 087 and EL 115, 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. 19, Rm. 231D, 541.463.3158, *clemonsm@lanecc.edu*

Course Requirements

1. See course descriptions for prerequisite and corequisite information.
2. All AV and MTH courses must be taken for a letter grade, not P/NP, and must be passed with a "C-" or better to fulfill program requirements.
3. WR and PE/Health requirement must be passed with a Pass or "C-" or better to fulfill program requirements.
4. MTH 060 and 065 or MTH 070 may substitute for MTH 075.
5. Foundational Skills (except MTH) and Discipline Studies are not required for two-year FAA Airframe and Powerplant airman's certificate exams.
6. For choices in Foundational Skills and Discipline Studies, see AAS degree description.

Two-Year Associate of Applied Science Degree

Required Prior to Beginning of First Year

MTH 075 Applied Algebra for Technicians or equivalent	4
WR 115W Introduction to College Writing: Workplace Emphasis or higher writing	3

First Year	**Fall**
AV 192 General 101	6
AV 193 General 102	6
Science/Computer Science requirement	3
Total Credits	15
	Winter
AV 196 General 105	6
AV 194 General 103	6
MTH 085 Applied Geometry for Technicians or higher mathematics	4
PE/Health requirement	3
Total Credits	19
	Spring
AV 279 Airframe (Section 3,and 4)	12
AV 195 General 104	6
Total Credits	18

Second Year	**Fall**
AV 281 Powerplant (Section 1 and 2)	12
AV 279 Airframe (Section 1)	6
Total Credits	18
	Winter
AV 281 Powerplant (Section 3 and 4)	12
Arts/Letters requirement	3
Human Relations requirement	3
Total Credits	18
	Spring
AV 283 Powerplant Return to Service	6
AV282 Airframe Return to Service	6
AV 279 Airframe (Section 2)	6
Elective AV 280 Co-op Ed: Aviation Maintenance (optional)	3
Total Credits	18-21

Aviation Maintenance Technician

Two-Year Certificate of Completion

Gainful Employment Disclosure

Standard Occupational Classification: 49-3011.00

Go to the Department of Labor's O*Net website for a profile of this occupation:

Aircraft Mechanics and Service Technicians
onetonline.org/link/summary/49-3011.00
Or check on these O*Net Related Occupations:
Aircraft Structure, Surfaces, Rigging, and Systems Assemblers *onetonline.org/link/summary/51-2011.00*

How many students complete the Aviation Maintenance Technician 2-year Certificate?
In academic year 2013-14, 14 students completed this certificate.

What was the on-time graduation rate for these students?
Of students who completed this certificate in the 2013-14academic year, 29% completed on time.

The federally required method for calculating this rate assumes students will enroll full-time, declare a major immediately, and enroll in it continuously until certificate completion. In reality, many community college students attend part-time, explore several majors, stop out for a term or more, change majors, or brush-up academic skills to be better prepared for college level courses, affecting this narrowly defined on-time graduation rate.

Job Openings Projected through 2022
Lane County: 5 positions
Statewide: 34 positions

Wages:
Lane County hourly average - $25.81; annual average - $53,628
Oregon hourly average - $26.75; annual average - $55,629

Costs (Estimate based on 2014-15 tuition and fees. Consult Lane's website for updated tuition.)

Resident tuition and student fees	$11,817
Books, supplies, other program costs	$5,870
On-campus room and board	Not offered
Total estimate	$17,687

What's included?
Program Costs: *lanecc.edu/esfs/credit-fees-and-expenses*

What is the median loan debt incurred by students who completed the program in 2014?

Federal Loans	$19,575
Institutional financing	$1,170

(For privacy reasons under FERPA, loan information is not disclosed for programs with fewer than ten graduates.)

Course Requirements

1. See course descriptions for prerequisite and corequisite information.
2. All AV and MTH courses must be taken for a letter grade, not P/NP, and must be passed with a "C-" or better to fulfill program requirements.
3. WR requirement must be passed with a Pass or "C-" or better to fulfill program requirements.
4. MTH 060 and 065 or MTH 070 may substitute for MTH 075.

Required Prior to Beginning of First Year

MTH 075 Applied Algebra for Technicians or equivalent	4

First Year	**Fall**
AV 192 General 101	6
AV 193 General 102	6
WR 115W Introduction to College Writing: Workplace Emphasis or higher writing	3
PE/Health elective	3
Total Credits	18

	Winter
AV 196 General 105	6
AV 194 General 103	6
MTH 085 Applied Geometry for Technicians or higher mathematics	4
Total Credits	16

	Spring
AV 279Airframe (Section 3, and 4)	12
AV 195 General 104	6
Total Credits	18

Second Year	Fall
AV 281 Powerplant (Section 1 and 2)	12
AV 279 Airframe (Section 1)	6
Total Credits	18

	Winter
AV 281 Powerplant (Section 3 and 4)	12
Human Relations requirement	3
Total Credits	15

	Spring
AV 283 Powerplant Return to Service	6
AV 282 Airframe Return to Service	6
AV 279 Airframe (Section 2)	6
Total Credits	18

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 the Department of Labor's O*Net website for a profile of this occupation:

Secretaries and Administrative Assistants, Except Legal, Medical, and Executive
onetonline.org/link/summary/43-6014.00
Or check on these O*Net Related Occupations:
Receptionists and Information Clerks *onetonline.org/link/summary/43-4171.00*
Office Clerks, General *onetonline.org/link/summary/43-9061.00*

How many students complete the Business Assistant 1-year Certificate?

In academic year 2013-14, 23 students completed this certificate.

How long will it take to complete this program?

The program is designed to take 4 terms, or about 15 months of study to complete.

What was the on-time graduation rate for these students?

Of students who completed this certificate in the 2013-14 academic year, 0% completed on time.

The federally required method for calculating this rate assumes students will enroll full-time, declare a major immediately, and enroll in it continuously until certificate completion. In reality, many community college students attend part-time, explore several majors, stop out for a term or more, change majors, or brush-up academic skills to be better prepared for college level courses, affecting this narrowly defined on-time graduation rate.

Job Openings Projected through 2022

Lane County:30 positions
Statewide: 370 positions

What wages are forecast for this occupation?

Lane County average hourly - $16.39; average annual - $34,107
Oregon average hourly - $16.74; average annual - $34,810

How much will the program cost?

(Estimates based on 2013-14 data for full-time students. Students attending part-time will incur additional term fees. Consult Lane's website for updated tuition and fees.)

Resident tuitionand fees	$5,729
Books and supplies	$2,161
Personal Computer	$1,500
Total Estimate	$9,390

What's included?

Program Costs: *lanecc.edu/esfs/credit-fees-and-expenses*

What is the median loan debt incurred by students who completed the program in 2014?

Federal Loans	$10,752
Institutional financing	$0

All Business Department majors must have a computer that meets minimum system requirements; contact the department or Academic Advisor for details.

Course Requirements

1. See course descriptions for prerequisite requirements.
2. Students must place at least into WR 121 or WR 121_H and MTH 065, or take classes to reach these levels before enrolling in program courses.
3. Foundational Requirements (writing and math) may be completed with a grade of "C-" or "Pass". All other required prerequisites and courses must be taken for a letter grade, not P/NP, and be passed with grade of "C" or better to satisfy program requirements.

4. 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. Contact the Business Resource Center 541-463-5799.5. Before enrolling in BA 214 Business Communications, students must pass BT 108 Business Proofreading and Editing.

Required Prerequisite

BT 108 Business Proofreading and Editing	4
Total Recommended Prerequisite Credits	4

	Fall
CG 203 Human Relations at Work	3
BT 120 MS WORD for Business	4
CS 120 Concepts of Computing: Information Processing	4
Total Credits	15

	Winter
BA 101 Introduction to Business	4
BT 123 MS EXCEL for Business	4
BT 165 Introduction to the Accounting Cycle	4
MTH 065 Elementary Algebra or higher	4
Total Credits	16

	Spring
BA 206 Management Fundamentals	3
BA 214 Business Communications	4
BT 163 QuickBooks	4
BT 206 Co-op Ed: Business Seminar	2
Choice of: BT 144 Administrative Procedures BA 281 Personal Finance	4
Total Credits	17

Computer Information Systems

Offered by the Computer Information Technology Department, 541.463.5221

Two-Year Associate of Applied Science Degree

(Also see the following Career Pathway Certificates of Completion: Database Specialist, Geographic Information Systems, Health Information Technology Specialist, Network Security, and Web Programming.)

Purpose Computer Information Systems 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 Computer Information Systems workers evaluate computer products, perform user needs assessments, install systems, prepare documentation, provide training for users, develop or maintain databases, analyze systems, and develop or maintain applications.

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.
- provide information systems or network support, analysis, or development
- monitor computer and peripheral device operation.
- test and troubleshoot computer applications and systems.
- follow computer diagnostic procedures.
- evaluate and recommend computer equipment and software.
- perform hardware installation, maintenance and common repair tasks.
- update and upgrade computer systems.
- apply standard project management techniques.
- work as a member of a team.
- use information resources for problem solving and troubleshooting.
- support computer users by troubleshooting workstation problems, assisting with needs assessment, providing end-user training and documentation, through use of help desk incident tracking software.
- maintain knowledge, skills and abilities through professional development.

Job Openings Projected through 2022
Lane County openings - 21 annually
Statewide openings - 187 annually

Wages
Lane County average hourly - $22.49; average annual - $46,778
Oregon average hourly - $22.76; average annual - $47,342

Costs (Estimate based on 2014-15 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees	$10,467
Books and Materials	$2,121
CIT Lab Fees	$208
Total Estimate	$12,796

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 recommended for second-year students in the degree program 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 Gerry Meenaghan, Cooperative Education Coordinator, Bldg. 19, Rm. 231A, 541.463.5883.

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.

Recommended Program Prerequisites

- take foundational writing courses to be prepared for WR 121 or WR 121_H Academic Writing or WR 121_H 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

Course Requirements

1. All courses must be completed for a letter grade of C-, except for the Communications, Writing, Math, PE/Health, and Human Relations requirements and CS 206 which may be completed with a "Pass" grade.

2. Prerequisites are required for some courses. See course descriptions.
3. Programming sequences may not be offered Winter/Spring term. Speak to an Academic Advisor if you are interested in a specific sequence.
4. Choice of recommended communication courses:

COMM 111 Fundamentals of Public Speaking	4
COMM 130 Business and Professional Speech	4
COMM 218 Interpersonal Communication	4
COMM 219 Small Group Discussion	4
COMM 220 Communications, Gender, and Culture.	4

5. 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. Note that some elective courses may require additional prerequisites: consult the course catalog for prerequisites. Pathways certificates are available in some elective clusters.

First Year	**Fall**
CIS 100 Computing Careers Exploration	2
CIS 140W Intro to Operating Systems: Windows Clients	4
MTH 095 Intermediate Algebra or higher	5
Choice of:	3-4
CIS 195 Web Authoring 1	
CS 160 Orientation to Computer Science	
CIS 125M Software Tools: Mobile Development	
CIS 140U Introduction to Unix/Linux	
Total Credits	14-15
	Winter
CS 179 Introduction to Computer Networks	4
ET 287 Microcomputer Hardware	4
Choice of:	4
WR 121 Introduction to Academic Writing	
WR 121_H Introduction to Academic Writing	
Choice of:	4
CS 133JS Beginning Programming: Javascript	
CS 133N Beginning Programming: C#	
CS 133P Beginning Programming: Python	
CS 161C+ Computer Science 1	
CS 161J Computer Science 1	
Total Credits	16
	Spring
CG 203 Human Relations at Work	3
CIS 125D Software Tools 1: Databases	4
Communication Requirement (see list above)	4
CS 206 Co-op Ed: Computer Information Technology Seminar	2
Choice of:	4
CS 133N Beginning Programming: C#	
CS 133P Beginning Programming: Python	
CS 161C+ Computer Science 1	
CS 161J Computer Science 1	
CS 162C+ Computer Science 2	
CS 162J Computer Science 2	
CS 233N Intermediate Programming: C#	
CS 233P Intermediate Programming: Python	
Total Credits	17

Second Year	**Fall**
CIS 244 Systems Analysis	4
WR 227 Technical Writing	4
Choice of one course from Elective Cluster 1	3-4
Choice of one course from Elective Cluster 2	4
Total Credits	15-16
	Winter
CIS 225 Computer End-User Support	4
Choice of one course from Elective Cluster 1	4
Choice of one course from Elective Cluster 2	4
PE/Health requirement	3
Total Credits	15
	Spring
CIS 245 Project Management	4
CS 280IS Coop Ed: Computer Information Systems	3
Choice of one course from Elective Cluster 1	4
Choice of one course from Elective Cluster 2	4
Total Credits	15

Elective Clusters

Network: Windows Cluster

CS 240W Advanced Windows: Server Management	4
CS 284 Network Security Fundamentals	4
CS 188 Wireless Networking	4

Network: Unix/Linux cluster

CIS 140U Introduction to Unix/Linux	4
CS 240U Advanced Unix/Linux: Server Management	4
CS 279 Essentials of Network Administration	4

Health Informatics cluster

HI 101 Intro of Health Care and Public Health in the U.S.	3
HI 107 Working with Health IT Systems	4
Choice of:	4
HI 111 Selecting, Implementing and Customizing Electronic Health Record Systems	
HI 208 Installation and Maintenance of Health IT Systems	

Geographic Inf+ormation Systems cluster

GIS 245 Maps and COMMatial Information	4
GIS 246 Introduction to GIS	4
CIS 247 Information Analysis and Visualization	4

Database cluster

CS 275 Database Program Development	4
CS 276 Advanced SQL	4
Choice of:	4
CIS 247 Information Analysis and Visualization	
BT 123 MS EXCEL for Business	
BT 223 MS EXCEL for Business-Expert	

Web Programming: PHP cluster

ART 288 Introduction to Web Design	3
CS 295P Web Development 1: PHP	4
CS 296P Web Development 2: PHP	4

Web Programming: C#/.NET cluster

CS 295N Web Development 1: ACOMM.NET	4
CS 296N Web Development 2: ACOMM.NET	4
CS 246 System Design	4

Programming cluster

Choice of:	4
CS 161C+ Computer Science 1	
CS 161J Computer Science 1	
CS 133N Beginning Programming: C#	
Choice of:	4
CS 162C+ Computer Science 1	
CS 162J Computer Science 1	
CS 233N Intermediate Programming: C#	
CS 260 Data Structures	4

Mobile Application cluster

CIS 125M Mobile Development 1	4
CS 235AM Intermediate Mobile Application Development:Android	4
CS 235IM Intermediate Mobile Application Development: IOS	4

Accounting cluster

BT 165 Intro to Accounting Principles	4
BT 163 QuickBooks	4
BT 276 Automated Accounting Information	4

Application skills cluster

BT 120 MS Word for Business	4
BT 123 MS EXCEL for Business	4
Choice of:	3-4
BT 220 MS WORD for Business-Expert	
BT 223 MS EXCEL for Business-Expert	

Computer Information Systems - Health Informatics

Offered by the Computer Information Technology Department, 541.463.5221

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:

- demonstrate an understanding of, and the ability to work with, a health care information system at all stages of the information system life cycle.
- demonstrate a working knowledge of medical terminology and the health care delivery system.
- create, manage and query database systems and/or reporting systems.
- demonstrate an understanding of networking concepts with specific knowledge of issues and standards relevant to the health care industry.
- have the ability to work effectively as a member of a team in a health care setting.
- use project management tools and techniques to effectively manage work projects.
- effectively research and analyze health informatics topics and issues and produce useful information.
- connect to professional organizations and engage in experiential learning in order to enhance and build skills and knowledge important for career development.
- demonstrate an understanding of systems analysis and programming concepts and how they are used to solve problems
- use library resources for research and written tasks.
- perform advanced mathematical functions as necessary to prepare health data reports.

Job Openings Projected through 2022

Lane County openings - 35 annually
Statewide openings 309 annually

Wages

Lane County average hourly - $22.49; average annual - $46,778
Oregon average hourly - $22.76; average annual - $47,342

Costs (Estimate based on 2014-15 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees	$10,428
Books and Materials	$2,251
Laptop Computer	$1,500
CIT Lab Fees	$208
Total Estimate	$14,387

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 computer 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 Gerry Meenaghan, Cooperative Education Coordinator, Bldg. 19, Rm. 231A, 541.463.5883.

Program Lead Kathy Walters, Bldg. 19, Rm. 147, 541.463.5734, *waltersk@lanecc.edu*

Course Requirements

1. All courses must be completed for a letter grade of C-, except for the Communications, Writing, Math, and Human Relations requirements which may be completed with a "Pass" grade.
2. Prerequisites are required for some courses. See course descriptions.
3. CS280H Coop Ed is recommended as a directed elective. Multiple terms of CS 280H may be taken to apply to multiple directed electives.
4. Programming sequences (Python, C#, etc.) may not be offered Winter/Spring term. Speak to an Academic Advisor if you are interested in a specific sequence.

Two-Year Associate of Applied Science Degree

First Year	**Fall**
CIS 100 Computing Careers Exploration	2
MTH 095 Intermediate Algebra	5
HI 101 Intro to Health Care and Public Health in the US	4
Choice of:	4
CIS 140W Intro to Operating Systems: Windows Clients	
CIS 140U Introduction to Unix/Linux	
Total Credits	15
	Winter
HO 100 Medical Terminology	3
Choice of:	4
WR 121 Introduction to Academic Writing	
WR 121_H Introduction to Academic Writing	
CS 179 Introduction to Computer Networks	4
Choice of:	4
CS 133P Beginning Programming: Python	
CS 133N Beginning Programming: C#	
CS 161C+ Computer Science 1	
Total Credits	15
	Spring
CIS 125D Software Tools 1: Databases	4
Choice of:	4
CS 233P Intermediate Programming: Python	
CS 233N Intermediate Programming: C#	
CS 162C+ Computer Science 2	
Human Relations requirement	3-4
CG 203 Human Relations at Work recommended	
Directed Elective	4
Total Credits	15-16

Second Year	**Fall**
CIS 244 Systems Analysis	4
HI 107 Working with Health IT Systems	4
Choice of recommended Communication classes:	4
COMM 111 Fundamentals of Public Speaking	
COMM 219 Small Group Discussion	
COMM 220 Communication, Gender, and Culture or other Arts and Letters requirement	
Directed Elective	3-4
Total Credits	15-16
	Winter
CS 275 Database Systems and Modeling	4
HI 208 Installation and Maintenance of Health IT Systems	4
HI 111 Selecting, Implementing, and Customizing Electronic Health Record System	4
BA 211 Financial Accounting	4
Total Credits	16
	Spring
CS 276 Database SQL Programming	4
HI 209 Networking and Health Information Exchange	3
CIS 245 Project Management	4
Choice of:	3-4
CS280HI Coop Ed: Health Informatics	
Directed Elective	
Total Credits	14-15

Directed Electives - consider prerequisites when choosing:

BA 224 Human Resource Management	3
BI 102I Human Biology	4
BI 121 Intro to Human Anatomy and Physiology 1	4
BI 122 Intro to Human Anatomy and Physiology 2	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 125M Software Tools: Mobile Development	4
CIS 140U Introduction to Unix/Linux (if not taken an alternative to CIS 140)	4
CIS 140W Intro to Operating Systems: Windows Clients (if not taken as an alternative to CIS 140U)	4
CIS 225 Computer End User Support	4
CS 133JS Beg. Programming: JavaScript	4
CS 133N Beginning Programming: C#	4
CS 133P Beginning Programming: Python	4
CS 188 Wireless Networking	4
CS 233N Intermediate Programming: C#	
CS 233P Intermediate Programming: Python	
CS235AM Intermediate Mobile Application Development: Android	4
CS235IM Intermediate Mobile Application Development: IOS	4
CS 240U Advanced Unix/Linux: Server Management	4
CS 240W Advanced Windows: Server Management	4
CS 279 Essentials of Network Administration	4
CS 284 Network Security	4
CS 288 Network Monitoring and Management	4
CS 289 Cisco Router and Switch Administration	4
CS 280HI Coop Ed: Health Informatics	3-12
ET 287 Microcomputer Hardware	4
HIM 120 Intro to Health Information Management	3
HIM 200 Healthcare Statistics	3
HIM 230 Quality Improvement in Healthcare	3
HIM 241 HIM Apps 1	4
HIM 242 HIM Apps 2	4
HO 150 Human Body Systems 1	3
HO 152 Human Body Systems 2	3
HO 220 Legal and Ethical Aspects	3
WR 122 Composition: Argument, Style and Research	4
WR 122_H Composition: Argument, Style and Research	4
WR 227 Technical Writing	4

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.
- translate database related problems into SQL logic and expressions.
- 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 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.

Course Requirements

1. All courses must be completed with a letter grade of "C-" or better.
2. Prerequisites are required for some courses. See course descriptions.

Certificate Lead Mari Good, Bldg. 19, Room 158, 541.463.5838, *goodm@lanecc.edu*

Courses Required	**Credits**
CIS 125D Software Tools 1: Databases	4
CIS 244 Systems Analysis	4
CS 275 Database Systems and Modeling	4
CS 276 Database SQL Programming	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 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.

Course Requirements

1. Prerequisites are required for some courses. See course descriptions.
2. All courses must be completed with a letter grade of "C-" or better.

Certificate Lead Kathy Walters, Bldg. 19, Rm. 147, 541.463.5734, *waltersk@lanecc.edu*

Courses Required

HI 101 Intro to Health Care and Public Health in the U.S.	4
HI 107 Working with Health IT Systems	4
HI 111 Selecting, Implementing, and Customizing Electronic Health Records Systems	4
HI 208 Installation and Maintenance of Health IT Systems	4
HI 209 Networking and Health Information Exchange	3
Total Credits	19

Computer Network Operations

Offered by the Computer Information Technology Department, 541.463.5221

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.
- demonstrate an understanding of network security issues and tools.
- demonstrate an understanding of the basic features of wireless networking.
- develop skills for doing network performance monitoring
- 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 2022
Lane County openings - 45 annually
Statewide openings - 462 annually

Wages
Lane County average hourly - $26.13; average annual - $54,350
Oregon average hourly - $27.97; average annual - $58,185

Costs (Estimate based on 2014-15 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees	$10,982
Books and Materials	$1,831
CIT Lab Fees	$208
Total Estimate	$13,021

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 recommended for second-year students in the degree program. Please contact the Program Lead for options and system requirements.

Prerequisites Students must qualify for WR 121 or WR 121_H and MTH 082, either by placement testing or completing prerequisite courses. Each student should consult with a counselor or advisor to plan a program of study.

Computer Network Security The curriculum for the Computer Network Operations degree and the Computer Network Security Certificate may be taken during the same two-year period to qualify for both completion documents. This is accomplished by taking the certificate's security courses as the degree's second-year electives. 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 Gerry Meenaghan, Cooperative Education Coordinator, Bldg. 19, Rm. 231A, 541.463.5883.

Program Lead Joseph Colton, Bldg. 19, Room 144, 541.463.5249, *coltonj@lanecc.edu*

Note Students completing the curriculum for the Computer Network Operations degree also qualify for the Computer Network Monitoring and Management certificate. In addition, students taking CS 188 Wireless Networking, CS 285 Operating System Hardening, and CS 286 Firewalls and VPNs as their second-year electives would qualify for the Computer Network Security certificate.

Course Requirements

1. Prerequisites are required for some courses. See course descriptions.
2. All courses must be completed for a letter grade of C-, except for the Communications, Writing, Math, PE/Health, and Human Relations requirements and CS 206 which may be completed with a "Pass" grade.
3. CS/CIS/GIS Electives must be completed with a letter grade.
4. 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. For more information about electives, students should contact the program lead to help determine what elective courses best fit their goals.
5. List of approved communication electives:
    COMM 100 Basic Communication
    COMM 111 Fundamentals of Public Speaking
    COMM 112 Persuasive Speech
    COMM 130 Business and Professional Speech
    COMM 219 Small Group Discussion
    COMM 220 Communications, Gender, and Culture
6. 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, 260 Discrete Mathematics 1, 2, 3.

7. Instead of CS 133P and CS 233P the student may take any two required programming courses that are a sequence from one of the other CIT degree programs.

Two-Year Associate of Applied Science Degree

First Year	**Fall**
CIS 100 Computing Careers Exploration	2
CS 179 Introduction to Computer Networks	4
CIS 140W Intro to Operating Systems: Windows Clients	4
MTH 082 Math for Network Operations	4
Total Credits	14
	Winter
CS 206 Co-op Ed: Computer Information Technology Seminar	2
PE/Health Requirement	3
CIS 125D Software Tools 1: Databases	4
CS 279 Essentials of Network Administration	4
ET 287 Microcomputer Hardware	4
Total Credits	17
	Spring
CS133P Beginning Programming: Python	4
CS 240W Advanced Windows: Server Management	4
Human relations requirement	3-4
CG 203 Human Relations at Work recommended	
Choice of:	4
WR 121 Introduction to Academic Writing	
WR 121_H Introduction to Academic Writing	
Total Credits	15-16

Second Year	**Fall**
CS233P Intermediate Programming: Python	4
CIS 140U Introduction to Unix/Linux	4
CS 284 Network Security Fundamentals	4
CS/CIS/GIS Elective	4
Total Credits	16
	Winter
CS 289 Cisco Router and Switch Administration	4
Choice of:	4
CIS 225 Computer End-User Support	
CIS 245 Project Management	
CS 240U Advanced Unix/Linux: Server Management	4
CS/CIS/GIS Elective	4
Total Credits	16
	Spring
CS 280CN Coop Ed: Computer Network Operations	3
CS 288 Network Monitoring and Management	4
WR 227 Technical Writing	4
CS/CIS/GIS Electives or Communication Elective	4
Total Credits	15

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
- 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 Joseph Colton, Bldg. 19, Room 144, 541.463.5249, *coltonj@lanecc.edu*

Course Requirements All courses must be completed with a letter grade of "C-" or better.

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, 541.463.5249, *coltonj@lanecc.edu*

Course Requirements All courses must be completed with a letter grade of "C-" or better.

Courses required	**Credits**
CS 188 Wireless Networking	4
CS 284 Network Security Fundamentals	4
CS 285 Operating System Hardening	4
CS 286 Firewalls and VPNs	4
Total Credits	16

Computer Programming

Offered by the Computer Information Technology Department, 541.463.5221

Two-Year Associate of Applied Science Degree, Computer Programming

Career Pathway Certificate of Completion, Mobile Application Development

(See also Career Pathway Certificate of Completion, Database Specialist and Geographic Information Systems and One-year Certificate, Web Design)

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 2022
Lane County openings - 11 annually
Statewide openings - 170 annually

Wages
Lane County average hourly - $30.32; average annual - $63,074
Oregon average hourly - $38.86; average annual - $80,820

Costs (Estimate based on 2014-15 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees	$11,188
Books and Materials	$2,008
CIT Lab Fees	$208
Total Estimate	$13,404

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 recommended for second-year students in the degree program. Please contact the Program Lead for options and system requirements.

Course Requirements

1. Prerequisites are required for some courses. See course descriptions.
2. All courses must be completed for a letter grade of C-, except for the Communications, Writing, Math, PE/Health, and Human Relations requirements and CS 206 which may be completed with a "Pass" grade.
3. For more specific information about the Fall/Winter/Spring CS/CIS/GIS elective sequences please contact the Program Lead 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.
4. List of approved communication electives:
    COMM100 Basic Communication
    COMM 111 Fundamentals of Public Speaking
    COMM 112 Persuasive Speech
    COMM 130 Business and Professional Speech
    COMM 219 Small Group Discussion
    COMM220 Communications, Gender, and Culture

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.

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 Gerry Meenaghan, Cooperative Education Coordinator, Bldg. 19, Rm. 231A, 541.463.5883.

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 or WR 121_H, 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	2
CS 133N Beginning Programming: C#	4
MTH 095 Intermediate Algebra or higher	5
CIS 195 Web Authoring 1	3
PE/Health requirement	3
Total Credits	17
	Winter
ART 288 Introduction to Web Design	3
CS 233N Intermediate Programming C#	4
Choice of:	4
WR 121 Introduction to Academic Writing	
WR 121_H Introduction to Academic Writing	
CG 203 Human Relations at Work	3
CS 133JS Beginning Programming JavaScript	4
Total Credits	18
	Spring
Communications Elective (see approved list above)	4
CIS 125D Software Tools 1: Databases	4
CS 234N Advanced Programming C#	4
CS/CIS/GIS Elective (see Course Requirements, above)	4
Total Credits	16
Second Year	**Fall**
CIS 244 Systems Analysis	4
CS 295N Web Development 1: ASP.NET	4
WR 227 Technical Writing	4
CS 206 Co-op Ed: Computer Information Technology Seminar	2
CS/CIS/GIS Elective (see Course Requirements, above)	4
Total Credits	18

	Winter
CS 275 Database Systems and Modeling	4
CS 296N Web Development 2: ASP.NET	4
CS 246 System Design	4
CS/CIS/GIS Elective (see Course Requirements, above)	4
Total Credits	16

	Spring
CS 276 Database SQL Programming	4
CS 297 Programming Capstone	5
CS 280PR Co-op Ed: Programming (second-year standing required)	3
CS/CIS/GIS Elective (see Course Requirements, above)	4
Total Credits	16

Mobile Application Development

Career Pathway Certificate of Completion

Purpose To prepare technicians for entry-level positions as mobile application programmers.

Learning Outcomes The certificate recipient will:

- design, implement, test, debug and document mobile application based computer programs using a variety of current tools and technologies.
- understand the use of mobile application 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*

Course Requirements

1. Prerequisites are required for some courses. See course descriptions.
2. All courses must be completed with a letter grade of "C-" or better.

Courses required	**Credits**
CS235AM Intermediate Mobile Application Development: Android	4
CS235IM Intermediate Mobile Application Development: IOS	4
Choice of: CS 133N Beginning Programming: C# and CS 233N Intermediate Programming C# or CS161J Computer Science 1 and CS162J Computer Science 2	8
Total Credits	16

Computer Simulation and Game Development

Offered by the Computer Information Technology Department, 541.463.5221

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.

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 2022
Lane County openings - 11 annually
Statewide openings - 170 annually

Wages
Lane County average hourly - $30.32; average annual - $63,074
Oregon average hourly - $38.86; average annual - $80,820

Costs (Estimate based on 2014-15 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees	$10,776
Books and Materials	$1,427
Laptop Computer	$1,500
CIT Lab Fees	$208
Total Estimate	$13,911

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 Program Lead 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 Gerry Meenaghan, Cooperative Education Coordinator, Bldg. 19, Rm. 231A, 541.463.5883.

Program Lead Jim Bailey, Bldg. 19, Rm. 146, 541.463.3148, *baileyj@lanecc.edu*

Course Requirements

1. Prerequisites are required for some courses. See course descriptions.
2. All courses must be completed for a letter grade of C-, except for the Communications, Writing, Math, PE/Health, and Human Relations requirements and CS 206 which may be completed with a "Pass" grade.

Computer Simulation and Game Development

Two-Year Associate of Applied Science Degree

Prerequisites Students must qualify for MTH 231, CS 161C+ and WR 121 or WR 121_H either by placement testing or completing prerequisite courses.

Students should consult with a counselor or advisor to plan a program of study and choose speech and elective courses.

First Year	Fall
CIS 100 Computing Careers Exploration	2
CIS 125G Software Tools 1: Game Development	4
CS 161C+ Computer Science 1	4
Elective	4
Total Credits	14

	Winter
FA 221 Computer Animation	4
CS 162C+ Computer Science 2	4
ART 245 Drawing for Media	4
Elective	4
Total Credits	16

	Spring
CIS 126 Game Design: Principles and Practice	4
CS 260 Data Structures 1	4
FA 222 Computer Animation 2	4
PE/Health requirement	3
Elective	3
Total Credits	18

Second Year	Fall
CIS 135G Software Tools 2: Game Development	4
CS 234G Advanced C++ Programming	4
MTH 231 Discrete Math 1	4
Choice of:	4
WR 121 Introduction to Academic Writing	
WR 121_H Introduction to Academic Writing	
CS 206 Co-op Ed: Computer Information Technology Seminar	2
Total Credits	18

	Winter
CS 246 System Design	4
Communication requirement	4
WR 227 Technical Writing	4
MTH 232 Discrete Math 2	4
Total Credits	16

	Spring
CS 297 Programming Capstone	5
CS 280SGD Co-op Ed: Simulation and Game Development (second-year standing required)	3
Human Relations requirement	3-4
CG 203 Human Relations at Work (Recommended)	
MTH 260 Linear Algebra	4
Total Credits	15-16

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.

Certificate Lead Jim Bailey, Bldg. 19, Rm. 146, 541.463.3148, *baileyj@lanecc.edu*

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.

Courses Required	
CS 161C+ Computer Science 1	4
CS 162C+ Computer Science 2	4
CS 260 Data Structures	4
CS 234G Advanced C++ Programming	4
Total Credits	16

Construction Technology

Offered by the Advanced Technology Division, 541.463.5380

Two-Year Associate of Applied Science Degree

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 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.
- 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 2022

Lane County openings - 29 annually

Statewide openings - 409 annually

Wages

Lane County average hourly - $21.85; average annual - $45,452

Oregon average hourly - $21.25; average annual - $44,192

Costs (Estimate based on 2014-15 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees	$9,846
Other Course/Program Costs	$284
Tools	$200
Books and supplies	$1,629
Total Estimate	$11,959

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 RD 087 AND EL115, OR prior college. A high school diploma or equivalent is recommended for all applicants to this program.

Admission Information See *lanecc.edu/advtech/at/admission-information* 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 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. 19, Rm. 231D, 541.463.3158, *clemonsm@lanecc.edu*

Course Requirements

1. All CST and MTH courses must be taken for a letter grade, not P/NP, and must be passed with a "C-" or better to fulfill program requirements.
2. WR and PE/Health requirement must be passed with a Pass or "C-" or better to fulfill program requirements.
3. See course descriptions for prerequisite and corequisite information.
4. For choices in Foundational Skills and Discipline Studies, see AAS degree description.

Two-Year Associate of Applied Science Degree

First Year	**Fall**
CIS 101 Computer Fundamentals	3
CST 110 Blueprint Reading 1	3
CST 111 Construction Orientation and Environment	2
CST 118 Building Construction	5
MTH 085 Applied Geometry for Technicians or higher mathematics	4
Total Credits	17

	Winter
CST 118 Building Construction	5
CST 122 Construction Codes	2
CST 211 Blueprint Reading 2	3
PE/Health requirement	3
Choice of:	4
WR 121 Introduction to Academic Writing	
WR 121_H Introduction to Academic Writing	
Total Credits	17

	Spring
CST 116 Construction Estimating	4
CST 118 Building Construction	5
CST 119 Building Construction Surveying	3
Human Relations requirement	3
Total Credits	15

Second Year	**Fall**
Arts and Letters requirement	3
CST 280 Co-op Ed: Construction	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	3
DRF 208 Residential Buildings	4
Science or Computer Science course	3
Directed electives (see list below)	6
Total Credits	16

	Spring
CST 280 Co-op Ed: Construction	3
Directed electives (see list below)	9
Choice of:	3
Arts/Letters, Science or Computer Science course, or Social Science/Human Relations requirement	
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	
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 075 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 the Department of Labor's O*Net website for a profile of this occupation:

Construction Laborers
onetonline.org/link/summary/47-2061.00
Or check on these O*Net Related Occupations:
Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters *onetonline.org/link/summary/47-3011.00*

How many students completed this certificate?
Seven students completed this certificate.

What was the on-time graduation rate for these students?
Lane Community College is committed to protecting student privacy and does not publish this rate for ten or fewer graduates.

Job Openings Projected through 2022
Lane County: 27 positions
Statewide: 404 positions

What wages are forecast for this occupation?
Lane County average hourly - $17.71; average annual - $36,828
Oregon average hourly - $17.63; average annual - $36,676

How much will the program cost?
(Estimates based on 2013-14 data for full-time students. Students attending part-time will incur additional term fees. Consult Lane's website for updated tuition and fees.)

Resident tuition and fees	$5,189
Books, supplies, program costs	$1,265
On-Campus room and board	Not offered
Total Estimate	$6,454

What's included?
Program Costs: *lanecc.edu/advtech/program-costs*

What is the median loan debt incurred by students who completed the program in 2014?

Federal Loans	$6,634
Institutional financing	$107

(For privacy reasons under FERPA, loan information is not disclosed for programs with fewer than ten graduates.)

Course Requirements

1. All CST and MTH courses must be taken for a letter grade, not P/NP, and must be passed with a "C-" or better to fulfill program requirements.
2. WR and PE/Health requirement must be passed with a "C-" or better to fulfill program requirements.
3. See course descriptions for prerequisite information.

	Fall
CIS 101 Computer Fundamentals	3
CST 110 Blueprint Reading 1	3
CST 111 Construction Orientation and Environment	2
CST 118 Building Construction	5
MTH 085 Applied Geometry for Technicians or higher mathematics	4
Total Credits	17

	Winter
CST 118 Building Construction	5
CST 122 Construction Codes	2
CST 211 Blueprint Reading 2	3
PE/Health elective	3
Choice of: WR 121 Introduction to Academic Writing WR 121_H Introduction to Academic Writing	4
Total Credits	17

	Spring
CST 116 Construction Estimating	4
CST 118 Building Construction	5
CST 119 Building Construction Surveying	3
Human Relations requirement	3
Total Credits	15

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 develop 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.
- complete 8000 hours State of Oregon-approved on-the-job-training.

Costs (Estimate based on 2014-15 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 2022
Lane County openings - 29 annually
Statewide openings - 409 annually

Wages
Lane County average hourly - $21.85; average annual - $45,452
Oregon average hourly - $21.25; average annual - $44,192

HVAC

Job Openings Projected through 2022
Lane County openings – 10 annually
Statewide openings - 116 annually

Wages
Lane County average hourly - $26.05; average annual - $54,180
Oregon average hourly - $24.07; average annual - $50,065

Plumber

Job Openings Projected through 2022
Lane County openings - 8 annually
Statewide openings - 106 annually

Wages
Lane County average hourly - $29.32; average annual - $60,977
Oregon average hourly - $33.16; average annual - $68,979

Sheet Metal

Job Openings Projected through 2022
Lane County openings - 7 annually
Statewide openings - 105 annually

Wages
Lane County average hourly - $19.70; average annual - $40,986
Oregon average hourly - $24.42; average annual - $50,780

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, laddered 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

Course Requirements

1. WR 115W and MTH 060 must be completed with a grade of “Pass” or “C-“ or better.
2. See AAS degree page for choices in Arts and Letters, Human Relations, and Science/Math/Computer Science.

Requirements	**Credits**
1. General Education	
WR 115W Intro to College Writing:	
Workplace Emphasis or higher-level writing	3
MTH 060 Beginning Algebra or higher-level math	4
PE/Health Requirement	3
Arts and Letters requirement	3
Human Relations requirement	3
Science/Math/Computer Science requirement	3
Choice of: Arts and Letters requirement Human Relations/Social Science requirement Science/Math/Computer Science requirement	3
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 credits)	
(Choice of one of the following trades)	
Carpenter (36 credits)	
APR 115 Carpenter Skill Fundamentals	3
APR 116 Carpentry Framing Fundamentals	3
APR 117 Carpentry Framing and Introduction to Concrete	3
APR 118 Carpentry Framing and Finishing	3
APR 119 Carpentry Commercial Plans and Exterior Finish	3
APR 120 Carpentry Interior Finish	3
APR 201 Carpentry Basic Rigging and Practices	3
APR 202 Carpentry Concrete Practices	3
APR 203 Carpentry Forms and Tilt-up Panels	3
APR 204 Carpentry Advanced Layout and Building Systems	3
APR 205 Carpentry Advanced Planning and Management	3
APR 206 Carpentry Equipment and Site Layout	3
HVAC Technician/Installer (41-44 credits)	
APR 101A Trade Skills Fundamentals	4
APR 172 Sheet Metal/HVAC Blueprint Reading	3
APR 210 HVAC Systems 1	4
APR 211 HVAC Systems 2	4
APR 212 HVAC Systems 3	4
APR 220 Electrical Code and Exam Prep	6-9
APR 190 Electrical Theory 1	4
APR 191 Electrical Theory 2	4
APR 285 Motors 1	4
APR 286 Motors 2	4
Plumber (36-39 credits)	
APR 160 Plumbing Skill Fundamentals	4
APR 161 Plumbing Materials and Fixtures	4
APR 162 Plumbing Basic Waste Water Systems	2
APR 163 Plumbing Calculations and Print Reading	4
APR 164 Plumbing Basic Installation 1	4
APR 165 Plumbing Basic Installation 2	2
APR 260 Plumbing Water Supply Systems	4
APR 261 Pipe Sizing and Systems	4
APR 262 Plumbing Advanced Waste Systems	2
APR 263 Plumbing Code and Test Prep	6-9
Sheet Metal Worker (46 credits)	
APR 101A Trade Skills Fundamentals	4
APR 170 Introduction to Sheet Metal Apprenticeship	4
APR 171 Sheet Metal Basic Layout	4
APR 172 Sheet Metal/HVAC Blueprint Reading	3
APR 270 Architectural Sheet Metal	4
APR 271 Sheet Metal Building Codes and Installation	4
APR 272 Sheet Metal Duct Design	4
APR 273 General Sheet Metal Fabrication	4
APR 274 Sheet Metal Shop Fabrication	4
APR 275 Sheet Metal Project Supervision	4
MTH 085 Applied Geometry for Technicians	4
APR 185 Shielded Metal Arc Welding 1	1
APR 186 Wire Drive Welding 1	2
4. Program Electives to complete 90 credits for degree:	**1-11**
APR 101 Trade Skills Fundamentals	4
APR 106 Plumbing Trade Introduction	2
BA 101 Introduction to Business	4
CS 120 Concepts of Computing	4
CST 110 Blueprint Reading	3
CST 111 Construction Orientation and Environment	2
CST 116 Construction Estimating	4
CST 118 Building Construction	1-5
CST 119 Building Construction Surveying	3
DRF 167 CAD 1	4
HE 152 Drugs, Society and Behavior	3
HE 252 First Aid	3
MTH 085 Applied Geometry for Technicians	4
MTH 095 Intermediate Algebra or higher	5

NRG 103 Sustainability in the Built Environment	3
NRG 121 Air Conditioning System Analysis	3
NRG 124 Energy Efficient Methods	4
NRG 158 Thermal Design and Installation 1	4
NRG 159 Thermal Design and Installation 2	4
RTEC 105 Introduction to Advanced Technology	3
WATR 101 Introduction to Water Resources	3
WLD 121 Shielded Metal Arc Welding 1	1-4
WLD 122 Shielded Metal Arc Welding 2	1-4
WLD 139 Welding Lab	1-6
WLD 142 Pipe Welding Lab: Carbon Steel	3
WLD 143 Wire Drive Welding 1	1-4

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
• complete core-related training	36-46
Total Credits	45-55

Core Related Training requirements (Choice of one of the following trades)

Carpenter (36 Credits)

APR 115 Carpenter Skill Fundamentals	3
APR 116 Carpentry Framing Fundamentals	3
APR 117 Carpentry Framing and Introduction to Concrete	3
APR 118 Carpentry Framing and Finishing	3
APR 119 Carpentry Commercial Plans and Exterior Finish	3
APR 120 Carpentry Interior Finish	3
APR 201 Carpentry Basic Rigging and Practices	3
APR 202 Carpentry Concrete Practices	3
APR 203 Carpentry Forms and Tilt-up Panels	3
APR 204 Carpentry Advanced Layout and Building Systems	3
APR 205 Carpentry Advanced Planning and Management	3
APR 206 Carpentry Equipment and Site Layout	3

HVAC Technician/Installer (41-44 credits)

APR 101A Trade Skills Fundamentals	4
APR 172 Sheet Metal/HVAC Blueprint Reading	3
APR 210 HVAC Systems 1	4
APR 211 HVAC Systems 2	4
APR 212 HVAC Systems 3	4
APR 220 Electrical Code and Exam Prep	6-9
APR 190 Electrical Theory 1	4
APR 191 Electrical Theory 2	4
APR 285 Motors 1	4
APR 286 Motors 2	4

Plumber (36-39 credits)

APR 160 Plumbing Skill Fundamentals	4
APR 161 Plumbing Materials and Fixtures	4
APR 162 Plumbing Basic Waste Water Systems	2
APR 163 Plumbing Calculations and Print Reading	4
APR 164 Plumbing Basic Installation 1	4
APR 165 Plumbing Basic Installation 2	2
APR 260 Plumbing Water Supply Systems	4
APR 261 Pipe Sizing and Systems	4
APR 262 Plumbing Advanced Waste Systems	2
APR 263 Plumbing Code and Test Prep	6-9

Sheet Metal Worker (46 credits)

APR 101A Trade Skills Fundamentals	4
APR 170 Introduction to Sheet Metal Apprenticeship	4
APR 171 Sheet Metal Basic Layout	4
APR 172 Sheet Metal/HVAC Blueprint Reading	3
APR 270 Architectural Sheet Metal	4
APR 271 Sheet Metal Building Codes and Installation	4
APR 272 Sheet Metal Duct Design	4
APR 273 General Sheet Metal Fabrication	4
APR 274 Sheet Metal Shop Fabrication	4
APR 275 Sheet Metal Project Supervision	4
MTH 085 Applied Geometry for Technicians	4
APR 185 Shielded Metal Arc Welding 1	1
APR 186 Wire Drive Welding 1	2

Culinary Arts and Food Service Management

Offered by Culinary Arts and Hospitality Management, 541.463.3503

Two-Year Associate of Applied Science Degree

Dual-Degree Option for Culinary Arts/Hospitality Management

Career Pathway Certificate of Completion, Baking and Pastry

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 and Wages Projected through 2022:

Chefs and Head Cooks
Statewide openings - 42 annually
Lane County openings - 18 annually

Food Service Managers
Statewide openings - 98 annually
Lane County openings - 9 annually

Production Bakers
Statewide openings - 90 annually
Lane County openings - 12 annually

Restaurant Cooks
Statewide openings - 544 annually
Lane County openings - 48 annually

Supervisors and Managers of Food Preparation and Serving Workers
Statewide openings - 438 annually
Lane County openings - 43 annually

Wages

Chefs and Head Cooks
Lane County average hourly - $18. 35, average annual $ $38,168
Oregon average hourly $ $18.80 , annual average annual - $ $39,120

Food Service Managers
Lane County average hourly - $ 24.99, average annual $51,979.
Oregon average hourly - $ 22.62, average annual - $47, 048

Production Bakers
Lane County average hourly - $ 12.17, average annual -$ 25,306
Oregon average hourly $13. 95, average annual - $ 29,009

Restaurant Cooks
Lane County average hourly - $11. 05 average annual-$ 22,995
Oregon average hourly $ 11.17, average annual - $ 23,240

Supervisors and Managers of Food Preparation and Serving Workers
Lane County average hourly - $14. 32, average annual $ 29,775
Oregon average hourly $14. 12, average annual - $29, 368

Costs (Estimate based on 2014-15 tuition and fees for 2-yr program)

Resident Tuition and Student Fees	$ 10,812
Differential Fees*	$ 2,675
Other Course/Program Costs	$ 350
Culinary Books and supplies	$ 783
Culinary Fees	$ 2,300
Total	$ 16,920

*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. Other NRAEF Certificate examinations for various courses are available.

Prerequisites Students can enter the Culinary Arts program in fall, winter, or spring terms. Fall term entry is highly recommended in order to begin the foundational Cooking Theories course sequence. 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 Contact Wendy Milbrat, Project Specialist, 541.463.3503, *milbratw@lanecc.edu* or email: *CulinaryHospPrograms@lanecc.edu*

Students interested in transferring to a four-year institution should:

1. Substitute WR 121 or WR 121_H classes for WR 115W.
2. Add MTH 111 and MTH 112.
3. Add a speech course.
4. Add WR 122 and WR 123.

Course Requirements

1. Prerequisites are required for some courses. See course descriptions.
2. All courses required for this program must be taken for a letter grade, not P/NP, and must be passed with a grade of C- or better.
3. To reach 2nd year status, the following classes must be taken and passed with a min grade of C-: CA 160, CA 162, CA 163, CA 200, HRTM 105, and HRTM 106. CA 200 may be taken during Winter or Spring of first year or Fall of 2nd year.
3. Directed electives may be met in any term of the two-year program. Check current class schedule for which Directed Electives are offered in a given term.
4. Students may take Cooperative Education any term approved by the coordinator.

Two-Year Associate of Applied Science Degree

General Education Requirements (may be completed prior to program entry or any program term)

Writing requirement	3
Mathematics (MTH 025 or higher)	3
HE 252 First Aid	3
Arts and Letters requirement	3
Science/Math/Computer Science	3
Human Relations Requirement	3
Choice of: Social Science or Science/Math/Computer Science or Arts and Letters requirement	3
Total Credits	21

First Year	**Fall**
CA 160 Introduction to Cooking Theories 1	6
CA 175 Foodservice Sanitation and Safety	2
Choice of General Education Requirement	3
HRTM 105 Restaurant Operations	3
FN 105 Nutrition for Foodservice Professionals	3
Total Credits	17

	Winter
CA 162 Introduction to Cooking Theories 2	7
HRTM 220 Sustainability in the Hospitality Industry	2
Choice of General Education Requirement	3
HRTM 106 Introduction to Hospitality Management	3
Directed Electives	0-3
Total Credits	15-18

	Spring
CA 163 Introduction to Cooking Theories 3	7
Choice of General Education Requirement	3
CA 200 Menu Management	3
Directed Electives	0-4
Total Credits	13-17

	Summer
CA 280 Co-op Ed: Culinary Arts, Second Year	7
Total Credits	7

Second Year	**Fall**
CA 292 Advanced Cooking Theories 1	7
HRTM 265 Hospitality Financials 1	3
HRTM 260 Hospitality Human Resources and Supervision	3
Choice of General Education Requirement	3
Directed Electives	0-3
Total Credits	16-19

	Winter
CA 176 Concepts of (if approved to delete) Flavor	3
CA 293 Advanced Cooking Theories 2	7
HRTM 275 Hospitality Financials 2	3
Choice of General Education Requirement	3
Directed Electives	0-3
Total Credits	16-19

	Spring
CA 294 Advanced Cooking Theories 3	7
HRTM 290 Hospitality Leadership	3
Directed Electives	4
Choice of General Education Requirement	3
Total Credits	17

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**	22
CA 121 Culinary Adventuring: The Composition of Cake	2
CA 123 Culinary Adventuring: International Baking and Pastry	22
CA 130 Culinary Adventuring: Oregon Wine Country	2
CA 159 Kitchen Fundamentals	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
CS 120 Concepts of Computing: Information Processing	4
ES 102 Contemporary Racial and Ethnic Issues	4
FN 110 Personal Nutrition	3
FN 235 Managing Food and Nutrition Services	3
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
HRTM 109 Principles of Meeting and Convention Management	3
HRTM 110 Hospitality Sales and Marketing	3
HRTM 140 Hospitality Law and Security	3
HRTM 209 Advanced Principles of Meeting and Convention Management	3
HRTM 205 Managing the Restaurant Operation	3
HRTM 230 Hotel Operations 1	3
HRTM 231 Hotel Operations 2	3
HRTM 286 Bar and Beverage Management	3
HST 104, 105, or 106 World History	4
PHL 201 Ethics	4
COMM 115 Introduction to Intercultural Communications	4
COMM 130 Business and Professional Speech	4
SUST 101 Introduction to Sustainability	3
SUST 120 Gardening and Sustainable Food Systems	3
Choice of: WR 121 Introduction to Academic Writing WR 121_H Introduction to Academic Writing	4

* MS Powerpoint and Excel are used extensively. If students are not familiar with these software programs they are encouraged to take these classes prior to or during their first year in the program.

Dual-Degree Option for Culinary Arts Students/Graduates

Advising Plan for Culinary Arts AAS students

(Completing a second Two-Year Associate of Applied Science degree)

Students who have obtained the 2 yr. AAS degree in Culinary Arts during the 2012-13 academic year or later may also complete the 2 yr AAS degree in Hospitality Management to enhance their industry skill set and education. This list shows the nine classes (24 credits) needed to complete this degree.

Note This dual degree is not an option for Hospitality Management graduates seeking a Culinary Arts 2 yr. AAS degree.

	Fall
HRTM 225 Banquet Operations	2
HRTM 230 Hotel Operations 1	3
HRTM 286 Bar and Beverage Management	3
Total Credits	8

	Winter
HRTM 110 Hospitality Sales and Marketing	3
HRTM 225 Banquet Operations	2
HRTM 231 Hotel Operations 2	3
HRTM 140 Hospitality Law and Security	3
Total Credits	11

	Spring
HRTM 225 Banquet Operations	2
HRTM 205 Managing the Restaurant Operation	3
Total Credits	5

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*	$753

*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.

Career Pathway Certificate of Completion	**Fall**
CA 120 Culinary Adventuring: Seasonal Baking and Pastry**	2
CA 163A Beginning Baking and Pastry	3
CA 175 Foodservice Safety and Sanitation	2
Total Credits	7
	Winter
CA 123 Culinary Adventuring: International Baking and Pastry	2
CA 163B Intermediate Baking and Pastry	3
MTH 025 Basic Mathematics Applications or higher	3
Total Credits	8
	Spring
CA 120 Culinary Adventuring: Seasonal Baking and Pastry**	2
CA 121 Culinary Adventuring: Composition of Cake	2
CA 163C Advanced Baking and Pastry*	3
Total Credits	7
	Summer
CA 120 Culinary Adventuring: Seasonal Baking and Pastry**	(2)

** Choose only 2 terms of CA 120 Seasonal Baking and Pastry for Certificate of Completion

Dental Assisting

Offered by Health Professions Division, 541.463.5617

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 dental receptionist-bookkeeper.

Learning Outcomes The graduate will:

- demonstrate knowledge and skills required to systematically collect diagnostic data.
- 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 using multiple systems.
- 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.
- demonstrate knowledge and skills needed to maintain a professional working environment.
- demonstrate knowledge and skills required to provide an aseptic environment and prevent disease transmission.

Gainful Employment Disclosure

Standard Occupational Classification: 31-9091.00

Go to the Department of Labor's O*Net website for a profile of this occupation:

Dental Assistants
onetonline.org/link/summary/31-9091.00
Or check on these O*Net Related Occupations:
Surgical Technologists *onetonline.org/link/summary/29-2055.00*

How many students completed the Dental Assisting 1-year Certificate in 2013-14?

In academic year 2013-14, 25 students completed this certificate.

What was the on-time graduation rate for these students?

Of students who completed this certificate in the 2013-14 academic year, 0% completed on time. This program and profession includes possible exposure to blood borne pathogens and infectious diseases. Training is included to minimize risk to students and patients.

The federally required method for calculating this rate assumes students will enroll full-time, declare a major immediately, and enroll in it continuously until certificate completion. In reality, many community college students attend part-time, explore several majors, stop out for a term or more, change majors, or brush-up academic skills to be better prepared for college level courses, affecting this narrowly defined on-time graduation rate. This program and profession includes possible exposure to blood borne pathogens and infectious diseases. Training is included to minimize risk to students and patients. Following completion of pre-requisites and admission to the program, all 26 graduates completed the program in 3 terms.

How many jobs are forecast in this occupation between 2012-22?

Lane County: 21; Statewide: 235
Openings are estimated to increase by 25%.

What wages are forecast for this occupation?

Lane County hourly average - $19.18; annual average - $39,884
Oregon hourly average - $19.07; annual average - $39,672

How much will the program cost?

(Estimates based on 2014-15 data for full-time students. Students attending part-time will incur additional term fees. Consult Lane's website for updated tuition and fees.)

Resident tuition and fees	$5,296
Differential Fees*	$979
Books	$600
Required Program Costs (uniforms, National and State Board exams, etc.)	$4,402
On-Campus room and board	Not offered
Total Estimate	$11,277

*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/esfs/credit-fees-and-expenses*

What is the median loan debt incurred by students who completed the program in 2014?

Federal Loans	$15,229
Institutional financing	$0

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 800.621.8099 or 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/dental-assisting*

For assistance with meeting application or program requirements, contact Counseling and Advising in Building 30 Room 101 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. Evidence of a physical examination (within the previous nine months), immunizations, eye exam, drug screen and background checkmust be submitted prior to the start of the program.

This program and profession includes possible exposure to blood borne pathogens and infectious diseases. Training is included to minimize risk to students and patients.

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.

Course Requirements

1. All pre-req courses must be taken for a letter grade and passed with a "C" or higher (C- not accepted).75% class average or higher.
2. All DA courses must be passed with a class average of 75% or higher to remain in the program. (Courses with both a didactic and laboratory/clinical component must have a minimum grade of 75% in BOTH components to qualify as passing.)
3. Human Relations prerequisites may be selected from the list below.
4. HO 150 and 152 are offered Online. Anatomy and Physiology courses (combination of BI 231,232 and 233) can be substituted for the HO 150/152 combo.
5. For DA courses, students must be enrolled in the Dental Assisting program.
6. Some courses have prerequisites. See course descriptions.

Cooperative Education (Co-op) Co-op is a required class for students enrolled in the Dental Assisting Program. Through Co-op, students spend approximately 24 hours a week during spring term working in at least two different professional dental offices. Co-op field experience offers students the opportunity to gain skills, connect theory and practice, and make contacts for job openings. The required co-op seminar provides instruction on skills and documents needed to find employment. Contact Leslie Greer, Dental Assisting Program and Co-op Coordinator, Bldg. 5, Rm. 231, 541.463.5638, *greerl@lanecc.edu*

Program Coordinator Leslie Greer 541.463.5638

Prerequisites*	**Credits**
Mathematics proficiency, Choice of:	4
MTH 52 Math for Physical Science or higher Credit by Exam for MTH 052, or higher or transcripted credits: AP (Calculus), or CLEP (College Algebra, or any Calculus, or Statistics), or IB (Mathematics, or Math Studies, or Further Mathematics, or Statistics)	
Human Relations requirement from accepted DA list	3-4
Choice of:	4
WR 121 Introduction to Academic Writing WR 121_H Introduction to Academic Writing	
Choice of:	3-4
CIS 101 Computer Fundamentals or CS 120 Concepts of Computing: Information Processing	
HO 100 Medical Terminology 1	3
HO 110 Health Office Procedures	3
HO 150 Human Body Systems 1 **	3
HO 152 Human Body Systems 2 **	3
Total Prerequisite Credits	26-28

* Successful completion of the prerequisite courses fulfills the requirements for the Basic Healthcare Certificate. (The Human Relations course is not included in the Basic Healthcare Certificate)

** Anatomy & Physiology courses (combination of BI 231,232,233) can be substituted for the HO 150/152 combo

Human Relations Courses accepted for the DA program requirement: (the courses below focus skills needed to be successful in small group communications)

CG 144 Introduction to Assertive Behavior
CG 203 Human Relations at Work
COMM 219 Small Group Communications
COMM 218 Interpersonal Communication
SOC 204 Introduction to Sociology
SOC 206 Institutions and Social Change
SOC 210 Marriage, Family and Intimate Relations

Students must be admitted to the Dental Assisting program to enroll in the following Dental Assisting courses:

One-Year Certificate of Completion

	Fall
DA 107 Dental Health Education 1	1
DA 115 Dental Anatomy	3
DA 192 Dental Materials 1	3
DA 195 Chairside Procedures	6
DA 210 Dental Radiology	4
Total Credits	17

	Winter
DA 108 Dental Health Education 2	3
DA 193 Dental Materials 2	3
DA 194 Dental Office Procedures	3
DA 196 Chairside Procedures 2	7
DA 211 Dental Radiology 2	3
Total Credits	19

	Spring
DA 102 Advanced Clinical Experiences	3
DA 103 Dentistry, Law and Ethics	2
DA 206 Co-op Ed Seminar: Dental Assisting	1
DA 280 Co-op Ed: Dental Assisting	6
Total Credits	12

Dental Hygiene

Offered by Health Professions Division, 541.463.5617

Two-Year Associate of Applied Science Degree

Purpose To Prepare dental hygiene students for entry into the dental hygiene profession as a licensed clinician 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 application of principles of ethical reasoning, decision making and professional responsibility in the provision and support of evidence based oral health care services, research, patient care and practice management.
- demonstrate critical thinking, problem solving and self-evaluation in the provision of comprehensive care, selection of patient management strategies,and professional competence development.
- 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.
- access, critically appraise, apply and communicate evidence based practices for all periodontal classifications within diverse patient populations.

- demonstrate interpersonal communication and collaborative skills to effectively interact with diverse population groups, health care providers, dental professionals and community groups.
- demonstrate application of refined instrumentation skills for periodontal, restorative and therapeutic interventions for individuals at all stages of life.
- demonstrate application of behavioral sciences and patient centered approaches to promote, improve and maintain oral health.
- use assessment, planning, implementation and evaluation for the provision of dental hygiene services and disease prevention strategies within diverse, multicultural and special needs populations, and community groups.
- demonstrate use of mathematical and statistical concepts in the application of clinical and preventive dental care strategies.
- use appropriate library and information resources to research professional issues, develop community health program planning and to support lifelong learning.

Experiential Learning Membership in the Student American Dental Hygienists' Association (SADHA) at the state and national level. Professional Meetings and Continuing education offerings. Assessment, planning, implementation and evaluation of community health programs. Off campus experiences with community clinics, school-based screenings, presentations for health fairs, classrooms, inter-professional collaboration and visitations to specialty and general dental offices/clinics.

Job Openings Projected through 2022

Mid-Willamette -Mid-Coast region openings - 15 annually
Statewide openings - 148 annually

What was the on-time graduation rate for these students?
Class of 2014, 100% completed program

Wages
Lane County average hourly - $40.55; average annual - $84,334
Oregon average hourly - $38.83; average annual - $80,770

Lane Site Program Costs (Estimate based on 2014-15 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Institution Fees	$8,019
Differential Fees*	$10,647
Program Fees and Instrument Issue	$6,300
Books, Testing and Licensure	$6,700
Total Estimate	$31,666

LCSC Program site has a full cost model and is estimated at $53,500

*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 $2,400 are paid beginning in January of the second year of the curriculum. The program requires a criminal background check and licensure applications after graduation require a national 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.

Licensing or Other Certification: National Dental Hygiene Board and the Western Regional Examining Boards for Local Anesthesia, Restorative Dentistry and Clinical Dental Hygiene. Graduates eligible for licensure application throughout the U.S. and an Expanded Practice Certification in Oregon.

Admission Information See *lanecc.edu/hp/dental/dental-hygiene* for additional information and the admission packet.

Prerequisites In order to apply for entry, all applicants must complete the following minimum courses with a letter grade of C or better. Some of these courses have prerequisites. (See course descriptions.) 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	4
CH 112 Chemistry for Health Occupations	4
Choice of:	4
WR 121 Introduction to Academic Writing	
WR 121_H Introduction to Academic Writing	
BI 231 Human Anatomy and Physiology 1	4
BI 232 Human Anatomy and Physiology 2	4
BI233 Human Anatomy and Physiology 3	4
FN 225 Nutrition	4
Choice of:	3
SOC 204 Introduction to Sociology	
SOC 205 Social Stratification and Systems	
SOC 206 Institutions and Social Change	
MTH 052 Math for Introductory Physical Sciences or higher mathematics	4
Choice of:	4
COMM 100 Basic Communication	
COMM 111 Fundamentals of Public Speaking	
Choice of:	4
PSY 201, 202, 203 General Psychology	
Choice of:	4
WR123 Composition: Research	
WR227 Technical Writing	
Total Credits	47

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 Dental Hygiene Co-op Coordinator, Bldg. 19, Rm. 263A, 541.463.5616, *hagans@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 *DHProgram@lanecc.edu*

Course Requirements

1. Students must be accepted in Dental Hygiene Program to enroll in DH courses.
2. All courses listed below must be passed with a letter grade of "C" or better.

First Year	**Fall**
DH 107 Dental Infection Control and Safety	1
DH 113 Dental Anatomy and Histology	2
DH 118A Clinical Dental Hygiene 1	4
DH 118B Clinical Dental Hygiene 1 Lab	2
DH 228 Oral Biology 1	4
DH 243A Oral Roentgenology 1	2
DH 243B Oral Roentgenology 1 Lab	1
Total Credits	16
	Winter
DH 119A Clinical Dental Hygiene 2	3
DH 119B Clinical Dental Hygiene 2 Lab	4
DH 139 Special Needs Patient and Dental Emergencies	2
DH 229 Oral Pathology for the Dental Hygienist	3
DH 244A Oral Roentgenology 2	1

DH 244B Oral Roentgenology 2 Lab	1
Total Credits	14
	Spring
DH 120A Clinical Dental Hygiene 3	3
DH 120B Clinical Dental Hygiene 3 Lab	4
DH 132 Dental Materials for the Dental Hygienist	2
DH 254 Pharmacology	3
Total Credits	12
	Summer
DH 280 Co-op Ed: Dental Hygiene optional	1-3
Second Year	**Fall**
DH 220A Clinical Dental Hygiene 4	2
DH 220B Clinical Dental Hygiene 4 Lab	5
DH 233 Anesthesia/Analgesic for Dental Hygiene Therapy	3
DH 270 Periodontology 1	2
DH 275 Restorative Dentistry I	3
Total Credits	15
	Winter
DH 221A Clinical Dental Hygiene 5	2
DH 221B Clinical Dental Hygiene 5: Lab	6
DH 237 Community Dental Health	3
DH 271 Periodontology 2	1
DH 276 Restorative Dentistry 2	3
Total Credits	15
	Spring
DH 222A Clinical Dental Hygiene 6	2
DH 222B Clinical Dental Hygiene 6: Lab	5
DH 234 Trends and Issues in Dental Hygiene	2
DH 238 Community Dental Health	1
DH277 Restorative Dentistry 3	1
BI234 Introductory Microbiology	4
Total Credits	15

Diesel 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 in occupations such as heavy equipment technician and highway truck technician. Possible job opportunities are available with truck fleets, logging fleets, heavy construction companies, OEM dealerships, road construction contractors, parts sales, general heavy equipment repair shops, agriculture fleets and repair shops.

Learning Outcomes The graduate will:

- access library, computing, and communications services and obtain information and data from regional and national networks.
- 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.
- use lab station simulators to diagnose and troubleshoot system components.
- demonstrate troubleshooting, maintenance and repair procedures including: testing, disassembly, failure analysis, assembly and operation using industry standard tooling and equipment, to diagnose diesel fuel systems and components found on highway trucks, off highway vehicles and stationary applications including construction equipment, agriculture equipment, marine applications, truck equipment and power generation.
- demonstrate troubleshooting, maintenance and repair procedures including: testing, disassembly, failure analysis, assembly and operation using industry standard tooling and equipment, to diagnose brake systems and components found on highway trucks, off highway vehicles and stationary applications including construction equipment, agriculture equipment, marine applications, truck equipment and power generation.
- demonstrate troubleshooting, maintenance and repair procedures including: testing, disassembly, failure analysis, assembly and operation using industry standard tooling and equipment, to diagnose power train systems and components found on highway trucks, off highway vehicles and stationary applications including construction equipment, agriculture equipment, marine applications, truck equipment and power generation.
- demonstrate troubleshooting, maintenance and repair procedures including: testing, disassembly, failure analysis, assembly and operation using industry standard tooling and equipment to diagnose hydraulic systems and components found on highway trucks, off highway vehicles and stationary hydraulic systems including construction equipment, agriculture equipment, marine applications, truck equipment and plant hydraulics.
- demonstrate troubleshooting, maintenance and repair procedures including: testing, disassembly, failure analysis, assembly and operation using industry standard tooling and equipment, to diagnose diesel electrical systems and components found on highway trucks, off highway vehicles and stationary applications including construction equipment, agriculture equipment, marine applications, truck equipment and power generation.
- demonstrate troubleshooting, maintenance and repair procedures including: testing, disassembly, failure analysis, assembly and operation using industry standard tooling and equipment, to diagnose diesel engines and components found on highway trucks, off highway vehicles and stationary applications including construction equipment, agriculture equipment, marine applications, truck equipment and power generation.

Job Openings Projected through 2022

Lane County openings - 12 annually

Statewide openings - 133 annually

Wages

Lane County average hourly - $22.75; average annual - $47,320

Oregon average hourly - $21.96; average annual - $45,676

Costs (Estimate based on 2013-14 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees	$11,414
Differential Fees*	$2,472
Other Course/Program Costs	$648
Tools	$400
Books and supplies	$2,795
Total Estimate	$17,729

*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 RD 087 and EL115 or prior college. A high school diploma or equivalent is recommended for all applicants to this program. 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* 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 Clemons, Diesel Technology Co-op Coordinator, Bldg. 19, Rm. 231D, 541.463.3158, *clemonsm@lanecc.edu*

Course Requirements

1. Prerequisites are required for some courses. See course descriptions.
2. All DS, MFG courses and MTH 060 must be completed with a letter grade of "C-" or better.
3. WR 115 and the PE/Health requirement must be completed with a Pass or "C-" grade or better.
4. Arts and Letters choices are listed on the Associate of Applied Science degree page.

Two-Year Associate of Applied Science Degree

First Year	**Fall**
DS 155 Heavy Equipment Hydraulics	12
MTH 060 Beginning Algebra or higher mathematics	4
Total Credits	16
	Winter
DS 154 Heavy Duty Braking Systems	12
WLD 121 Shielded Metal Arc Welding 1	4
PE/Health requirement	3
Total Credits	19
	Spring
DS 158 Heavy Equipment Chassis and Power Trains	12
Human Relations requirement	3
WR 115W Introduction to College Writing: Workplace Emphasis or higher writing	3
Total Credits	18

Second Year	**Fall**
DS 256 Diesel and Auxiliary Fuel Systems	12
MTH 085 Applied Geometry for Technicians or higher mathematics	4
Choice of: MFG 197 Manufacturing Technology WLD 122 Shielded Metal Arc Welding 2	3-4
Total Credits	19-20
	Winter
DS 257 Diesel Electrical Systems	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	12
Arts and Letters requirement	3
DS 280 Co-op Ed: Diesel (optional elective)	(3)
Total Credits	15-18

Two-Year Certificate of Completion

Gainful Employment Disclosure

Standard Occupational Classification: 49-3031.00

Go to the Department of Labor's O*Net website for a profile of this occupation:

Bus and Truck Mechanics and Diesel Engine Specialists *onetonline.org/link/summary/49-3031.00*
Or check on these O*Net Related Occupations:
Mobile Heavy Equipment Mechanics, Except Engines *onetonline.org/link/summary/49-3042.00*

How many students complete the Diesel Technology 2-year Certificate?

In academic year 2013-14, 11 students completed this certificate.

What was the on-time graduation rate for these students?

Of students who completed this certificate in the 2013-14 academic year, 27% completed on time.

The federally required method for calculating this rate assumes students will enroll full-time, declare a major immediately, and enroll in it continuously until certificate completion. In reality, many community college students attend part-time, explore several majors, stop for a term or more, change majors, or brush-up academic skills to be better prepared for college level courses, affecting this narrowly defined on-time graduation rate.

How many jobs are forecast in this occupation between 2010-22?

Lane County: 12 positions
Statewide: 133 positions

What wages are forecast for this occupation?

Lane County average hourly - $22.75; average annual - $47,320 Oregon average hourly - $21.96; average annual - $45,676

How much will the program cost?

(Estimates based on 2013-14 data for full-time students. Students attending part-time will incur additional term fees. Consult Lane's website for updated tuition and fees.)

Resident tuition and fees	$10,063
Differential Fees*	$2,436
Books, supplies, program costs	$3,440
On-Campus room and board	Not offered
Total Estimate	$15,939

*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.

What's included?

Program Costs: *lanecc.edu/advtech/program-costs*

What is the median loan debt incurred by students who completed the program in 2014?

Federal Loans	$21,587
Institutional financing	$0

For privacy reasons under FERPA, loan information is not disclosed for programs with fewer than ten graduates.

First Year	**Fall**
DS 155 Heavy Equipment Hydraulics	12
MTH 060 Beginning Algebra or MTH 085 Applied Geometry for Technicians or higher mathematics	4
Total Credits	16
	Winter
DS 154 Heavy Duty Braking Systems	12
WLD 121 Shielded Metal Arc Welding 1	4
Total Credits	16
	Spring
DS 158 Heavy Equipment Chassis and Power Trains	12
Human Relations requirement	3
WR 115W Introduction to College Writing: Workplace Emphasis or higher writing	3
Total Credits	18

Second Year	**Fall**
DS 256 Diesel and Auxiliary Fuel Systems	12
Choice of: MFG 197 Manufacturing Technology WLD 122 Shielded Metal Arc Welding 2	3-4
Total Credits	15-16

	Winter
DS 257 Diesel Electrical Systems	12
WLD 143 Wire Drive Welding 1	4
Total Credits	16
	Spring
DS 259 Diesel Engines and Engine Overhaul	12
PE/Health elective	3
Total Credits	15

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 2022

Lane County openings - 2 annually

Statewide openings - 39 annually

Wages

Lane County average hourly - $21.41 to $21.91; average annual - $44,533 to $ 45,583

Oregon average hourly - $24.04 to $25.16; average annual - $50,001 to $52,333

Costs (Estimate based on 2014-15 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees	$9,650
Other Course/Program Costs	$295
Tools	$25
Books and supplies	$2,671
Total Estimate	$12,641

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 RD 087 And EL115 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* 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 Marv Clemons, Drafting Co-op Coordinator, Bldg. 12, Rm. 120C, 541.463.3158, *clemonsm@lanecc.edu*

Course Requirements

1. Prerequisites are required for some courses. See course descriptions.
2. PE/Health requirement, WR 121, and DRF 206 must be completed with a grade of "Pass" or "C-" or better.
3. Human Relations and Health/PE choices are listed on the Associate of Applied Science degree page.
4. All DRF and CST courses must be completed with a letter grade, not P/NP, and must be passed with a grade of "C-" or better to satisfy program requirements.

Two-Year Associate of Applied Science Degree

First Year	**Fall**
DRF 142 Graphic Concepts	2
DRF 167 CAD 1	4
CS 120 Concepts of Computing: Information Processing or higher computer science	4
MTH 075 Applied Algebra for Technicians or higher mathematics	4
Total Credits	14
	Winter
CST 122 Construction Codes	2
DRF 168 CAD 2	4
DRF 208 Residential Buildings	4
Human Relations Requirement	3
MTH 085 Applied Geometry for Technicians or higher	4
Total Credits	17
	Spring
DRF 121 Mechanical Drafting	4
DRF 137 Architectural Drafting - Plans	4
DRF 206 Co-op Ed: Drafting Seminar	2
DRF 245 Solid Modeling	3
WR 121 Introduction to Academic Writing	4
Total Credits	17
Second Year	**Fall**
DRF 205 Drafting: Structures	4
DRF 210 Commercial Buildings	4
DRF 232 Mechanical Design	4
DS 155 Heavy Equipment Hydraulics	1
PE/Health requirement	3
Total Credits	16
	Winter
DRF 207 Drafting: Strength of Materials	4
DRF 220 Building Information Modeling	4
DRF 233 Geometric Tolerancing	4
WR 227 Technical Writing	4
Total Credits	16

	Spring
DRF 211 Sustainable Building Systems	4
DRF 234 Power Trains and Accessories Design	4
ET121 Shop Practices	2
ENGR 280D Co-op Ed: Drafting	3
Total Credits	13

One-Year Certificate of Completion

Gainful Employment Disclosure

Standard Occupational Classification: 17-3011.01

Go to the Department of Labor's O*Net website for a profile of this occupation:

Architectural Drafters
onetonline.org/link/summary/17-3011.01
Or check on these O*Net Related Occupations:
Civil Drafters *onetonline.org/link/summary/17-3011.02*
Mechanical Drafters *onetonline.org/link/summary/17-3013.00*

How many students complete the Drafting 1-year Certificate?
In academic year 2013-14, 15 students completed this certificate.

What was the on-time graduation rate for these students?
Of students who completed this certificate in the 2013-14 academic year, 7% completed on time.

The federally required method for calculating this rate assumes students will enroll full-time, declare a major immediately, and enroll in it continuously until certificate completion. In reality, many community college students attend part-time, explore several majors, stop out for a term or more, change majors, or brush-up academic skills to be better prepared for college level courses, affecting this narrowly defined on-time graduation rate.

How many jobs are forecast in this occupation between 2010-20?
Lane County: 9 positions
Statewide: 117 positions

What wages are forecast for this occupation?
Lane County average hourly - $21.41 to $21.91; average annual - $44,533 to $45,583
Oregon average hourly - $24.04 to $25.16; average annual - $50,001 to $52,333

How much will the program cost?
(Estimate based on 2014-15 tuition and fees. Consult Lane's website for updated tuition.)

Resident tuition and fees	$4,993
Books, supplies, program costs	$1,800
On-Campus room and board	Not offered
Total Estimate	$6,793

What's included?
Program Costs: *lanecc.edu/advtech/program-costs*

What is the median loan debt incurred by students who completed the program in 2014?

Federal Loans	0
Institutional financing	0

	Fall
DRF 142 Graphic Concepts	2
DRF 167 CAD 1	4
CS 120 Concepts of Computing: Information Processing or higher computer science course	4
MTH 075 Applied Algebra for Technicians or higher mathematics	4
Total Credits	14

	Winter
CST 122 Construction Codes	2
DRF 168 CAD 2	4
DRF 208 Residential Buildings	4
Human Relations Requirement	3
MTH 085 Applied Geometry for Technicians or higher mathematics	4
Total Credits	17

	Spring
DRF 121 Mechanical Drafting	4
DRF 137 Architectural Drafting-Plans	4
DRF 206 Co-op Ed: Drafting Seminar	2
DRF 245 Solid Modeling	3
WR 121 Introduction to Academic Writing or higher writing	4
Total Credits	17

Early Childhood Education

Offered by the Child and Family Education Department, 541.463.5517

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

Career Pathway Certificate of Completion, Early Childhood Teacher Aide 1

Purposes To prepare students for successful careers as early childhood professionals in a variety of settings: for-profit and not-for-profit child development centers, on-site child development 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.

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 child development 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 2014-15 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	$1800
Total Estimate	$10,600

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 2022
Lane County openings - 22 annually
Statewide openings - 234 annually

Wages
Lane County average hourly wage - $10.79; average annual - $22,442
Oregon average hourly wage- $10.92; average annual - $22,723

Teacher Assistant

Job Openings Projected through 2022
Lane County openings - 79 annually
Statewide openings - 624 annually

Wages
Lane County average annual - $28,957
Oregon average annual -$30,188

Preschool Teacher

Job Openings Projected through 2022
Lane County openings - 22 annually
Statewide openings - 251 annually

Wages
Lane County average hourly wage- $13.11; average annual - $27,279
Oregon average hourly wage- $13.11; average annual - $27,282

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/ece*.

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 a cooperative education learning site, 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 ED280EC for five credits to earn the AAS degree; they are eligible to enroll after they have reached sixth-term standing in the program.

Visit the web *lanecc.edu/cfe/ece* for detailed information about the program and lab school or contact Jean Bishop at *bishopj@lanecc.edu* or by calling 541-463-5287.

Course Requirements

1. All ANTH, CG, ECE, ED, FN, HDFS, and directed electives must be taken for a grade, not P/NP, and must be passed with a "C-" or better to fulfill program requirements.
2. MTH course must be taken for a grade, not P/NP.
3. See course descriptions for prerequisite information.
4. For choices in Foundational Skills and Discipline Studies, see AAS degree description.

Two-Year Associate of Applied Science Degree

First Year	**Fall**
ECE 105 Health and Safety Issues in Early Childhood Ed	2
ECE 110 Observing Young Children's Behavior	1
ECE 120 Intro to Early Childhood Education	2
ECE 130 Guidance of Young Children	3
ECE 140 Practicum 1-LCC Lab School	3
WR 115 Introduction to College Writing or other AAS equivalent	4
Total Credits	15

	Winter
HDFS 226 Child Development	3
ECE 140 Practicum 1-LCC Lab School	3
ECE 150 Creative Activities for Children	3
ECE 170 Infants and Toddlers Development	4
MTH 025 Basic Math Applications or higher level mathematics	3
Total Credits	16

	Spring
ECE 160 Exploring Early Childhood Curriculum	4
ECE 240 Practicum 2-LCC Lab School	4
FN 130 Family, Food and Nutrition	3
Choice of: ANTH 103 Cultural Anthropology CG 203 Human Relations at Work	3-4
Directed elective (refer to list below)	3
Total Credits	17-18

Second Year	**Fall**
ECE 210 Applying Early Childhood Curriculum	4
ECE 240 Practicum 2-LCC Lab School	4
Directed elective (refer to list below)	3
Science/ Math/ Computer Science requirement	4
Total Credits	15

	Winter
ECE 230 Family, School, Community Relations	3
ECE 240 Practicum 2-LCC Lab School	4
HDFS 227 Children Under Stress	3
Discipline Studies requirement, Choice of: Arts/Letters Social Science Science/Math/Computer Science	4
Total Credits	14

	Spring
ECE 250 Infant and Toddler Environments	3
ECE 260 Administration of Child Care Programs	3
ED 280EC Co-op Ed: Early Childhood Ed	5
Arts/Letters requirement	3
Choice of: Health requirement Physical Education Activity requirement	3
Total Credits	17

Directed electives may be selected from the following list; alternative courses must be approved by the ECE Program Coordinator in advance:

CG 144 Introduction to Assertive Behavior
CG 204 Eliminating Self-Defeating Behavior
ED 225 Creative Dance for Children
ENG 100 Children's Literature
HDFS 228 Young Children with Special Needs
ECE 253 Diversity Issues in Early Childhood Education

Early Childhood Education

One-Year Certificate of Completion

Purpose To prepare students for successful careers as early childhood professionals in a variety of settings: for-profit and not-for-profit child development centers, on-site child development 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.

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 the Department of Labor's O*Net website for a profile of this occupation:

Preschool Teachers, Except Special Education
onetonline.org/link/summary/25-2011.00

How many students completed the Early Childhood Education 1-year Certificate in 2013-14?
In academic year 2013-14, 22 students completed this certificate.

What was the on-time graduation rate for these students?
Of students who completed this certificate in the 2013-14 academic year, 5% completed on time.

The federally required method for calculating this rate assumes students will enroll full-time, declare a major immediately, and enroll in it continuously until certificate completion. In reality, many community college students attend part-time, explore several majors, stop out for a term or more, change majors, or brush-up academic skills to be better prepared for college level courses, affecting this narrowly defined on-time graduation rate.

Job Openings Projected through 2022
Lane County openings - 22 annually
Statewide openings - 251 annually

Wages
Lane County average hourly wage- $13.11;
average annual - $27,279
Oregon average hourly wage- $13.11;
average annual - $27,282

How much will the program cost?
(Estimates based on 2013-14 data for full-time students. Students attending part-time will incur additional term fees. Consult Lane's website for updated tuition and fees.)

Resident tuition and fees	$5,002
Books, supplies, program costs	$1,650
On-Campus room and board	Not offered
Total Estimate	$6,652

What's included?
Program Costs: *lanecc.edu/esfs/credit-fees-and-expenses*

What is the median loan debt incurred by students who completed the program in 2014?

Federal Loans	$10,151
Institutional financing	$13

Course Requirements

1. All ANTH, CG, ECE, ED, FN, HDFS, and directed electives must be taken for a grade, not P/NP, and must be passed with a "C-" or better to fulfill program requirements.
2. MTH course must be taken for a grade, not P/NP.
3. See course descriptions for prerequisite information.

	Fall
ECE 105 Health and Safety Issues in Early Childhood Ed	2
ECE 110 Observing Young Children's Behavior	1
ECE 120 Intro to Early Childhood Education	2
ECE 130 Child Care and Guidance	3
ECE 140 Practicum 1-LCC Lab School	3
WR 115 Introduction to College Writing or other AAS equivalent	4
Total Credits	15

	Winter
HDFS 226 Child Development	3
ECE 140 Practicum 1-LCC Lab School	3
ECE 150 Creative Activities for Children	3
ECE 170 Infants and Toddlers Development	4
MTH 025 Basic Math Applications or higher level mathematics	3
Total Credits	16

	Spring
ECE 160 Exploring Early Childhood Curriculum	4
ECE 240 Practicum 2-LCC Lab School	4
FN 130 Family, Food and Nutrition	3
Choice of: ANTH 103 Cultural Anthropology CG 203 Human Relations at Work	3-4
Directed elective (refer to list below)	3
Total Credits	17-18

Directed electives may be selected from the following list; alternate courses must be approved by the ECE Program Coordinator in advance:

CG 144 Introduction to Assertive Behavior
ECE 253 Diversity Issues in Early Childhood Education
ED 225 Creative Dance for Children
ENG 100 Children's Literature
HDFS 228 Young Children with Special Needs

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.
- 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.

Course Requirements All ECE courses must be taken for a grade, not P/NP, and must be passed with a "C-" or better to fulfill program requirements.

	Fall
ECE 120 Intro to Early Childhood Education	2
ECE 130 Guidance of Young Children	3
ECE 140 Practicum 1-LCC Lab School	3
ECE 150 Creative Activities for Children	3
ECE 160 Exploring Early Childhood Curriculum	4
ECE 210 Applying Early Childhood Curriculum	4
Total Credits	19

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.
- identify state rules and regulations which govern certification of infant and toddler centers.

Course Requirements All ECE and HDFS courses must be taken for a grade, not P/NP, and must be passed with a "C-" or better to fulfill program requirements.

	Fall
ECE 130 Guidance of Young Children	3
ECE 140 Practicum 1-LCC Lab School	3
ECE 170 Infants and Toddlers Development	4
ECE 250 Infant and Toddler Environments	3
HDFS 226 Child Development	3
Total Credits	16

Early Childhood Teacher Aide 1

Career Pathway Certificate of Completion

Purpose: Prepares student to work in an early childhood education setting as a Teacher Aide 1 as defined by the Oregon Child Care Division. Students completing this certificate will also achieve Level 7 in the Oregon Professional Development Registry for Early Childhood.

Learning Outcomes The graduate will:

- develop a creative Imagination to understand suitable art forms to offer young children.
- be able to explain theories of development relating to the early years.
- express and understand the use of guidance that supports moral autonomy in young children.
- identify state rules and regulations regarding health and safety which govern licensing of early childhood programs.
- demonstrate in a supervised lab school setting awareness of consistent, appropriate guidance and developmentally appropriate curriculum.

	Fall
ECE 105 - Health and Safety Issues in Early Childhood Education[2]	2
ECE 120 Introduction to Early Childhood Education[1]	2
ECE 130 Positive Guidance of Young Children	3
ECE 140 Practicum 1[1]	3
ECE 150 Creative Activities for Children[1]	3
HDFS 226 Child Development[1]	3
Total	16

(1) Articulated College Now class

(2) Must be taken at LCC (or a similar class at another college) for college credit.

Electrician Apprenticeship Technologies

Offered by the Advanced Technology Division, 541.463.5380

Associate of Applied Science Degree, Electrician Apprenticeship Technologies

Certificate of Completion, Electrician Apprenticeship Technologies

Certificate of Completion, Limited 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 2022
Lane County openings - 19 annually
Statewide openings - 266 annually

Wages
Lane County average hourly - $28.10; average annual - $58,448
Oregon average hourly - $33.24; average annual - $69,139

Costs (Estimate based on 2014-15 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, laddered 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

Learning Outcomes 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.

Course Requirements

1. Prerequisites are required for some courses. See course descriptions.
2. All courses must be completed with a letter grade of "C" or better.

AAS requirements	**Credits**
General Education	
WR 115W Intro to College Writing: Workplace Emphasis or higher-level writing	3
MTH 060 Beginning Algebra or higher-level math	4
PE/Health Requirement	3
Arts and Letters requirement	3
Human Relations requirement	3
Science/Math/Computer Science requirement	3
Choice of:	3
Arts and Letters requirement Human Relations/Social Science requirement Science/Math/Computer Science requirement	
Journeyman card from Oregon Bureau of Labor and Industries Apprenticeship and Training Division	22
Electrician Core-Related Training	
(Choice of one of the following trades)	21-48
Limited Maintenance Electrician (20-21 credits)	
APR 189 Shop Practices	2
APR 190 Electrical Theory 1	4
APR 191 Electrical Theory 2	4
APR 220 Electrical Code and Exam Prep or	2-3
APR 285 Motors 1	4
APR 286 Motors 2	4
Limited Energy Technician License B (26-27 credits)	
APR 101A Trade Skills Fundamentals	4
APR 140 Electrical System Installation Methods	4
APR 141 Limited Voltage Electrical Circuits	4
APR 142 Devices, Testing Equipment and Code	4
APR 143 Limited Voltage Cabling	4
APR 144 Communications	4
APR 220 Electrical Code and Exam Prep	2-3
Limited Energy Technician License A (38-39 credits)	
APR 101A Trade Skills Fundamentals	4
APR 140 Electrical System Installation Methods	4
APR 141 Limited Voltage Electrical Circuits	4
APR 142 Devices, Testing Equipment and Code	4
APR 143 Limited Voltage Cabling	4
APR 144 Communications	4
APR 220 Electrical Code and Exam Prep	2-3
APR 240 Audio and Intrusion Systems	4
APR 241 Fire Alarm Systems and Nurse Call	4
APR 242 Limited Voltage System Integration	4
Manufacturing Plant Electrician (38-41 credits)	
APR 185 Shielded Metal Arc Welding	2
APR 189 Shop Practices	2
APR 190 Electrical Theory 1	4
APR 191 Electrical Theory 2	4
APR 220 Electrical Code and Exam Prep	6-9
APR 285 Motors 1	4
APR 286 Motors 2	4
APR 290 Programmable Controllers 1	4
APR 291 Programmable Controllers 2	4
APR 292 Programmable Controllers 3	4
Inside Wire Electrician (45-48 credits)	
APR 130 Electrical Principles	5
APR 131 Electrical Principles/Residential Wiring	5
APR 132 Electrical Residential Wiring Lab	3
APR 133 Electrical Generators, Transformers, and Motors 1	5
APR 134 Electrical Generators, Transformers, and Motors 2	5
APR 135 Electrical Generators, Transformers, and Motors Lab	3
APR 220 Electrical Code and Exam Prep	6-9
APR 225 Electrical Motor Controls	5
APR 226 Electrical Grounding/Bonding and Blueprint Reading	5
APR 227 Electrical System Troubleshooting	3
Program Electives to complete 90 credits for degree:	**0-26**
APR 101 Trade Skills Fundamentals	4
APR 105 Residential Wiring	4
CS 120 Concepts of Computing	4
CST 110 Blueprint Reading	3
CST 111 Construction Orientation and Environment	2
CST 118 Building Construction	1-5
DRF 167 CAD 1	4
ET 129 Electrical Theory 1	4
ET 130 Electrical Theory 2	4
ET 234 Programmable Controllers 1	4
HE 152 Drugs, Society and Behavior	3
HE 252 First Aid	3
MTH 085 Applied Geometry for Technicians	4
MTH 111 College Algebra	5
MTH 112 Trigonometry	4
RTEC 105 Introduction to Advanced Technology	3
WLD 121 Shielded Metal Arc Welding 1	1-4

Electrician Apprenticeship Technologies

Certificate of Completion

Purpose Students may earn a Certificate of Completion in Electrician Apprenticeship Technologies by successfully completing core related training credits, and completing related instruction in communications, computation, and human relations.

Learning Outcomes The graduate will:

- apply theory to electrical wiring.
- repair and install electrical wire devices according to licensure regulations to meet National Electrical Code and Oregon Building Codes Division for Inside Electrician, Limited Energy Technician-License A, and/or Manufacturing Plant Electrician.

Course Requirements

1. Prerequisites are required for some courses. See course descriptions.
2. All courses must be completed with a letter grade of "C" or better.

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 (communication, computation, human relations)	9
• complete core-related training credits	38-48
Total Credits	47-57

Core Related Training requirements (Choice of one of the following trades)

Limited Energy Technician License A (38-39 credits)

APR 101A Trade Skills Fundamentals	4
APR 140 Electrical System Installation Methods	4
APR 141 Limited Voltage Electrical Circuits	4
APR 142 Devices, Testing Equipment and Code	4
APR 143 Limited Voltage Cabling	4
APR 144 Communications	4
APR 220 Electrical Code and Exam Prep	2-3
APR 240 Audio and Intrusion Systems	4
APR 241 Fire Alarm Systems and Nurse Call	4
APR 242 Limited Voltage System Integration	4

Manufacturing Plant Electrician (38-41 credits)

APR 185 Shielded Metal Arc Welding	2
APR 189 Shop Practices	2
APR 190 Electrical Theory 1	4
APR 191 Electrical Theory 2	4
APR 220 Electrical Code and Exam Prep	6-9
APR 285 Motors 1	4
APR 286 Motors 2	4
APR 290 Programmable Controllers 1	4
APR 291 Programmable Controllers 2	4
APR 292 Programmable Controllers 3	4

Inside Wire Electrician (45-48 credits)

APR 130 Electrical Principles	5
APR 131 Electrical Principles/Residential Wiring	5
APR 132 Electrical Residential Wiring Lab	3
APR 133 Electrical Generators, Transformers, and Motors 1	5
APR 134 Electrical Generators, Transformers, and Motors 2	5
APR 135 Electrical Generators, Transformers, and Motors Lab	3
APR 220 Electrical Code and Exam Prep	6-9
APR 225 Electrical Motor Controls	5
APR 226 Electrical Grounding/Bonding and Blueprint Reading	5
APR 227 Electrical System Troubleshooting	3

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.

Course Requirements

1. Prerequisites are required for some courses. See course descriptions.
2. All courses must be completed with a letter grade of "C"or better.

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 Journeyman card or BOLI-ATD Certificate of Completion
- complete core related training 20-27 credits

Core Related Training requirements (Choice of one of the following trades)

Limited Maintenance Electrician (20-21 credits)

APR 189 Shop Practices	2
APR 190 Electrical Theory 1	4
APR 191 Electrical Theory 2	4
APR 220 Electrical Code and Exam Prep	2-3
APR 285 Motors 1	4
APR 286 Motors 2	4

Limited Energy Technician License B (26-27credits)

APR 101A Trade Skills Fundamentals	4
APR 140 Electrical System Installation Methods	4
APR 141 Limited Voltage Electrical Circuits	4
APR 142 Devices, Testing Equipment and Code	4
APR 143 Limited Voltage Cabling	4
APR 144 Communications	4
APR 220 Electrical Code and Exam Prep	2-3

Electronic Technology

This program is being discontinued. Students currently enrolled in the program should contact Counseling and Advising at 541.463.3200 for information about completing core courses.

Energy Management Technician

Offered by the Institute for Sustainable Practices, 541.463.6160

Two-Year Associate of Applied Science Degree

Two-Year Associate of Applied Science Options Renewable Energy Technician Building Controls Technician

Purpose: Prepare students for careers in Energy Management, Building Controls Technology, and Renewable Energy

Learning Outcomes The graduate will:

- evaluate the energy use patterns for residential and commercial buildings and recommend energy efficiency measures and renewable energy solutions for high energy consuming buildings.
- understand the interaction between energy consuming building systems and make energy use reduction 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., excel and other computer software).
- develop and evaluate inferences and predictions that are based on collected data.
- read and analyze building blue prints including floor, mechanical, and electrical plans.
- interpret the concepts of a problem-solving task, and, using mathematics, translate concepts into energy related projects.

The graduate of the Renewable Energy Technician Option will also:

- appropriately size and recommend renewable energy system types for particular situations.
- understand and put into practice the installation protocol for Photovoltaic (PV) and Solar Domestic Hot Water (thermal) Systems.
- determine appropriate sites for solar systems using contemporary siting technology.
- understand local, state, and federal jurisdiction codes related to solar PV and Thermal installation.
- become familiar with the tools, technology, and software used in the design and installation of solar PV and Solar thermal systems.

The graduate of the Building Controls Technician Option will also:

- understand control system management software.
- diagnose and troubleshoot existing building control systems.
- write building control systems schemes
- become familiar with modules and electronics commonly used to implement building automation schemes.
- analyze a variety of commercial HVAC and lighting systems from a controls perspective.

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: $40,000-50,000 annually.
Renewable Energy Technician: $25,000-35,000 annually, depending on region
Building Controls Technician: $35,000-45,000

Costs (Estimate based on 2013-14 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees	$10,227
Other Course/Program Costs	$1,800
Estimated annual cost	$12,027

* Subject to change without notice.

Admission Information Roger Ebbage, Bldg. DCA, Rm. 404, *ebbager@lanecc.edu*, This is a limited enrollment program. Students must apply to the program by completing an Energy Program application. Applicants must have completed Math 065 or 070. Individual courses may be taken with Department Approval.

Program Accreditation Renewable Energy Program Accreditation awarded by the Interstate Renewable Energy Council, (IREC Standard 01022:2011 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 their degree requirements. Contact Marv Clemons, Cooperative Education, Bldg. 12, Rm. 120C, 541.463.3158.

Course Requirements

1. Prerequisites are required for some courses. See course descriptions.
2. Instructor permission is required for all Physics and NRG courses.
3. MTH 95 must be completed by the end of the first year.
4. Health/PE requirement, Directed Electives, WR 121, and WR 227 may be taken any term.

First Year	**Fall**
BT 123 MS Excel for Business	4
NRG 102 Blueprint Reading: Residential and Commercial	3
MTH 95 Intermediate Algebra	5
NRG 101 Introduction to Energy Management	3
PH 101 Fundamentals of Physics	4
Total Credits	19
	Winter
NRG 111 Residential/Light Commercial Energy Analysis	3
NRG 154 Alternative Energy Technologies	3
NRG 206A Co-op Ed: Energy Management Seminar 1	1
PH 102 Fundamentals of Physics	4
Choice of:	4
WR 121 Introduction to Academic Writing	
WR 121_H Introduction to Academic Writing	
Human Relations Requirement	3
Total Credits	18
	Spring
NRG 121 Air Conditioning Systems Analysis	3
NRG 124 Energy Efficient Methods	4
NRG 131 Lighting Fundamentals	3
WR 227 Technical Writing	4
Total Credits	14

Second Year	**Fall**
NRG 122 Commercial Air Conditioning Systems Analysis	3
NRG 132 Lighting Applications	3
NRG 141 Energy Investment Analysis	3
Directed elective	3
NRG 103 Sustainability in the Built Environment	3
Total Credits	15
	Winter
NRG 112 Commercial Energy Use Analysis	4
NRG 123 Energy Control Strategies	4
NRG 206B Co-op Ed: Energy Management Seminar 2	1
Choice of:	3
Physical Education Activity requirement	
Health requirement	
Directed elective	3
Total Credits	15
	Spring
NRG 113 Building Energy Simulations	4
NRG 142 Energy Accounting	3
NRG 280 Co-op Ed: Energy Management	6
Total Credits	13

Renewable Energy Technician Option

First Year	**Fall**
BT 123 MS Excel for Business	4
NRG 102 Blueprint Reading: Residential and Commercial	3
MTH 95 Intermediate Algebra	5
NRG 101 Introduction to Energy Management	3
PH 101 Fundamentals of Physics	4
Total Credits	19
	Winter
NRG 111 Residential/Light Commercial Energy Analysis	3
NRG 154 Alternative Energy Technologies	3
NRG 206 A Co-op Ed: Energy Management Seminar 1	1

PH 102 Fundamentals of Physics	4
Choice of:	4
WR 121 Introduction to Academic Writing	
WR 121_H Introduction to Academic Writing	
Human Relations Requirement	3
Total Credits	18

	Spring
NRG 121 Air Conditioning Systems Analysis	3
NRG 124 Energy Efficient Methods	4
NRG 131 Lighting Fundamentals	3
WR 227 Technical Writing	4
Total Credits	14

Second Year	Fall
ET 129 Electrical Theory 1	4
NRG 141 Energy Investment Analysis	3
NRG 155 Photovoltaic Design and Installation 1	4
NRG 157 Renewable Energy Systems	3
NRG 103 Sustainability in the Built Environment	3
Total Credits	17

	Winter
ET 130 Electrical Theory 2	4
NRG 156 Photovoltaic Design and Installation 2	4
NRG 158 Solar Thermal Design and Installation 1	4
NRG 206 B Co-op Ed: Energy Management Seminar 2	1
Choice of:	3
Physical Education Activity requirement	
Health requirement	
Total Credits	16

	Spring
NRG 159 Solar Thermal Design and Installation 2	4
NRG 162 Solar Photovoltaics Systems Design and Installation	4
NRG 280 Co-op Ed: Energy Management	6
Total Credits	14

Building Controls Technician Option

First Year	Fall
BT 123 MS Excel for Business	4
NRG 102 Blueprint Reading: Residential and Commercial	3
MTH 95 Intermediate Algebra	5
NRG 101 Introduction to Energy Management	3
PH 101 Fundamentals of Physics	4
Total Credits	19

	Winter
NRG 111 Residential/Light Commercial Energy Analysis	3
CS 133JS Beginning Programming: Javascript	4
CS 179 Introduction to Computer Networks	4
PH 102 Fundamentals of Physics	4
Choice of:	4
WR 121 Introduction to Academic Writing	
WR 121_H Introduction to Academic Writing	
Total Credits	19

	Spring
NRG 121 Air Conditioning Systems Analysis	3
NRG 124 Energy Efficient Methods	4
NRG 131 Lighting Fundamentals	3
WR 227 Technical Writing	4
NRG 103 Sustainability in the Built Environment	3
Total Credits	17

Second Year	Fall
NRG 141 Energy Investment Analysis	3
NRG 122 Commercial Air Conditioning Systems Analysis	3
NRG 185 Lighting Controls	4
CG 203 Human Relations	3
Total Credits	13

	Winter
NRG 112 Commercial Energy Use Analysis	4
NRG 206B Co-op Ed: Energy Management Seminar	1
NRG 123 Energy Control Strategies	4
NRG 182 Commercial HVAC Controls	4
NRG 181 Direct Digital Controls 1	4
Total Credits	17

	Spring
NRG 184 Direct Digital Controls 2	4
NRG 183 Controls Retuning and Troubleshooting	4
NRG 280 Co-op Ed: Energy Management	6
Physical Education or Health	3
Total Credits	17

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

Career Pathways Certificate, Group Exercise Instructor

Purpose The 2-year AAS and Fitness Specialist Level 2 Certificate is to prepare students for various careers in the fitness industry, including personal training, group exercise instruction, coaching, athletic training, 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 in order to create responsive, adaptive, and personalized exercise programs for a diverse clientele.
- understand, synthesize, and apply nationally recognized standards for fitness and health and be able to communicate the benefits and precautions associated with exercise.
- understand, analyze and apply behavior modification strategies to enhance exercise and health behavior change with clients.
- analyze and 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.
- evaluate, 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.

- analyze, synthesize, evaluate, and 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 and evaluate 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 and demonstrate 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.
- identify and communicate the unique benefits of group exercise in the health and fitness industry.

Job Openings Projected through 2020
Lane County openings – annually 12
Statewide openings – annually 93

Wages
Lane County average hourly - $17.10; average annual - $,35,559
Oregon average hourly - $19.47; average annual - $40,496

Costs (Estimate based on 2013-14 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees	$9,778
Books, supplies other program costs	$630
Total Estimate	$10,408

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 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/exercise-and-movement-science-program

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 after formerly being admitted into the program
- earn letter grade of C or higher (C- or less not accepted) and earned accumulative G.P.A. of 3.0 or higher in all program core courses (e.g. all EXMS and PE280 Co-op)
- 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 supervisors and coordinators
- successfully complete the comprehensive exit exam with a 70% or higher.

Course Requirements

1. All EXMS and PE 280 courses must be passed with a letter grade of C or better (C- or less; P/NP grades not accepted)
2. EXMS 194F is a co-requisite for first PE 280 course and a prerequisite for remaining PE 280 courses.

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 other areas (see Program Coordinator for approved list and requirements). 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: Chuck Fike, Bldg. 19, Rm. 231C, 541.463.5078, *fikec@lanecc.edu.*

Program Coordinator Call 541.463.5816.

Fitness Specialist Level 2

Two-Year Certificate of Completion

Gainful Employment Disclosure

Standard Occupational Classification: 39-9031.00

Go to the Department of Labor's O*Net website for a profile of this occupation:

Fitness Trainers and Aerobics Instructors *onetonline.org/link/summary/39-9031.00* Or check on these O*Net Related Occupations: Recreation Workers onetonline.org/link/summary/39-9032.00

How many students complete the 2-year Fitness Specialist Level 2 Certificate?
In academic year 2013-14, 15 students completed this certificate.

What was the on-time graduation rate for these students?
Of students who completed this certificate in the 2013-14 academic year, 27% completed on time.

The federally required method for calculating this rate assumes students will enroll full-time, declare a major immediately, and enroll in it continuously until certificate completion. In reality, many community college students attend part-time, explore several majors, stop out for a term or more, change majors, or brush-up academic skills to be better prepared for college level courses, affecting this narrowly defined on-time graduation rate.

Lane Community College is committed to protecting student privacy and does not publish this rate for fewer than ten graduates.

How many jobs are forecast in this occupation between 2010-20?
Lane County: 12 positions annually
Statewide: 93 positions annually

What wages are forecast for this occupation?
Lane County average hourly - $17.10; average annual - $35,559
Oregon average hourly - $19.47; average annual - $40,496

How much will the program cost?
(Estimates based on 2013-14 data for full-time students. Students attending part-time will incur additional term fees. Consult Lane's website for updated tuition and fees.)

Resident tuition and fees	$9,778
Books, supplies, program costs	$630
On-Campus room and board	Not offered
Total Estimate	$10,408

What's included?
Explanation of costs: *lanecc.edu/esfs/credit-fees-and-expenses*

What is the median loan debt incurred by students who completed the program in 2013?

Federal loans	$15,947
Private loans	Not available
Institutional financing	Not disclosed

*Course may have a co-requisite, a pre-requisite or testing may be required to enroll.

First Year	**Fall**
EXMS 194F Professional Activity: Fitness Assessment and Exercise Prescription: Field Tech.	3
EXMS 194S Professional Activity: Strength Training and Conditioning	2
HE 252 First Aid	3
Choice of:	1
183S Strength Training	
183U Strength Training	
Human Relations Requirement (see catalog)	3
PE 280* Co-Op Fitness	1
Total Credits	13

	Winter
EXMS 194T Professional Activity: Techniques of Group Exercise Leadership	2
EXMS 196 Applied Anatomy and Kinesiology	4
EXMS 240 Mental Dynamics of Exercise and Sport	3
PE 280F* Co-op Ed: Fitness	1
Choice of:	1
PE 183A Conditioning	
PE 183F Fitness Education: Introduction	
Choice of:	4
BI 101 General Biology	
BI 112 Cell Biology for Health Occupations	
Total Credits	15

	Spring
EXMS 135 Applied Exercise Physiology 1	3
EXMS 295 Injury Prevention	3
Choice of:	4
WR121 Introduction to Academic Writing	
WR 121_H Introduction to Academic Writing	
MTH 052* or higher	4
PE Activity Electives: see approved list	1
Choice of*:	2
PE 280F Co-op Ed: Fitness	
PE 280RT Co-op Ed: Corrective Fitness	
PE 280 Co-op Ed: Physical Education	
PE 280AR Co-op Ed: Aerobics	
PE 280W Co-op Ed: Wellness	
PE 280M Co-op Ed: Fitness Management	
PE 280AT Co-op Ed: Athletic Training	
Total Credits	17

Second Year	**Fall**
EXMS 120 Research Methods	2
EXMS 194L* Fitness Assessment and Ex Prescription: Lab Tech	3
FN 225 Nutrition	4
Directed Electives* (see catalog)	4
Choice of*:	2
PE 280F Co-op Ed: Fitness	
PE 280RT Co-op Ed: Corrective Fitness	
PE 280 Co-op Ed: Physical Education	
PE 280AR Co-op Ed: Aerobics	
PE 280W Co-op Ed: Wellness	
PE 280M Co-op Ed: Fitness Management	
PE 280AT Co-op Ed: Athletic Training	
Total Credits	15

	Winter
EXMS 294 Foundations of Fitness Management	3
EXMS 235* Exercise Physiology II	3
HE 255 Global Health	4
Choice of*:	4
WR 122 Composition: Argument, Style and Research	
WR122_H Composition Argument, Style and Research	
WR 123 Composition: Research	
WR 227 Technical Writing	
PE Activity Electives: see approved list	1
Choice of*:	2
PE 280F Co-op Ed: Fitness	
PE 280RT Co-op Ed: Corrective Fitness	
PE 280 Co-op Ed: Physical Education	
PE 280AR Co-op Ed: Aerobics	
PE 280W Co-op Ed: Wellness	
PE 280M Co-op Ed: Fitness Management	
PE 280AT Co-op Ed: Athletic Training	
Total Credits	17

	Spring
Choice of:	4
PSY 201 General Psychology	
PSY 215 Lifespan Development	
Choice of:	4
COMM 100 Basic Communication	
COMM 111 Fundamentals of Public Speaking	
COMM 112 Persuasive Speech	
Directed Electives* (see list below)	8
Choice of*:	2
PE 280F Co-op Ed: Fitness	
PE 280RT Co-op Ed: Corrective Fitness	
PE 280 Co-op Ed: Physical Education	
PE 280AR Co-op Ed: Aerobics	
PE 280W Co-op Ed: Wellness	
PE 280M Co-op Ed: Fitness Management	
PE 280AT Co-op Ed: Athletic Training	
Total Credits	18

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 Cardio Kickboxing
- 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: Returning
- PE 183J Jogging
- PE 183R Stability Ball Fitness
- PE 183S Strength Training
- PE 183U Strength Training for Women
- PE 183W Progressive Integrative 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.

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
- 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

CG100 College Success (3 credit)
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
COMM 105 Listening and Critical Thinking
COMM 111 Fundamentals of Public Speaking
COMM 112 Persuasive Speech
COMM 115 Introduction to Intercultural Communication
COMM 130 Business and Professional Speech
COMM 218 Interpersonal Communication
CS 120 Concepts of Computing: Information Processing
EL 115 Effective Learning
EL 115H Effective Learning: Health Science Majors
EXMS 214 Physiology of Exercise and Healthy Aging
EXMS 227 Introduction to Exercise Science
EXMS 275 Exercise and Sport Biomechanics
FN 110 Personal Nutrition
FN 190 Sports Nutrition
FN255 Medical Nutrition Therapy
FN 230 Family, Food, and Nutrition
FN 240 Intro to Nutrition and Metabolism
HE 125 Workplace Health and Safety
HE 152 Drugs, Society and Behavior
HE 209 Human Sexuality
HE 222 Consumer Health
HE 240 Holistic Health
HE 250 Personal Health
HE 251 Wilderness First Aid
HE 255 Global Health and Sustainability
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
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

Fitness Specialist Level 1

One-Year Certificate of Completion

Learning Outcomes The graduate will:

- demonstrate interpersonal skills in the areas of leadership, motivation, and communication.
- understand and apply basic exercise principles related to applied kinesiology, physiology, injury prevention, conditioning, resistance training, and functional training.
- understand and apply nationally recognized standards for fitness and overall health and describe the benefits and precautions associated with exercise.
- understand and apply basic behavior modification strategies to enhance exercise and health behavior change with clients.
- administer various basic fitness assessments including the measurement of cardiovascular endurance, body composition, flexibility, muscular strength and endurance in gym or health club settings.
- design and demonstrate safe and effective exercise programs for apparently healthy individuals and groups within current fitness industry standards and best practices.
- utilize appropriate library and information resources to apply current fitness industry research and support lifelong professional education.
- apply and interpret basic algebraic formulas to fitness assessment data and exercise programming.
- respond to the needs of a diverse clientele and demonstrate inclusive practices.
- understand their scope of practice and role within the health and fitness field and the allied health care system and practice appropriate and ethical professional conduct.

Gainful Employment Disclosure

Standard Occupational Classification: 39-9031.00

Go to the Department of Labor's O*Net website for a profile of this occupation:

Fitness Trainers and Aerobics Instructors *onetonline.org/link/summary/39-9031.00* Or check on these O*Net Related Occupations: Recreation Workers onetonline.org/link/summary/39-9032.00

How many students completed the Fitness Specialist Level 1 1-year Certificate in 2013-14?
In academic year 2013-14, 21 students completed this certificate.

What was the on-time graduation rate for these students?
Of students who completed this certificate in the 2013-14 academic year, 5% completed on time.

The federally required method for calculating this rate assumes students will enroll full-time, declare a major immediately, and enroll in it continuously until certificate completion. In reality, many community college students attend part-time, explore several majors, stop out for a term or more, change majors, or brush-up academic skills to be better prepared for college level courses, affecting this narrowly defined on-time graduation rate.

How many jobs are forecast in this occupation between 2010-20?
Lane County: 12 positions
Statewide: 93 positions

What wages are forecast for this occupation?
Lane County average hourly - $17.10; average annual - $35,559
Oregon average hourly - $19.47 average annual - $40,496

How much will the program cost?
(Estimates based on 2013-14 data for full-time students. Students attending part-time will incur additional term fees. Consult Lane's website for updated tuition and fees.)

Resident tuition and fees	$5,688
Books, supplies, program costs	$390
On-Campus room and board	Not offered
Total Estimate	$6,078

What's included?
Program Costs: lanecc.edu/esfs/credit-fees-and-expenses

What is the median loan debt incurred by students who completed the program in 2013?

Federal Loans	$15,912
Institutional financing	Not disclosed

For privacy reasons under FERPA, loan information is not disclosed for programs with fewer than ten graduates.

Course Requirements

1. All EXMS courses must be passed with a letter grade of C or better (P/NP, C- or less not accepted) to satisfy program requirements.
2. All PE 280 courses must be completed with a letter grade, not

P/NP, and must be passed with a grade of C or better (P/NP, C- or less not accepted) to satisfy program requirements.

*Course may have a co-requisite, a pre-requisite or testing may be required to enroll

	Fall
EXMS 194F Professional Activity: Fitness Assessment and Exercise Prescription: Field Techniques	3
EXMS 194S Professional Activity: Strength Training and Conditioning	2
PE 280* Co-Op: Fitness Education Center	1
HE 252 First Aid	3
HE 255 Global Health	4
Choice of:	1
PE183S Strength Training	
PE 183U Strength Training for Women	
Human Relations Requirement	3
Total Credits	17

	Winter
EXMS 194T Professional Activity: Techniques of Group Exercise Leadership	2
EXMS 196 Anatomy and Kinesiology	
EXMS 240 Mental Dynamics of Exercise and Sport	3
PE 280F* Co-op Ed: Fitness	1
Choice of:	4
BI 101 General Biology	
BI 112 Cell Biology for Health Occupations	
Choice of:	1
PE 183A Conditioning	
PE 183F Fitness Ed: Intro	
Total Credits	15

	Spring
EXMS135 Applied Exercise Physiology 1	3
EXMS 295* Injury and Prevention	3
Choice of:	4
WR121 Introduction to Academic Writing	
WR 121_H Introduction to Academic Writing	
MTH 052* or higher	4
Choice of:	2
PE 280F Co-op Ed: Fitness	
PE 280RT Co-op Ed: Corrective Fitness	
PE 280 Co-op Ed: Physical Education	
PE 280AR Co-op Ed: Aerobics	
PE 280W Co-op Ed: Wellness	
PE 280M Co-op Ed: Fitness Management	
PE 280AT Co-op Ed: Athletic Training	
Total Credits	16

Group Exercise Instructor Certificate

Career Pathway Certificate of Completion

Purpose Prepare students to become instructors in group fitness activities, such as aerobics, step, cycling, circuit, yoga, muscle conditioning, interval and other group exercise modalities. The curriculum and Co-operative education experiences serve as a "launching pad" into the career of instructing group exercise. National certification and further training in specific styles of group exercise is often required.

Learning Outcomes Upon completion of this certificate, students will:

- design, evaluate, and instruct safe and effective group exercise classes utilizing a variety of exercise modalities.
- appropriately modify and adapt group classes to meet the needs of a variety of participants.
- demonstrate excellent interpersonal skills in the areas of leadership, exercise motivation, and communication (written, verbal, and non-verbal).
- apply nationally recognized standards for group exercise instruction.
- communicate to participants the benefits, risks, and precautions involved with participation in group exercise.
- understand the role of proper nutrition and training techniques as they relate to physical fitness and weight management.
- identify and implement risk management strategies and safety precautions to ensure a safe and productive exercise experience for all participants.
- identify and communicate the unique benefits of group exercise in the health and fitness industry.

Course Requirements

1. All EXMS courses must be passed with a letter grade of "C" or better.
2. PE 280AR must be completed with a letter grade, not P/NP, and must be passed with a grade of "C" or better to satisfy program requirements. HE 252 must be completed with a grade of "Pass" or "C -" or better.

	Fall
EXMS 194S Professional Activity: Strength Training and Conditioning	2
HE 252 First Aid	3
PE 280AR* Co-op Ed: Aerobics	1
Total Credits	6

	Winter
EXMS 194T Professional Activity: Techniques of Group Exercise Leadership	2
PE 280AR Co-op Ed: Aerobics	2
FN 225 Nutrition	4
Total Credits	8

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

One-Year Certificate of Completion
Welding Processes

Career Pathway Certificate of Completion
Wire Drive Welder

Career Pathway Certificate of Completion
Shielded Metal Arc Welder

Purpose To prepare the graduate for employment in 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, and quality control procedures.
- 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.

Job Openings Projected through 2022
Lane County openings - 15 annually
Statewide openings - 178 annually

Wages
Lane County average hourly - $17.86 to $26.28; average annual - $37,155 to $54,657
Oregon average hourly - $19.11 to $26.81; average annual - $39,757 to $55,779

Costs (Estimate based on 2013-14 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees	$10,336
Other Course/Program Costs	$2,156
Tools	$575
Books and supplies	$1,468
Total Estimate	$14,535

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 arc welding processes and forklift certification.

Prerequisites Minimum placement score of 68 in Reading OR completion of RD 080 OR RD 087 And EL115 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 mandatory program orientation is held for new students for fall term (dates available from Advance Technology couselor/advisor). Contact advisor/counselor for assistance for winter and spring term entry, email *AdvTechPrograms@lanecc.edu*

Course Requirements

1. Prerequisites are required for some courses. See course descriptions.
2. All WLD and MTH courses must be completed with a letter grade of "C-" or better. MFG course must be completed for a letter grade.
3. WR 115W and PE/Health requirement must be completed with a "C-" or better or Pass grade.
4. Choices for requirements in Arts and Letters, Social Science, and Science are listed on the Associate of Applied Science degree page.

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 Clemons, Fabrication/Welding Co-op Coordinator, Bldg. 19, Rm. 231D, 541.463.3158, *clemonsm@lanecc.edu*

Fabrication/Welding

Two-Year Associate of Applied Science Degree/One-Year Certificate of Completion

First Year	**Fall**
WLD 112 Fabrication/Welding 1	12
MTH 085 Applied Geometry for Technicians or higher mathematics	4
Total Credits	16

	Winter
WLD 113 Fabrication/Welding 2	12
CG 203 Human Relations at Work	3
Total Credits	15

	Spring
WLD 114 Fabrication/Welding 3	12
WR 115W Introduction to College Writing: Workplace Emphasis or higher writing	3
Total Credits	15

Second Year	**Fall**
WLD 215 Fabrication/Welding 4	12
MFG 197 Manufacturing Technology	3
Choice of: Arts/Letters requirement Social Science requirement	3
Total Credits	18

	Winter
WLD 216 Fabrication/Welding 5	12
PE/Health requirement	3
Science or Computer Science course	3
Total Credits	18

	Spring
WLD 217 Fabrication/Welding 6	12
Arts and Letters requirement	3
Welding elective	3
Total Credits	18

Fabrication Welding

One-Year Certificate of Completion

Learning Outcomes 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.

Gainful Employment Disclosure

Standard Occupational Classification: 51-4121.06

Go to the Department of Labor's O*Net website for a profile of this occupation: Structural Metal Fabricators and Fitters *onetonline.org/link/summary/51-2041.00* Or check on these O*Net Related Occupations: Welders, Cutters, and Welder Fitters *onetonline.org/link/summary/51-4121.06*

How many students complete the Fabrication/Welding Technology 1-year Certificate?
In academic year 2013-14, 15 students completed this certificate.

What was the on-time graduation rate for these students?
Of students who completed this certificate in the 2013-14 academic year, 0% completed on time.

The federally required method for calculating this rate assumes students will enroll full-time, declare a major immediately, and enroll in it continuously until certificate completion. In reality, many community college students attend part-time, explore several majors, stop out for a term or more, change majors, or brush-up academic skills to be better prepared for college level courses, affecting this narrowly defined on-time graduation rate.

How many jobs are forecast in this occupation between 2010-20?
Lane County: 10 positions
Statewide: 115 positions

What wages are forecast for this occupation?
Lane County average hourly - $18.51; average annual - $38,497
Oregon average hourly - $19.11; average annual - $39,757

How much will the program cost?
(Estimates based on 2013-14 data for full-time students. Students attending part-time will incur additional term fees. Consult Lane's website for updated tuition and fees.)

Resident tuition and fees	$4,895
Books, supplies, program costs	$2,235
On-Campus room and board	Not offered
Total Estimate	$7,130

What's included?
Program Costs: *lanecc.edu/advtech/program-costs*

What is the median loan debt incurred by students who completed the program in 2014?

Federal Loans	$15,096
Institutional financing	Not disclosed

For privacy reasons under FERPA, loan information is not disclosed for programs with fewer than ten graduates.

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 Clemons, Fabrication/Welding Co-op Coordinator, Bldg. 19, Rm. 231D, 541.463.3158, *clemonsm@lanecc.edu*

Course Requirements

1. Prerequisites are required for some courses. See course descriptions.
2. All WLD and MTH courses must be completed with a letter grade of "C-" or better. WR 115W must be completed with a "C-" or better or Pass grade.

	Fall
WLD 112 Fabrication/Welding 1	12
MTH 085 Applied Geometry for Technicians or higher mathematics	4
Total Credits	16

	Winter
WLD 113 Fabrication/Welding 2	12
WR 115W Introduction to College Writing: Workplace Emphasis or higher writing	3
Total Credits	15

	Spring
WLD 114 Fabrication/Welding 3	12
CG 203 Human Relations at Work	3
Total Credits	15

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. Training and experience can lead to careers in technical sales, supervision, estimating, quality control, inspection, specialty welding, and teaching. The welding processes certificate program prepares graduates for employment as welder-trainees or welders.

Learning Outcomes 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 the Department of Labor's O*Net website for a profile of this occupation:
Structural Metal Fabricators and Fitters
onetonline.org/link/summary/51-2041.00
Or check on these O*Net Related Occupations:
Welders, Cutters, and Welder Fitters *onetonline.org/link/summary/51-4121.06*

How many students completed the Welding Processes 1-year Certificate in 2013-14?
In academic year 2013-14, 1 student completed this certificate.

What was the on-time graduation rate for these students?
Lane Community College is committed to protecting student privacy and does not publish this rate for fewer than ten graduates.

How many jobs are forecast in this occupation between 2010-20?
Lane County: 10 positions
Statewide: 115 positions

What wages are forecast for this occupation?
Lane County average hourly - $18.51; average annual - $38,497
Oregon average hourly - $19.11; average annual - $39,757

How much will the program cost?
(Estimates based on 2013-14 data for full-time students. Students attending part-time will incur additional term fees. Consult Lane's website for updated tuition and fees.)

Resident tuition and fees	$5,279
Books, supplies, program costs	$2,715
On-Campus room and board	Not offered
Total Estimate	$7,994

What's included?
Program Costs: *lanecc.edu/advtech/program-costs*

What is the median loan debt incurred by students who completed the program in 2014?

Federal Loans	Not disclosed
Institutional financing	$87

For privacy reasons under FERPA, loan information is not disclosed for programs with fewer than ten graduates.

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/admission-information* 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. In certain circumstances, Co-op experience may be substituted for major course work. Contact Marv Clemons, Fabrication/Welding Co-op Coordinator, Bldg. 19, Rm. 231D, 541.463.3158, *clemonsm@lanecc.edu*

Course Requirements

1. Prerequisites are required for some courses. See course descriptions.
2. All WLD and MTH courses must be completed with a letter grade of "C-" or better. WR 115W must be completed with a "C-" or better or Pass grade.

One-year Certificate	**Fall**
MTH 085 Applied Geometry for Technicians or higher mathematics	4
WLD 121 Shielded Metal Arc Welding 1	4
WLD 143 Wire Drive Welding 1	4
Total Credits	12
	Winter
CG 203 Human Relations at Work	3
WLD 122 Shielded Metal Arc Welding 2	4
WLD 154 Wire Drive Welding 2	4
Total Credits	11
	Spring
WLD 159 Wire Drive Welding 3	4
WLD 242 Gas Tungsten Arc Welding 1	3
WR 115W Introduction to College Writing: Workplace Emphasis or higher writing	3
Total Credits	10
	Fall
WLD 111 Blueprint Reading for Welders	3
WLD 160 Wire Drive Welding 4	4
WLD 256 Gas Tungsten Arc Welding 2	3
Total Credits	10
	Winter
WLD 257 Gas Tungsten Arc Welding 3	3
Directed electives	1-4
Total Credits	4-7

Directed Electives

DRF 167 Cad 1	4
ENGR 280W Co-op Ed: Welding	3
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

Wire Drive Welder

Career Pathway Certificate of Completion

Learning Outcomes The graduate will:

- read simple introductory 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 085 Applied Geometry for Technicians or higher mathematics	4
Choice of:	4-12
WLD 143 Wire Drive Welding 1	
WLD 112 Fabrication/Welding 1	
Choice of:	4-12
WLD 154 Wire Drive Welding 2	
WLD 113 Fabrication/Welding 2	
Choice of:	3-12
WLD 140 Welder Qualification (Certification): Wire Drive	
WLD 216 Fabrication/Welding 5	
Total Credits	15-40

Shielded Metal Arc Welder

Career Pathway Certificate of Completion

Learning Outcomes The graduate will:

- read simple introductory 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 085 Applied Geometry for Technicians or higher mathematics	4
Choice of:	4-12
WLD 121 Shielded Metal Arc Welding 1	
WLD 112 Fabrication/Welding 1	
Choice of:	4-12
WLD 122 Shielded Metal Arc Welding 2	
WLD 113 Fabrication/Welding 2	
Choice of:	3-12
WLD 141 Welder Qualification (Cert): SMAW	
WLD 216 Fabrication/Welding 5	
Total Credits	15-40

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.

Job Openings Projected through 2022
Statewide openings - 80 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 2013-14 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees	$ $11,199
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	$59,299

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/aviationacademy.*

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. 19, Rm. 231D, 541.463.3158, *clemonsm@lanecc.edu*

For FT 239 Professional Pilot Flight Lab a student must have a total of 39 Flight Lab credits to fulfill the AAS Degree requirement.

Course Requirements

1. Prerequisites are required for some courses. See course descriptions.
2. All GS and FT courses (except FT 102 and FT 239) must be completed with a letter grade, not P/NP, and must be passed with a grade of "C-" or better to satisfy program requirements.
3. CS 120, FT 102, FT 239, MTH 095 and WR 121 must be completed with a grade of "Pass" or "C-" or better.
4. Choices for Arts and Letters and Human Relations requirements are listed on the Associate of Applied Science degree page.

Prerequisite Courses An applicant may complete the following courses prior to program entry.

Arts and Letters requirement	3
Human Relations requirement	3
Total Credits	6

First Year	**Fall**
FT 102 General Aviation Careers	1
FT 103 Aircraft Safety Development	4
FT 130 Primary Flight Briefing	3
FT 239 Professional Pilot Flight Lab	6
FT 250 Private Pilot Ground School	5
Total Credits	19

	Winter
FT 239 Professional Pilot Flight Lab	6
GS 109 Meteorology	5
MTH 095 Intermediate Algebra or higher mathematics	5
Total Credits	16

	Spring
WR 121 Composition: Introduction to Academic Writing or higher writing	4
FT 115 Aircraft Structures and Systems	3
FT 239 Professional Pilot Flight Lab	6
FT 251 Commercial Pilot Ground School	4
FT 261 Air Traffic Control and Airspace	1
Total Credits	18

Second Year	**Fall**
CS 120 Concepts of Computing or higher computer science	4
FT 239 Professional Pilot Flight Lab	7
FT 252 Instrument Ground School	4
FT 262 Aviation Law and Regulations	1
Total Credits	16

	Winter
FT 239 Professional Pilot Flight Lab	7
FT 254 Aerodynamics	3
FT 256 Flight Instructor–Airplane and Instrument Ground School	3
FT 280 Co-op Ed: Flight Technology (optional)	3
Physical Education/Health requirement	3
Total Credits	16-19

	Spring
BA 254 General Aviation Management	3
FT 228 Multiengine Ground School	2
FT 239 Professional Pilot Flight Lab	7
FT 255 Fundamentals of Instruction and Human Factors	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

Geographic Information Systems

Offered by the Social Science Division, 541.463.5427

Certificate of Completion

Purpose The GIS less-than-one-year certificate is to provide students with the technical skills and geospatial content to employ geospatial information system (GIS) in support of their career and education goals in: science, business, resource management, public safety, and urban and regional planning. GIS 151, GIS 245 and GIS 246 transfer to many Oregon four-year colleges and support current graduates and working professionals as they update their technical skills. The core GIS classes are required or directed elective in several AAS degrees such as: Computer Information Systems (GIS 151, GIS 245, GIS 246) and Watershed Technician (GIS 151, GIS 245)

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.
- create, manage, and update spatial data.

- manage information in a GIS database.
- perform routine data analysis-buffer, query, union, intersect.

Jobs Openings:

Lane County openings – Current number 4 annually
Statewide openings – Current number 46 annually

Wages

Lane County average hourly- $22.78 average annual- $47,369
Oregon average hourly-$23.26 average annual - $48,400

Costs

Resident	$1,921
Non Resident	$3,313
Books	$300
Tuition and Fees: Resident	$1,621
Tuition and Fees: Nonresident	$3,013

*It is strongly recommended that students have a personal computer capable of running GIS and remote sensing software. Students who do not have access to a computer may be at a disadvantage.

Courses required	Credits
GIS 151 Digital Earth	4
GIS 245 GIS 1	4
GIS 246 GIS 2	4
Total Credits	12

Graphic Design

Offered by the Arts Division, 541.463.5409

Two-Year Associate of Applied Science Degree

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 2022

Lane County openings - 9annually
Statewide openings - 118 annually

Wages

Lane County average hourly - $21.45; average annual - $44,615
Oregon average hourly - $22.90 average annual - $47,630

Costs (Estimate based on 2014-15 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/second-year-graphic-design-program*.

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, *hughest@lanecc.edu*

Program Contacts Jefferson Goolsby, Bldg. 17, Rm. 105; Susan Lowdermilk, Bldg. 11, Rm. 112.

Course Requirements

1. Prerequisites are required for some courses. See course descriptions.
2. CIS 195 and ART 280GD must be completed with a letter grade, not P/NP.
3. ART 200, CG 203, GD 110, MTH 060, MUL 218, WR 121, Science/Math/Computer Science Requirement, and Directed Electives must be completed with a letter grade, not P/NP, and must be passed with a grade of "C-" or better to satisfy program requirements. All other courses must be completed with a letter grade of "B" or better to satisfy prerequisite requirements.

Two-Year Associate of Applied Science Degree

First Year	Fall
ART 131 Introduction to Drawing	3
ART 216 Digital Design Tools	4
MUL 105 Image Communications	4
Choice of:	4
ART 115GD Basic Design Fundamentals (4 credits) or ART 115 Basic Design: Fundamentals (3 credits) and GD 110 Introduction to Graphic Design (1 credit)	
Total Credits	15
	Winter
ART 119 Typography 1	3
ART 231 Drawing Intermediate	3
ART 225 Digital Illustration	3
CG 203 Human Relations at Work	3
Science/Math/Computer Science requirement	4
Total Credits	16
	Spring
ART 116 Basic Design: Color	3
ART 200 Graphic Design History	3
MUL 218 Business Practices for Media Arts	3
MUL 212 Digital Imaging	4
WR 121 Introduction to Academic Writing	4
Total Credits	17
Second Year	**Fall**
MUL 220 Intermediate Typography	3
ART 221 Graphic Design 1	4
ART 227 Graphic Design Production 1	3
CIS 195 Web Authoring 1 G	3
Directed elective	3
Total Credits	16
	Winter
ART 222 Graphic Design 2	4
ART 228 Graphic Design Production 2	4
ART 280GD Co-op Ed: Graphic Design	3
ART 289 Web Production	3
Choice of:	3
Physical Education Activity requirement Health requirement	
Total Credits	17

	Spring
ART 223 Graphic Design 3	4
ART 229 Graphic Design Production 3	4
ART 280GD Co-op Ed: Graphic Design	3
ART 290 Design Concepts for the Web	3
MTH 060 Beginning Algebra or higher mathematics	4
Total Credits	18

Directed Electives
Any Art Class
Any Multimedia Class

Health Records Technology

Offered by Health Professions Division, 541.463.5617

One-Year Certificate of Completion

Career Pathway Certificate of Completion: Basic Health Care

Career Pathway Certificate of Completion: Medical Coding

Refer to *lanecc.edu/custom/pathways/medicalrecordstechnology* for Two-year Associate of General Studies Transfer Guide

Health Records Technology

One-Year Certificate of Completion

Purpose Prepares graduates for entry level careers in medical records, health information management, medical billing, and medical transcription. Health Record Technicians organize and manage demographic, coded, and billing data by ensuring its quality, accuracy, accessibility, and security. They communicate with physicians and other healthcare professionals to clarify diagnoses or to obtain additional information as needed to meet billing, payment, and regulatory requirements. Health Record Technicians may assist with improving electronic health records (EHR) software usability

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, transcribe clinic notes and/or physician dictation per regulatory requirements with accuracy and timeliness.

Gainful Employment Disclosure
Standard Occupational Classification: 29-2071.00
For a profile of this occupation go to the U.S. Department of Labor's O*Net website:
Medical Records and Health Information Technicians
onetonline.org/link/summary/29-2071.00
Or check on these O*Net Related Occupations:
Insurance Claims Clerks
onetonline.org/link/summary/43-9041.01

How many students completed the Health Records Technology 1-year Certificate in 2013-14?
In academic year 2013-14 ,15 students completed this certificate.

What was the on-time graduation rate for these students?
Of students who completed this certificate in the 2013-14 academic year, 0% completed on time.

The federally required method for calculating this rate assumes students will enroll full-time, declare a major immediately, and enroll in it continuously until certificate completion. In reality, many community college students attend part-time, explore several majors, stop out for a term or more, change majors, or brush-up academic skills to be better prepared for college level courses, affecting this narrowly defined on-time graduation rate.

Job openings projected through 2022
Lane County: 14; Statewide: 136

What wages are forecast for this occupation?
Lane County hourly average - $19.60; annual average - $40,766
Oregon hourly average - $19.29; annual average - $40,702

Cost (Estimates based on 2014-15 data for full-time students. Students attending part-time will incur additional term fees. Consult Lane's website for updated tuition and fees.)

Resident tuition and fees	$5,131
Differential fees*	$228
Books, supplies, program costs	$1,775
On-Campus room and board	Not offered
Total Estimate	$7,134

*This is the total of all the differential fees attached to Health Records Technology courses. These fees and other course fees may change during the year – see the online credit class schedule for fees assigned to courses.

What's included?
Program Costs: *lanecc.edu/esfs/credit-fees-and-expenses*

What is the median loan debt incurred by students who completed the program in 2013?

Federal Loans	$19,933
Institutional financing	$578

Admission Information See the Counseling and Advising Center, e-mail *HRTProgram@lanecc.edu* or consult the HRT web site, *lanecc.edu/hp/hrt/admissions-and-application*

Cooperative Education (Co-op) Co-op is required for students admitted to the HRT Program. Students must successfully complete 3 credit hours (minimum) of 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 course work prior to registering for HRT Co-op. Contact the HRT Cooperative Coordinator, Chuck Fike, Bldg. 19, 541.463.5203.

Program Coordinator Shelley K. Williams, BA, RN, RHIT, 541.463 .5182, *williamSSK@lanecc.edu*

Course Requirements

1. Prerequisites are required for some courses. See course descriptions.
2. All BT, CIS, HO, HIM, HIT, MTH, COMM, and WR courses must be completed with a letter grade, not P/NP, and must be passed with a grade of "C" or better to satisfy program requirements. Other courses may be completed with a "Pass" or grade of "C-."
3. Completion of BI 231, 232, and 233 with a "C" or better is an acceptable equivalent for HO 150 and HO152.
4. Completion with a grade of "C" or better of 3-course series HIM 270, HIM 273, and HIM 275 may be substituted for HO 114 Introduction to Coding.

Prerequisites to Apply Credits

Choice of:	3-4
CIS 101 Computer Fundamentals	
CS 120 Concepts of Computing: Info Processing	
HO 100 Medical Terminology 1	3
HO 110 Health Office Procedures	3
Mathematics proficiency, Choice of:	3
MTH 52 Math for Physical Science or higher	

Credit by Exam for MTH 052, or higher or transcripted credits: AP (Calculus), or CLEP (College Algebra, or any Calculus, or Statistics), or IB (Mathematics, or Math Studies, or Further Mathematics, or Statistics)	
HO 150 Human Body Systems 1	3
HO 152 Human Body Systems 2	3
Choice of:	4
WR 121 Introduction to Academic Writing	
WR 121_H Introduction to Academic Writing	
Total Prerequisite Credits	22-23

One-Year Certificate of Completion

	Fall
HIM 120 Intro to HIM	3
HIT 154 Human Disease Processes	3
HO 112 Medical Insurance Procedures	3
HI 101 Intro to Healthcare and Public Health in the U.S.	4
HI 107 Working with Health IT Systems	4
Total Credits	17

	Winter
HO 220 Legal and Ethical Aspects of Health Care	3
HO 114 Medical Coding Procedures	3
HIT 160 Practice Management	3
HIT 222 Reimbursement Methodologies	3
HIM 206 Co-op Ed: Employment in Healthcare: HIM Seminar	2
Total Credits	14

	Spring
HO 190 Medical Formatting	3
HIM 183 Health Information Systems	4
Directed Elective	3
Human Relations: Student's choice: SOC 204, COMM 218, or CG 203	3-4
HIT 280 Co-op Ed: Health Records	3
Total Credits	16-17

Directed Electives

CIS 125D Software Tools 1: Databases	4
HI 111 Selecting, Implementing, and Customizing EHR Systems	3
HIM 200 Healthcare Statistics	3
HIM 230 Quality Improvement in Healthcare	3
HIM 270 ICD-10 Coding 1	4
HIM 271 ICD-10 Coding 2	4
HIM 273 CPT Coding 1	4
HIM 275 CPT Coding 2	4
HIT 280 Co-op Ed: Health Records	3-6
HO 153 Intro to Pharmacology	3

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.

Course Requirements

1. Prerequisites may be required for some courses. See course descriptions.
2. All courses must be completed with a letter grade, not P/NP, and must be passed with a grade of "C" or better to satisfy program requirements.
3. Completion of BI 231, 232, and 233 with a "C" or better is an acceptable equivalent for HO 150 and HO152.

	Fall
MTH 052 Math for Physical Science or higher	3-4
HO 100 Medical Terminology 1	3
HO 110 Health Office Procedures	3
HO 150 Human Body Systems 1	3
Total Credits	12-13

	Winter
Choice of:	3-4
BT 120 MS Word for Business	
CIS 101 Computer Fundamentals	
CS 120 Concepts of Computing: Info Processing	
HO 152 Human Body Systems 2	3
WR 121 Introduction to Academic Writing	4
Total Credits	10-11

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.
- understand 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 required for students admitted to the HRT Program. Students must successfully complete 3 credit hours (minimum) of 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 course work prior to registering for HRT Co-op. Contact the HRT Cooperative Coordinator, Chuck Fike, 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*

Program Coordinator Shelley K. Williams, BA, RN, RHIT, 541.463.5182, *williamSSK@lanecc.edu*

Course Requirements

1. Prerequisites are required for some courses. See course descriptions.
2. All BT, CIS, HO, HIM, HIT, MTH, COMM, and WR courses must be completed with a letter grade, not P/NP, and must be passed with a grade of "C" or better to satisfy program requirements. Other courses may be completed with a "Pass" or grade of "C-."
3. Completion of BI 231, 232, and 233 with a "C" or better is an acceptable equivalent for HO 150 and HO152.

Prerequisites to Apply	**Credits**
Choice of:	3-4
CIS 101 Computer Fundamentals	
CS 120 Concepts of Computing: Info Processing	
HO 100 Medical Terminology 1	3
HO 110 Health Office Procedures	3
Mathematics proficiency, Choice of:	3
MTH 052 Math for Physical Science or higher Credit by Exam for MTH 052, or higher or transcripted credits: AP (Calculus), or CLEP (College Algebra, or any Calculus, or Statistics), or IB (Mathematics, or Math Studies, or Further Mathematics, or Statistics)	
HO 150 Human Body Systems 1	3
HO 152 Human Body Systems 2	3
Choice of:	4
WR 121 Introduction to Academic Writing	
WR 121_H Introduction to Academic Writing	
Total Prerequisite Credits	22-23

	Fall
HIM 270 ICD-10 Coding 1	4
HO 112 Medical Insurance Procedures	3
HIT 154 Introduction to Disease Processes	3
HO 220 Legal and Ethical Aspects of Health Care	3
HO 153 Introduction to Pharmacology	3
Total Credits	16

	Winter
HIM 271 ICD-10 Coding 2	4
HIM 273 CPT Coding 1	4
HIT 222 Reimbursement Methodologies	3
HIM 206 Co-op Ed: Employment in Healthcare: HIM Seminar	2
Total Credits	13

	Spring
HI107 Working with Health Information Systems	4
HIM 275 CPT Coding 2	4
Choice of:	3-4
COMM218 Interpersonal Communication	
CG 203 Human Relations at Work	
SOC 204 Introduction to Sociology	
HIT 280 Co-op Ed: Health Records	3
Total Credits	14-15

Hospitality Management

Offered by Culinary Arts and Hospitality Management, 541.463.3503

Two-Year Associate of Applied Science Degree

Career Pathway Certificate of Completion,
Meeting, Convention, and Special Events Manager

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 2014-15 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees	$9,930
Hospitality Management Books	$929
Hospitality Management Fees	$ 850
Total Estimate	$11,709

Hospitality Management course fees and other course fees may change during the year - see the online credit class schedule for fees assigned to courses.

Job Openings and Wages Projected through 2022

Hotel Front Desk
Lane County openings - 21 annually
Statewide openings - 192 annually

Wages
Lane County average hourly - $10.71; average annual - $22,280
Oregon average hourly - $11.22; average annual - $23,352

Hotel Managers

Job Openings
Lane County openings - 3 annually
Statewide openings - 31 annually

Wages
Lane County average hourly - $21. 22 ; average annual - $44,140
Oregon average hourly - $ 21.93 ; average annual - $ 45,616

Meeting and Convention Planners

Job Openings
Lane County openings - 3 annually
Statewide openings - 44 annually

Wages
Lane County average hourly - $20.78 ; average annual - $ 43,209
Oregon average hourly - $21.26 ; average annual - $44, 211

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 required for entry into the program.

The Dual Degree Option for Culinary Arts Graduates, seeking the 2yr. AAS in Hospitality Management, can not be reversed. This option can only be obtained by first completing the 2yr. AAS in Culinary Arts.

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, Project Specialist, 541.463.3503, *milbratw@lanecc.edu*; or email: *Culinary HospPrograms@lanecc.edu*

Course Requirements

1. Prerequisites are required for some courses. See course descriptions.
2. All courses must be completed with a letter grade, not P/NP, and must be passed with a grade of "C-" or better to satisfy program requirements.
3. Directed electives may be met in any term of the two-year program. Check current class schedule for which Directed Electives are offered in a given term.
4. Students may take Cooperative Education in any term approved by the coordinator.
5. Cooperative Education can be substituted for one term of HRTM 225 Banquet Operations.
6. Students interested in transferring to a four-year institution should:
   - Complete WR 122 and WR 123 to fulfill the Arts and Letters requirements for the AAS.
   - Add MTH 111 and MTH 112 courses.

General Education Requirements

Mathematics (MTH 025 or higher)	3
Science/Math/Computer Science	3
Arts and Letters requirement	3
Human Relations Requirement	3
Choice of: Social Science or Science/Math/Computer Science or Arts and Letters requirement	3
WR 115 W Introduction to College Writing: Workplace Emphasis	3
Physical Education or Health	3
Total Credits	21

First Year	**Fall**
CA 159 Kitchen Fundamentals	2
CA 175 Foodservice Sanitation and Safety	2
CA 200 Menu Management	3
HRTM 105 Restaurant Operations	3
HRTM 106 Introduction to Hospitality Management	3
HRTM 225 Banquet Operations	2
Total Credits	15
	Winter
HRTM 110 Hospitality Sales and Marketing	3
HRTM 140 Hospitality Law and Security	3
HRTM 220 Sustainability in the Hospitality Industry	2
HRTM 225 Banquet Operations	2
General Education Requirement	3
Total Credits	13
	Spring
HRTM 225 Banquet Operations	2
Directed Electives	8
General Education Requirements	6
Total Credits	16

	Summer
HRTM 280 Co-op Ed: Hospitality Management	7-8
Total Credits	7-8

Second Year	**Fall**
HRTM 230 Hotel Operations 1	3
HRTM 260 Hospitality Human Resources and Supervision	3
HRTM 265 Hospitality Financials 1	3
General Education Requirement	3
Directed Electives	4-6
Total Credits	16-18

	Winter
HRTM 231 Hotel Operations 2	3
HRTM 275 Hospitality Financials 2	3
HRTM 292 Dining Room and Kitchen Lab	2
General Education Requirement	6
Total Credits	14

	Spring
HRTM 205 Managing the Restaurant Operation	3
HRTM 286 Bar and Beverage Management	3
HRTM 290 Hospitality Leadership	3
HRTM 292 Dining Room and Kitchen Lab	2
General Education Requirement	3
Total Credits	14

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 165 Introduction to Accounting Cycle	4
BT 180 Business Proofreading and Editing	4
CA 110 Guest Chef Series	2
CA 130 Oregon Wine Country	2
CA 176 Concepts of Flavour	2
CS 120 Concepts of Computing: Information Processing	4
ES 102 Contemporary Racial and Ethnic Issues	4
FN 105 Nutrition for Foodservice Professionals	3
FN 110 Personal Nutrition	3
FN 235 Managing Food and Nutrition Services	3
GEOG 201 World Regional Geography	3
HRTM 100 Introduction to Culinary Arts and Hospitality Management	3
HRTM 104 Introduction to Travel and Tourism	3
HRTM 109 Principles of Meeting and Convention Management	3
HRTM 209 Advanced Principles of Meeting and Convention Management	3
HRTM 281 Restaurant Ownership	3
PHL 201 Ethics	4
COMM 115 Introduction to Intercultural Communications	4
COMM 130 Business and Professional Speech	4
SUST 101 Introduction to Sustainability	3
SUST 120 Gardening and Sustainable Food Systems	3
WR 121 Introduction to Academic Writing	4

*MS Powerpoint and Excel are used extensively. If students are not familiar with these software programs they are encouraged to take these classes prior to or during their first year in the program.

Meeting, Convention, and Special Events Manager

Career Pathway Certificate of Completion

Purpose 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 *lanecc.edu/culinary*. Or email: *CulinaryHospPrograms@lanecc.edu*

	Fall
HRTM 106 Introduction to Hospitality Management	3
HRTM 109 Principles of Meeting and Convention Management	3
HRTM 225 Banquet Operations	2
HRTM 230 Hotel Operations 1	3
HRTM 260 Hospitality Human Resources and Supervision 3	3
Total Credits	14

	Winter
HRTM 110 Hospitality Sales and Marketing	3
HRTM 225 Banquet Operations	2
HRTM 231 Hotel Operations 2	3
HRTM 280 Co-op Ed: Hospitality Management	2
Total Credits	10

	Spring
HRTM 209 Advanced Principles of Meeting, Convention, and Special Event Management	3
HRTM 225 Banquet Operations	2
HRTM 280 Co-op Ed: Hospitality Management	2
Total Credits	7

	Summer
HRTM 280 Co-op Ed: Hospitality Management	4
Total Credits	4

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

Career Pathway Certificate of Completion, Community Health Worker

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; assisting individuals in meeting their health related needs; 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. Most human services careers 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.

Social and Human Service Assistants

Job Openings Projected through 2022

Statewide employment analysis for social and human service assistants indicates that this occupation in 2012 was much larger than the statewide average for all occupations. The total number of job openings is projected to be much higher than the statewide average number of job openings for all occupations through 2022. This occupation is expected to grow at about the statewide average growth rate for all occupations through 2022. Reasonable employment opportunities exist.

Wages

Lane County average hourly - $14.35; average annual - $ 29,895
Oregon average hourly - $14.85; average annual - $ 30,895

Substance Abuse and Behavioral Disorder Counselors

Job Openings Projected through 2022

Statewide employment analysis for substance abuse and behavioral disorder counselors indicates that employment in this occupation in 2012 was somewhat larger than the statewide average for all occupations. The total number of job openings is projected to be some what higher than the statewide average number of job openings for all occupations through 2022. This occupation is expected to grow at a somewhat faster rate than the statewide average growth rate for all occupations through 2022. Reasonable employment opportunities exist largely due to the significant number of job openings projected for this occupation.

Wages

An average hourly wage has not been reported for Lane County. In nearby counties, the average hourly is $22.65. Oregon average hourly - $22.19; average annual - $46,152

Costs (Estimate based on 2014-15 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees	$9,255
Books and supplies	$3,200
Total Estimate	$12,455

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: *lanecc.edu/counseling/academic-advising*

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 Co-op Ed Office at 541-463-5203.

Course Requirements

1. All required CG, and Directed electives courses, and all HS courses except HS 266 must be taken for a letter grade, not P/NP, and must be passed with a "C-" or better to fulfill program requirements.
2. See course descriptions for prerequisite and corequisite information.
3. A total of 18 credits of CG 280HS Cooperative Education: Human Services must be completed.
4. HS 155 Interviewing Theory and Techniques must be completed prior to enrollment in HS 224 or 232 (on the directed elective list).
5. Courses with WR, COMM, ANTH, PSY prefixes and all Science/Math, Computer Science courses are transferable and may be applicable to an AAOT degree.
6. For choices in Science, Math, and Computer Science, see AAOT degree description.

First Year	**Fall**
HS 150 Personal Effectiveness for Human Service Workers	3
HS 201 Introduction to Human Services	3
HS 226 Ethics and Law	3
WR 121 Introduction to Academic Writing	4
Directed Elective	3-6
Total Credits	16-19

	Winter
HS 155 Interviewing Theory and Techniques	3
MTH 025 Basic Mathematics Applications or higher	3
CG 280HS Co-op Ed: Human Service	3
WR 122 Composition: Argument, Style and Research	4
Choice of: COMM 100 Basic Communication COMM 111 Fundamentals of Public Speaking COMM 112 Persuasive Speech COMM 130 Business and Professional Speech COMM 218 Interpersonal Communication	4
Total Credits	17

	Spring
ANTH 103 Cultural Anthropology	4
CG 280HS Co-op Ed: Human Service	4
HS 231 Advanced Interviewing and Counseling	3
HS 265 Casework Interviewing	3
Directed Elective	3-4
Total Credits	17-18

Second Year	**Fall**
CG 280HS Co-op Ed: Human Service	3
HS102 Psychopharmacology	4
HS 266 Case Management in Human Services	3
Directed Elective	3-4
PSY 201 General Psychology	4
Total Credits	17-18

	Winter
HS 267 Cultural Competence in Human Services	3
Directed Elective	2-4
PSY 202 General Psychology	4
CG 280HS Co-op Ed: Human Service	4
Science/Math/Computer Science requirement	3
Total Credits	16-18

	Spring
CG 280HS Co-op Ed: Human Service	4
Choice of:	3-4
HE 209 Human Sexuality	
HE 250 Personal Health	
HE 252 First Aid	
HE 255 Global Health and Sustainability	
HE 275 Lifetime Health and Fitness	
HS 224 Group Counseling	3
HS 232 Cognitive-Behavioral Strategies	3
PSY 203 General Psychology	4
Total Credits	17-18

Directed electives Students are required to take 9 credits in electives. Courses may be taken within a concentration area that addresses their career interests as suggested below or across multiple concentration areas. Directed electives must be taken for a letter grade, not P/NP, and must be passed with a "C-" or better to fulfill program requirements.

Behavioral Health

HS 151 Issues in Assessing and Treating the Problem Gambler
HS 158 Trauma: Theory to Practice
HS 171 Community Health Worker **FALL TERM ONLY**
HS 205 Youth Addiction
HS 209 Crisis Intervention and Prevention
HS 224 Group Counseling Skills
HS 220 Prevention1: Preventing Substance Abuse and Other Social Problems
HS 221 Co-ocurring Disorders
HS 222 Best Practices in Human Services: Intervention
HS 228 HIV and Other Infectious Diseases

Family

HS 107 Aging: A developmental Perspective
HS 151 Issues in Assessing and Treating the Problem Gambler
HS 158 Trauma: Theory to Practice
HS 171 Community Health Worker **FALL TERM ONLY**
HS 205 Youth Addiction
HS 209 Crisis Intervention and Prevention
HS 220 Prevention1: Preventing Substance Abuse and Other Social Problems
HS 222 Best Practices in Human Services: Intervention

Criminal Justice and Treatment

HS 158 Trauma: Theory to Practice
HS 205 Youth Addiction
HS 206 The Criminal Addict: Issues and Interventions
HS 220 Prevention1: Preventing Substance Abuse and Other Social Problems
HS 222 Best Practices in Human Services: Intervention

Community Health Worker

HS 150 Personal Effectiveness For Human Service Workers
HS155 Interviewing Theory And Techniques
HS 171 Community Health Worker **FALL TERM ONLY**
HS 226 Ethics And Law
HS 267 Cultural Competence In Human Services
HS 221 Co-Ocurring Disorders
HS 266 Case Management
HS 158 Trauma: Theory To Practice
HE 255 Global Health and Sustainability
CG280HS Cooperative Education
  (with a focus on community health worker roles)
Choice of:
  HE 25O Personal Health
  HE 275 Lifetime Health And Fitness

Aging and Adult Development

CG 208 Co-op Aging Specific Internship
HS 107 Aging: A developmental Perspective
HS 235 The Aging Mind
HS 229 Grief and Loss Across the Life Span

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 Co-op Education *Office at 541-463-5203.*

Course Requirements

1. All courses must be taken for a letter grade, not P/NP, and must be passed with a "C-" or better to fulfill program requirements.

2. See course descriptions for prerequisite and corequisite information.

	Credits
HS 107 Aging: A Social and Developmental Perspective	3
HS 229 Grief and Loss Across the Lifespan	3
HS 235 The Aging Mind	3
CG 280HS Co-op Ed: Human Service (with a focus on aging)	3
Total Credits	12

Community Health Worker

Career Pathway Certificate of Completion

Purpose This program prepares students for an emerging role in the health care field. Community Health Workers have been identified as critical positions in helping individuals, and Communities, efficiently access care and community resources to improve health outcomes for the individual while controlling health care costs.

Learning Outcomes Upon completion students will:

- list the regulations and services offered by the various components of the health care system.
- demonstrate relationship building and helping skills to assist individuals in accessing and effectively utilizing primary and behavioral health care settings.
- demonstrate sensitivity and cultural competence in serving members of diverse communities including clinical communities.
- demonstrate outreach, advocacy, and system navigation skills.
- demonstrate case management and coordination skills.
- develop ethical relationships with consumers, caregivers, professionals and community agencies.
- list the principles of trauma-informed services.
- list the social determinants of health.
- describe health across the life span.
- identify basic symptoms related to common chronic diseases including mental health problems and addictions and list ways to prevent and manage these diseases..

The Human Services Community Health Worker Career Pathway Certificate of Completion prepares students to work as community health workers. Successful completion of four classes, HS 171 Community Health Worker, HS 150 Personal Effectiveness for Human Service Workers, HS 226 Ethics and Law, and CG280HS Cooperative Education qualifies students for an Award of Participation and eligibility for state certification for entry-level positions in the traditional health worker field.

Pathway Certificates of Completion are awarded to students completing all of the listed classes. The state of Oregon requires criminal background checks for individuals seeking employment as community health care workers.

Employment Trends Recent changes in health care reform suggests that new employment opportunities will be available for persons interested in assisting individuals and families access services to maintain their health. Community health worker is an emerging occupation so no historical employment data is available.

Statewide employment analysis for social and human service assistants indicates that this occupation in 2012 was much larger than the statewide average for all occupations. The total number of job openings is projected to be much higher than the statewide average number of job openings for all occupations through 2022. This occupation is expected to grow at about the statewide average growth rate for all occupations through 2022. Reasonable employment opportunities exist.

Wages Average hourly wage in Lane County is $14.35. Average annual salary for social and human service assistants is $29.895 in Lane County and $30,895 in Oregon.

Costs in Addition to Tuition/Fees (estimate)*

Books*	$1100
Vaccinations*	$280

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 Co-op Education Office at 541-463-5203.

1. All courses must be taken for a letter grade, not P/NP, and must be passed with a "C-" or better to fulfill program requirements.
2. See course descriptions for prerequisite and corequisite information.

	Credits
HS 150 Personal Effectiveness For Human Service Workers	3
HS155 Interviewing Theory And Techniques	3
HS 171 Community Health Worker	6
HS 226 Ethics And Law	3
HS 267 Cultural Competence In Human Services	3
HS 221 Co-Ocurring Disorders	3
HS 266 Case Management	3
HS 158 Trauma: Theory To Practice	2
HE 255 Global Health& Sustainability	4
CG280HS Cooperative Education (with a focus on community health worker roles)	3
Choice of: HE 25O Personal Health HE 275 Lifetime Health And Fitness	3
Total Credits	36

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.

Job Openings Projected through 2022
Lane County openings - 14 annually
Statewide openings - -182 annually

Wages
Oregon average hourly - $25.13; average annual - $52,270
Lane County average hourly - $25.73; average annual - $53,530

Costs (Estimate based on 2013-14 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees	$9,739
Books and supplies	$3,200
Total Estimate	$12,939

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.

Cooperative Education (Co-op) Co-op provides opportunities for field experience 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, Center Bldg., Rm. 419E, 541.463.5286, *delneroj@lanecc.edu*

Admission Information Social Science Division, John delNero, Program Coordinator, 541.463.5286, *delneroj@lanecc.edu*

Course Requirements

1. Prerequisites are required for some courses. See course descriptions.
2. All CJA courses must be completed with a letter grade of "C" or better to satisfy program requirements.
3. PSY, SOC, and WR courses must be completed with a letter grade.
4. Courses that satisfy transfer general education requirements are recommended: BI, BOT, Z, CH, G, GS, PH
5. Directed electives (choose 6 credits total)

CJA 201 Juvenile Delinquency	3
CJA 210 Criminal Investigation 1	3
CJA 214 Introduction to Forensic Science	4
CJA 232 Correctional Casework	3
CJA 243 Narcotics and Dangerous Drugs	3
SOC 211 Social Deviance	3

6. CJA 214 Introduction to Forensic Science can be used to meet Directed Elective or Biological/Physical Science Elective.
7. CH 114 Forensic Chemistry can satisfy the Biological or Physical Science requirement

First Year	Fall
CJA 100 Introduction to Criminal Justice 1	3
Directed elective	3
SOC 204 Introduction to Sociology	4
COMM 105 Listening and Critical Thinking	4
Choice of:	4
WR 121 Introduction to Academic Writing	
WR 121_H Introduction to Academic Writing	
Total Credits	18
	Winter
Arts and Letters elective	3
CJA 110 Introduction to Criminal Justice 2	3
SOC 205 Social Stratification and Social Systems	4
COMM 100 Basic Communication	4
WR 122 Composition: Argument, Style and Research	4
Total Credits	18
	Spring
CJA 101 Introduction to Criminology	3
CS 120 Concepts of Computing: Information Processing or higher computer science course	4
SOC 206 Institutions and Social Change	4
Choice of:	3
HE 250 Personal Health	
HE 252 First Aid	
HE 275 Lifetime Health and Fitness	
Total Credits	14

Second Year	Fall
Biological or Physical Science requirement	3-4
CJA 213 Interviewing and Interrogation	3
CJA 220 Introduction to Criminal Law	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	4-5
CJA 222 Criminal Law: Procedural Issues	3
CJA 280 Co-op Ed: Criminal Justice	3
Directed elective	3
PS 202 State and Local Government and Politics	3
Total Credits	16-17
	Spring
MTH 095 Intermediate Algebra or higher	5
CJA 280 Co-op Ed: Criminal Justice	3
PS 203 American Government	3
PSY 203 General Psychology	4
Arts and Letters elective	3
Total Credits	18

Human Services: Juvenile Corrections

Offered by the Social Science Division, 541.463.5427

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:

- effectively supervise juvenile offenders.
- monitor and ensure a safe environment for juvenile offenders.
- provide support services to juvenile offenders.
- provide social and life skills training to juvenile offenders.
- assist in the treatment process and provide crisis intervention with juvenile offenders.

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 $2,851-$4,141 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*

Course Requirements

1. Prerequisites are required for some courses. See course descriptions.
2. All CJA, HS, PSY, and SOC courses must be completed with a letter grade of “C“ or better to satisfy program requirements.
3. WR courses must be completed with a letter grade.

Gainful Employment Disclosure

Standard Occupational Classification: 21-1021.00

Go to the Department of Labor’s O*Net website
for a profile of this occupation:
Child, Family, and School Social Workers
onetonline.org/link/summary/21-1021.00
Or check on these O*Net Related Occupations:
Probation Officers and Correctional Treatment
Specialists *onetonline.org/link/summary/21-1092.00*

How many students complete the Human Services: Juvenile Corrections 1-year Certificate?
In academic year 2013-14, 3 students completed this certificate.

What was the on-time graduation rate for these students?
Lane Community College is committed to protecting student privacy and does not publish this rate for ten or fewer graduates.

How many jobs are forecast in this occupation between 2012-22
Lane County: 9positions
Statewide: 164 positions

What wages are forecast for this occupation?
Lane County average hourly - $18.57; average annual - $38,620 Oregon average hourly - $21.28; average annual - $44,271

How much will the program cost?
(Estimates based on 2014-15 data for full-time students. Students attending part-time will incur additional term fees. Consult Lane’s website for updated tuition and fees.)

Resident tuition and fees	$5,198
Books, supplies, program costs	$1,600
On-Campus room and board	Not offered
Total Estimate	$6,798

What’s included?
Program Costs: *lanecc.edu/esfs/credit-fees-and-expenses*

What is the median loan debt incurred by students who completed the program in 2014?

Federal Loans	Not disclosed
Institutional financing	Not Disclosed

For privacy reasons under FERPA, loan information is not disclosed for programs with fewer than ten graduates.

Course Requirements

1. Prerequisites are required for some courses. See course descriptions.
2. All CJA, HS, PSY, and SOC courses must be completed with a letter grade of “C“ or better to satisfy program requirements.
3. WR courses must be completed with a letter grade.
4. MTH 095 is recommended for students going on to complete the 2-yr AAS degree in Criminal Justice.
5. Students should be advised that it may take up to 4 terms to complete.

	Fall
HS 206 Counseling the Criminal Addict	3
MTH 060 Beginning Algebra or higher	4
PSY 201 General Psychology	4
SOC 225 Social Problems	4
WR 121 Introduction to Academic Writing	4
Total Credits	19

	Winter
CJA 201 Juvenile Delinquency	3
CS 120 Concepts of Computing: Information Processing	4
HS 205 Youth Addiction	3
PSY 202 General Psychology	4
PSY 239 Introduction to Abnormal Psychology	3
Total Credits	17

	Spring
CJA 101 Introduction to Criminology	3
CJA 232 Correctional Casework	3
CJA 280 Co-op Ed: Criminal Justice	3
HS 209 Crisis Intervention and Prevention	3
PSY 215 Lifespan Development	4
Total Credits	16

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 2022
Lane County openings - 2 annually
Statewide openings - 27 annually

Wages
Lane County average hourly - $22.34; average annual - $46,471
Oregon average hourly - $27.08; average annual - $56,326

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 2014-15 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 and 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, laddered 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. 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

Learning Outcomes 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.

Course Requirements

1. Prerequisites are required for some courses. See course descriptions.
2. WR 115W and MTH 060 must be must be passed with a grade of Pass or "C-" or better to satisfy program requirements.
3. General education course choices are listed on the Associate of Applied Science degree page.

AAS requirements	**Credits**
General Education	
WR 115W Intro to College Writing: Workplace Emphasis or higher-level writing	3
MTH 060 Beginning Algebra (or higher)	4
PE/Health Requirement	3
Arts and Letters requirement	3
Human Relations requirement	3
Science/Math/Computer Science requirement	3
Choice of:	3
Arts and Letters requirement	
Human Relations/Social Science requirement	
Science/Math/Computer Science requirement	
Journeyman card from Oregon Bureau of Labor and Industries Apprenticeship and Training Division, prior certification	22
Millwright Core Related Training	43
APR 150 The Millwright and Shop Safety	5
APR 151 Millwright Machine Theory and Trade Calculations	5
APR 152 Millwright: Power Trains/Boilers and Steam	5
APR 250 Millwright: Industrial Print Reading, Schematics, Estimating	5
APR 251 Millwright: Pneumatics and Lubrications	5
APR 252 Hydraulics for Millwrights	5
APR 253 Millwright Piping Systems	5
MTH 085 Applied Geometry for Technicians	4
APR 185 Shielded Metal Arc Welding 1	2
APR 186 Wire Drive Welding 1	2
Program Electives to complete 90 credits for degree:	
APR 101 Trade Skills Fundamentals	4
CS 120 Concepts of Computing	4
DRF 167 CAD 1	4
ET 129 Electrical Theory 1	4
HE 252 First Aid	3
MFG 201 CNC Mill	1-6
MFG 202 CNC Lathe	1-6
MTH 112 Trigonometry	4
RTEC 105 Introduction to Advanced Technology	3
WLD 122 Shielded Metal Arc Welding 2	1-4
WLD 139 Welding Lab	1-6
WLD 140 Welder Qualification (Certification) Wire	3
WLD 141 Welder Qualification (Certification) SMAW	3
WLD 142 Pipe Welding Lab: Carbon Steel	3
WLD 151 Fundamentals of Metallurgy	1-3
WLD 154 Wire Drive Welding 2	1-4

Industrial Mechanics and Maintenance Technology Apprenticeship

Certificate of Completion

Purpose Students may earn a Certificate of Completion in Industrial Mechanics and Maintenance Technology Apprenticeship by successfully completing 43 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.

Course Requirements

1. Prerequisites are required for some courses. See course descriptions.
2. WR 115W and MTH 060 must be must be passed with a grade of Pass or "C-" or better to satisfy program requirements.
3. Human Relations course choices are listed on the Associate of Applied Science degree page.

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 (communication, computation, human relations) and core-related training credits:

complete related instruction credits (communication, computation, human relations).	10
complete core-related training credits.	43
Total Credits	53

Related Instruction requirements

WR 115W Intro to College Writing: Workplace Emphasis or higher-level writing	3
Human Relations	3
MTH 060 Beginning Algebra (or higher)	4
Total Credits	10

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 /Machining 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 2022
Lane County openings – 14 annually
Statewide openings - 152 annually

Wages
Lane County average hourly - $20.39; average annual - $42,421
Oregon average hourly - $22.45; average annual - $46,711

Costs (Estimate based on 2013-14 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees	$11,022
Differential Fees*	$2,450
Other Course/Program Costs	$892
Tools	$1,075
Books and supplies	$1,504
Total Estimate	$16,943

*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 RD 087 AND EL115 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/admission-information* 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. 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. 19, Rm. 231D, 541.463.3158, *clemonsm@lanecc.edu*

Course Requirements

1. Prerequisites are required for some courses. See course descriptions.
2. MFG 201 and 202 must be completed with a letter grade, not P/NP. All other MFG and MTH courses must be completed with a letter grade, not P/NP, and must be passed with a grade of "C-" or better to satisfy program requirements.
3. PE/Health courses must be completed with a Pass or "C-" or better to meet program requirements.
4. Arts and Letters, Human Relations, and Social Science course choices are listed on the Associate of Applied Science degree page.

Two-Year Associate of Applied Science Degree

First Year	**Fall**
MFG 197 Manufacturing Technology	12
MTH 060 Beginning Algebra 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	12
PE/Health requirement	3
Total Credits	19
	Spring
MFG 197 Manufacturing Technology	12
WR 115W Introduction to College Writing: Workplace Emphasis or higher writing	3
Total Credits	15

Second Year	**Fall**
DRF 167 CAD 1	4
MFG 197 Manufacturing Technology	12
MTH 085 Applied Geometry for Technicians or higher mathematics	4
Total Credits	20
	Winter
Arts/Letters requirement	3
MFG 197 Manufacturing Technology	6
Choice of:	6
MFG 201 CNC MILL	
MFG 202 CNC Lathe	
Total Credits	15

	Spring
MFG 197 Manufacturing Technology	12
WLD 121 Shielded Metal Arc Welding 1	4
Human Relations requirement	3
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	12
MTH 060 Beginning Algebra or higher mathematics	4
WLD 151 Fundamentals of Metallurgy	3
Total Credits	19

	Winter
MFG 197 Manufacturing Technology	12
CS 120 Concepts of Computing: Information Processing or higher computer science course	4
PE/Health requirement	3
Total Credits	19

	Spring
MFG 197 Manufacturing Technology	6
MFG 210 CAM 1	3
MFG 211 CAM 2	3
WR 115W Introduction to College Writing: Workplace Emphasis or higher writing	3
Total Credits	15

Second Year	**Fall**
DRF 167 CAD 1	4
MFG 197 Manufacturing Technology	6
MFG 201 CNC Mill	6
MTH 085 Applied Geometry for Technicians or higher mathematics	4
Total Credits	20

	Winter
MFG 197 Manufacturing Technology	6
MFG 202 CNC Lathe	6
Choice of:	4
DRF 121 Mechanical Drafting	
DRF 168 CAD 2	
Total Credits	16

	Spring
MFG 197 Manufacturing Technology	3
MFG 208 CNC: Special Project	9
Arts and Letters requirement	3
Human Relations requirement	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 the Department of Labor's O*Net website for a profile of this occupation:
Industrial Engineering Technicians
onetonline.org/link/summary/17-3026.00

Or check on these O*Net Related Occupations:
Materials Engineers *onetonline.org/link/summary/17-2131.00*
Inspectors, Testers, Sorters, Samplers, and Weighers *onetonline.org/link/summary/51-9061.00*

How many students complete the Manufacturing Technology 2-year Certificate?

In academic year 2013-14, 0 students completed this certificate

What was the on-time graduation rate for these students?

Lane Community College is committed to protecting student privacy and does not publish this rate for ten or fewer graduates.

How many jobs are forecast in this occupation between 2010-20?

Lane County: 22 positions
Statewide: 313 positions

What wages are forecast for this occupation?

Lane County average hourly - $13.68; average annual - $28,460
Oregon average hourly - $14.69; average annual - $30,551

How much will the program cost?

(Estimates based on 2013-14 data for full-time students. Students attending part-time will incur additional term fees. Consult Lane's website for updated tuition and fees.)

Resident tuition and fees	$9,582
Differential fees*	$2,455
Books, supplies, program costs	$2,813
On-Campus room and board	Not offered
Total Estimate	$14,850

*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.

What's included?

Program Costs: *lanecc.edu/esfs/credit-fees-and-expenses*

What is the median loan debt incurred by students who completed the program in 2013?

Federal Loans	Not disclosed
Institutional financing	Not disclosed

For privacy reasons under FERPA, loan information is not disclosed for programs with fewer than ten graduates.

Course Requirements

1. Prerequisites are required for some courses. See course descriptions.
2. MFG 201 and 202 must be completed with a letter grade, not P/NP. All other MFG and MTH courses must be completed with a letter grade, not P/NP, and must be passed with a grade of "C-" or better to satisfy program requirements.
3. Human Relations and PE/Health course choices are listed on the Associate of Applied Science degree page.

First Year	**Fall**
MFG 197 Manufacturing Technology	12
MTH 060 Beginning Algebra or MTH 085 Applied Geometry for Technicians or higher mathematics	4
Total Credits	16

	Winter
MFG 197 Manufacturing Technology	12
PE/Health requirement	3
Total Credits	15

	Spring
MFG 197 Manufacturing Technology	12
WLD 111 Blueprint Reading for Welders	3
Total Credits	15

Second Year	**Fall**
MFG 197 Manufacturing Technology	12
WLD 121 Shielded Metal Arc Welding 1	4
Total Credits	16

	Winter
MFG 197 Manufacturing Technology	6
WR 115W Introduction to College Writing: Workplace Emphasis, or higher writing	3
Choice of:	6
MFG 201 CNC Mill	
MFG 202 CNC Lathe	
Total Credits	15

	Spring
MFG 197 Manufacturing Technology	12
Human Relations requirement	3
Total Credits	15

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

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:

- 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 Machine Tool Fundamentals	3
MTH 060 Beginning Algebra or higher mathematics	4
WLD 111 Blueprint Reading for Welders	3
MFG 197 Manufacturing Technology Inspection	2
MFG 197 Manufacturing Technology Industrial Safety	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

Medical Office Assistant

Offered by the Health Professions Division, 541.463.5617

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 mathematic equations associated with medication dosages as well as basic mathematics to process medical insurance claims.

Gainful Employment Disclosure

Standard Occupational Classification: 31-9092.00

For a profile of this occupation go to the
U.S. Department of Labor's O*Net website:
Medical Assistants
onetonline.org/link/summary/31-9092.00
Or check on these O*Net Related Occupations:
Nursing Assistants
onetonline.org/link/summary/31-1014.00

How many students completed the Medical Office Assistant 1-year Certificate in 2013-14?
In academic year 2013-14, 16 students completed this certificate.

What was the on-time graduation rate for these students?
Of students who completed this certificate in the 2013-14 academic year, 13% completed on time.
The federally required method for calculating this rate assumes students will enroll full-time, declare a major immediately, and enroll in it continuously until certificate completion. In reality, many community college students attend part-time, explore several majors, stop out for a term or more, change majors, or brush-up academic skills to be better prepared for college level courses, affecting this narrowly defined on-time graduation rate.

Job Openings Projected through 2022
Lane County openings - 21 annually
Statewide openings - 352 annually

Wages
Lane County average hourly - $15.77; average annual - $32,791
Oregon average hourly - $16.42; average annual - $34,162

How much will the program cost?
(Estimates based on 2014-15 data for full-time students. Students attending part-time will incur additional term fees. Consult Lane's website for updated tuition and fees.)

Resident tuition and student fees	$6,072
Differential fees*	$582
Books, supplies, other program costs	$3,758
On-campus room and board	Not offered
Total estimate	$10,407

*This is the total of all the differential fees attached to Medical Office Assisting courses. These fees and other course fees may change during the year – see the online credit class schedule for fees assigned to courses.

What's included?
Explanation of costs: *lanecc.edu/esfs/credit-fees-and-expenses*

What is the median loan debt incurred by students who completed the program in 2013?

Federal loans	$17,453
Private loans	Not available
Institutional financing	$0

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.

Cooperative Education (Co-op) During the required unpaid Co-op work experience in spring term, students rotate through local medical offices and clinics in both clinical and administrative settings. Students 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. 18, Rm. 105, 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.

1. Prerequisites are required for some courses. See course descriptions.
2. All first year courses, as well as MTH 052 and HO100 must be completed with a letter grade, not P/NP, and must be passed with a grade of "C-" or better to satisfy program requirements. WR 115 must be must be passed with a grade of "C-" or better and WR 121 must be completed with a letter grade, not P/NP.
3. All second year courses may be completed prior to entry into the Medical Office Assistant program, and may be taken any term.
4. To register for any MA or HIT classes, a student must be accepted into the program. Other first and second term courses may be taken prior to program entry.
5. To meet MOA Certificate requirements and also AGS degree requirements, take Arts and Letters for 4 credits if CG 103 was completed as prerequisite for MOA program admission; take Human Relations requirement for 3-4 credits if COMM 218 was completed as prerequisite.
6. PSY 201 and PSY 203 meet 8 credits of the 12-credit AGS Social Science degree requirement and may be taken in lieu of PSY 110 to meet MOA certificate requirements.

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*

Course Requirements

1. Prerequisites are required for some courses. See course descriptions.
2. WR 115W must be completed with a Pass or "C-" or better to satisfy program requirements.
3. To meet AGS degree requirements, take Arts and Letters for 4 credits if CG 103 was completed as prerequisite for MOA program admission; take Human Relations for 4 credits if COMM 218 was completed as prerequisite.
4. HO 100, MTH 052 and all courses with BT, HIT, HO, or MA prefixes must be completed with a letter grade of "C-" or better to satisfy program requirements.
5. To register for any MA or HIT classes, a student must be accepted into the program. Other first and second term courses may be taken prior to program entry.
6. These courses may be taken any term: BT 120, BT 165, HO 110, HO 114, HO 220.

Prerequisite Courses Required for Admission

Choice of:	3-4
CG 203 Human Relations at Work	
COMM 218 Interpersonal Communication	
HO 100 Medical Terminology 1	3
WR 115W Intro to College Writing: Workplace Emphasis or higher-level writing	3
MTH 052 Math for Introductory Physical Science	4
Total Credits	13-14

	Fall
BT 120 MS WORD for Business	4
HO 110 Administrative Medical Office Procedures	3
HO 150 Human Body Systems 1	3
HO 190 Medical Formatting	3
MA 110 Clinical Assistant 1	3
Choice of:	3-8
PSY 110 Exploring Psychology or	
PSY 201 General Psychology and	
PSY 203 General Psychology	
Total Credits	19-24

	Winter
BT 165 Introduction to the Accounting Cycle	4
HO 114 Introduction to Coding	3
HO 152 Human Body Systems 2	3
HO 220 Legal and Ethical Aspects of Healthcare	3
MA 120 Clinical Assistant 2	3
MA 150 Laboratory Orientation	3
MA 206 Co-op Ed. Medical Office Assistant Seminar	2
Total Credits	21

	Spring
HIT160 Practice Management	3
HO 112 Medical Insurance Procedures	3
MA 130 Clinical Assistant 3	3
MA 280 Co-op Ed: Medical Office Assistant	5
Total Credits	14

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 2022
Lane County Openings- 4 annually
Statewide openings - 37 annually

Wages
Lane County average hourly - $31.68; average annual - $65,888
Oregon average hourly - $30.18; average annual - $62,781

Costs (Estimate based on 2013-14 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@lanecc.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.

Course Requirements

1. Prerequisites are required for some courses. See course descriptions.
2 Foundational Skills and Discipline Studies courses can be taken pass/no pass or for a letter grade of C- or higher.
3. All program core courses must be taken for a letter grade and passed with a minimum of grade C- .
4. All program core courses that serve as prerequisites in a sequence must be taken for a letter grade of a B- or higher (with the exception of WR 121). See course description for prerequisites.

Two-Year Associate of Applied Science Degree

First Year	Fall
ART 115 Basic Design: Fundamentals	3
MUL105 Image Communications	4
MUL101 Introduction to Media Arts	3
FA 250 Concepts of Visual Literacy	3
Total Credits	13

	Winter
AUD 120 Audio Production	4
Art 131 Introduction to Drawing	3
Art 216 Digital Design Tools	4
Choice of: WR 121 Introduction to Academic Writing WR 121_H Introduction to Academic Writing	4
MUL 218 Business Practices for Media Arts	3
Total Credits	18

	Spring
FA 221 Computer Animation	4
ART 245 Drawing for Media	4
MUL 212 Digital Imaging	4
Science, Math, Computer Science Requirement	4
VP 151 Video Production 1: Camera	3
Total Credits	19

Second Year	Fall
CIS 195 Web Authoring 1	3
MUL 210 Multimedia Design	3
VP 152 Video Production 2: Editing	3
MTH 60 Beginning Algerbra - or Higher Math	4
Directed Elective	3-4
Total Credits	16-17

	Winter
ART 289 Web Production	3
CG 203 Human Relations at Work	3
FA 261 Writing for Interactive Design	3
MDP 246 Multimedia Production 1	4
MDP 280 Co-op Ed: Multimedia	3
Total Credits	16

	Spring
MDP 247 Multimedia Production 2	4
MDP 280 Co-op Ed: Multimedia	3
Choice of: Physical Education Activity requirement Health Requirement	3
Directed elective	3-4
Total Credits	13-14

One-Year Certificate of Completion in Multimedia Design

Gainful Employment Disclosure

Standard Occupational Classification: 27-1014.00

Go to the Department of Labor's O*Net website
for a profile of this occupation:
Multimedia Artists and Animators
onetonline.org/link/summary/27-1014.00
Or check on these O*Net Related Occupations: *None*

How many students complete the Multimedia Design 1-year Certificate?
In academic year 2013-14, 13 students completed this certificate.

What was the on-time graduation rate for these students?
Of students who completed this certificate in the 2013-14 academic year 0% completed on time.

The federally required method for calculating this rate assumes students will enroll full-time, declare a major immediately, and enroll in it continuously until certificate completion. In reality, many community college students attend part-time, explore several majors, stop out for a term or more, change majors, or brush-up academic skills to be better prepared for college level courses, affecting this narrowly defined on-time graduation rate.

Job Openings Projected through 2022
Lane County Openings- 4 annually
Statewide openings - 37 annually

Wages
Lane County average hourly - $31.68; average annual - $65,888
Oregon average hourly - $30.18; average annual - $62,781

How much will the program cost?
(Estimates based on 2013-14 data for full-time students. Students attending part-time will incur additional term fees. Consult Lane's website for updated tuition and fees.)

Resident tuition and fees	$6,983
Books, supplies, program costs	$1,700
On-Campus room and board	Not offered
Total Estimate	$8,683

What's included?
Program Costs: *lanecc.edu/esfs/credit-fees-and-expenses*

What is the median loan debt incurred by students who completed the program in 2013?

Federal Loans	$0
Institutional financing	$0

Course Requirements

1. Prerequisites are required for some courses. See course descriptions.
2. Foundational Skills and Discipline Studies courses can be taken pass/no pass or for a letter grade of C- or higher.
3. All program core courses must be taken for a letter grade and passed with a minimum of grade C-.
4. All program core courses that serve as prerequisites in a sequence must be taken for a letter grade of a B- or higher (with the exception of WR 121). See course description for prerequisites.

	Fall
ART 115 Basic Design: Fundamentals	3
MUL 101 Introduction to Media Arts	3
MUL 105 Image Communications	4
FA 250 Concepts of Visual Literacy	3
Choice of:	4
WR 121 Introduction to Academic Writing	
WR 121_H Introduction to Academic Writing	
Total Credits	17

	Winter
AUD 120 Audio Production	4
ART 131 Introduction to Drawing	3
ART 216 Digital Design Tools	4
FA 261 Writing and Interactive Design	3
MTH 060 Beginning Algebra or higher mathematics	4
Total Credits	18

	Spring
FA 221 Computer Animation	4
MUL 210 Multimedia Design	3
CG 203 Human Relations at Work	3
Science, Math, Computer Science course	4
VP 151 Video Production 1 / Camera	3
Total Credits	17

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 151A Media Graphics	3
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 261 Photography	3
ART 220 Documentary Photography	3
ART 262 Photography 2	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
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 many students complete the Multimedia Design 1-year Certificate?
In academic year 2013-14, 1 students completed this certificate.

What was the on-time graduation rate for these students?
Lane is committed to protecting student privacy and does not publish this rate for fewer than ten graduates.

How many jobs are forecast in this occupation between 2010-20?
Lane County: 11 Statewide: 130

What wages are forecast for this occupation?
Lane County hourly average - $20.61; annual average - $42,858
Oregon hourly average - $23.12 ; annual average - $ 48,079

How much will the program cost?
(Estimate based on 2014-15 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 is the median loan debt incurred by students who completed the program in 2014?

Federal Loans	Not disclosed
Institutional financing	Not disclosed

What's included?
Program Costs: *lanecc.edu/esfs/credit-fees-and-expenses*

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 federal and 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.

How many 2013-14 Web Design graduates completed within the designed program length?
This is a new program. 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.

Course Requirements

1. Prerequisites are required for some courses. See course descriptions.
2. CG 203, CIS 195, CS 295P, MTH 060 and WR 121 must be completed with a letter grade, not P/NP, and must be passed with a grade of "C-" or better to satisfy program requirements. All other courses must be completed with a letter grade of "B" or better to satisfy prerequisite requirements.

	Fall
ART 115 Basic Design: Fundamentals	3
CIS 195 Web Authoring 1	3
MTH 060 Beginning Algebra or higher math	4
ART 216 Digital Design Tools	4
CG 203 Human Relations at Work	3
Total Credits	17

	Winter
ART 245 Drawing for Media	4
ART 289 Web Production	3
CS 133JS Beginning Programming: JavaScript	4
MUL 212 Digital Imaging	4
Total Credits	15

	Spring
ART 290 Design Concepts for the Web	3
MUL 218 Business Practices for Media Arts	3
MDP 246 Multimedia Production 1	4
Choice of: WR 121 Introduction to Academic Writing WR 121_H Introduction to Academic Writing	4
Total Credits	14

Nursing

Offered by the Health Professions Division 541.463.5617

Two-Year Associate of Applied Science Degree

Certificate of Completion, Practical Nursing

Practical Nursing Bridge

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 2022
Lane County openings - 96 annually
Statewide openings – 1,091 annually

Wages
Lane County average hourly - $37.94 average annual - $78,923
Oregon average hourly - $39.17 average annual - $81,484

Costs (Estimate based on 2014-15 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees	$9,181
Differential Fees*	$10,644
Other program costs (Criminal background check, uniform, shoes, stethoscope, physical exam, immunizations, etc.)	$3,165
Books and supplies	$1,400
Total Estimate	$24,390

*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/registered-nursing-application-information.* Oregon residency required.

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: *http://arcweb.sos.state.or.us/pages/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 nine community colleges and OHSU consortium partners.

Cooperative Education Co-op internships may be taken as an optional elective any of the last four terms of the program. Contact Sara Barnes, Cooperative Education Coordinator for Nursing, Bldg. 30, Rm. 102, (541) 463-3276.

Academic Advising/Counseling For assistance with meeting application or program requirements contact Counseling and Advising in Building 30, Room 101 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 select the academic advisory tab then select "nursing" .

Program Coordinator Patricia Tully, RN, MS - *tullyt@lanecc.edu*

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	4
BI 232 Human Anatomy and Physiology 2	4
BI 233 Human Anatomy and Physiology 3	4
Nutrition course, Choice of: FN 225 Nutrition FN 240 Introduction to Nutrition and Metabolism	4
PSY 215 Lifespan Developmental Psychology	4
Mathematics proficiency, Choice of: MTH 095 Intermediate Algebra or higher or Credit by Exam for MTH 095 or transcripted credits: AP (Calculus), or CLEP (College Algebra, or any Calculus, or Statistics), or IB (Mathematics, or Math Studies, or Further Mathematics, or Statistics)	4-5

Choice of:	4
WR 121 Introduction to Academic Writing	
WR 121_H Introductiion to Academic Writing	
Choice of:	4
WR 122 Composition: Argument, Style and Research	
WR 122_H Composition: Argument, Style and Research	
Human Relations requirement	3
Any college level 100 or 200 transferable non-studio humanities, social science or science electives	3-6

Course Requirements

1. Prerequisites are required for some courses. See course descriptions.
2. All courses except Clinical Labs, Cooperative Education, and Biology with Genetics must be passed with a letter grade of "C" or better. C- or less not accepted.
3. WR 121 and 122 (prerequisite to program entry) are waived with completion of previous U.S. Bachelors Degree or higher from U.S. regionally accredited institution.
4. WR 123 and 227 are waived if WR 121 and WR 122 are taken as 4 credit courses effective summer term 2010.
5. The most recent BI 233 course must have been completed within 7 years prior to starting the nursing program.
6. PSY 236 is not offered at Lane, but is available at other colleges in the OCNE consortium.
7. Students must be enrolled in the Nursing Program to register for any NRS classes.

First Year	**Fall**
BI 234 Introductory Microbiology	4
Human Relations requirement	3-4
NRS 110A Foundations of Nursing: Health Promotion	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	2
NRS 111B Foundations of Nursing in Chronic Illness Lab	4
NRS 230 Clinical Pharmacology 1	3
NRS 232 Pathophysiology Processes 1	3
Choice of:	4
WR 123 Composition: Research	
WR 227 Technical Writing	
Total Credits	16

	Spring
BI112 Cell Biology for Health Occupations	4
taken 2013 or later; or:	
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 112A Foundations of Nursing in Acute Care 1	2
NRS 112B Foundations of Nursing in Acute Care 1 Clinical Lab	4
NRS 231 Clinical Pharmacology 2	3
NRS 233 Pathophysiology Processes 2	3
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	4
NRS 221B Nursing in Chronic Illness 2 and End-of-Life Lab	5
Arts and Letters, Social or Natural Science electives (required for BS, not for AAS)	(6)
Elective:	
NRS 280 Co-op Ed: Nursing	(2)
Total Credits	9-17

	Winter
NRS 222A Nursing in Acute Care 2 and End-of-Life	4
NRS 222B Nursing in Acute Care 2 and End-of-Life Clinical Lab	5
Arts and Letters, Social or Natural Science electives (required for BS, not for AAS)	(6)
Total Credits	9-15

	Spring
NRS 224A Integrative Practicum 1	2
NRS 224B Integrative Practicum 1 Clinical Lab (pass/no pass)	7
Arts and Letters, Social or Natural Science electives (required for BS, not for AAS)	(6)
Electives as required to complete 90 credits for AAS	(0-16)
Total Credits	9-31

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

For a profile of this occupation go to the U.S. Department of Labor's O*Net website:

Licensed Practical and Licensed Vocational Nurses
onetonline.org/link/summary/29-2061.00
Or check on these O*Net Related Occupations:
Psychiatric Aides
onetonline.org/link/summary/31-1013.00

How many students completed the Practical Nursing 1-year Certificate in 2013-14?

In academic year 2013-14,14 students completed this certificate.

What was the on-time graduation rate for these students?

Of students who completed this certificate in the 2013-14 academic year 0% completed on time.

The federally required method for calculating this rate assumes students will enroll full-time, declare a major immediately, and enroll in it continuously until certificate completion. In reality, many community college students attend part-time, explore several majors, stop out for a term or more, change majors, or brush-up academic skills to be better prepared for college level courses, affecting this narrowly defined on-time graduation rate.

Job Openings Projected through 2022

Lane County openings - 16 annually
Statewide openings – 120 annually

Wages

Lane County average hourly - $23.69 average annual - $47,131
Oregon average hourly - $23.42 average annual - $48,714

How much will the program cost?

(Estimates based on 2014-15 data for full-time students. Students attending part-time will incur additional term fees. Consult Lane's website for updated tuition and fees.)

Resident tuition and student fees	$4,708
Differential fees*	$3,156
Books, supplies, other program costs	$2,718
On-campus room and board	Not offered
Total estimate	$10,582

*This is the total of all the differential fees attached to Practical Nursing courses. These fees and other course fees may change during the year – see the online credit class schedule for fees assigned to courses.

What's included?

Program Costs: *lanecc.edu/esfs/credit-fees-and-expenses*

What is the median loan debt incurred by students who completed the program in 2013?

Federal loans	$14,868
Private loans	Not available
Institutional financing	$1,367

Admission Information Program website: *lanecc.edu/hp/nursing/.* Application website: *lanecc.edu/hp/nursing/licensed-practical-nursing-application-information.* Drug testing, criminal background check required. Consult *lanecc.edu/hp/nursing/registered-nursing-faq*. Information on criminal background checks and disqualifying crimes can be found at the Oregon Board of Nursing at: http://*arcweb.sos.state.or.us/pages/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 30, Room 101 or E-mail *NursingProgram@lanecc.edu* with your specific questions.

Program Coordinator Patricia Tully, RN, MS, *tullyt@lanecc.edu*

Course Requirements

1. Prerequisites are required for some courses. See course descriptions.
2. The most recent BI 231, BI 232, BI 233 courses must have been completed within 7 years prior to starting the PN Program.
3. PN 101, PN 102, and PN 103 must be completed with a letter grade and passed with "C" or better. Human Relations course must be completed with a letter grade.

Prerequisite Courses for Program Application	**Credits**
Mathematics proficiency, Choice of: MTH 065 Intermediate Algebra or higher or Credit by Exam for MTH 065 or transcripted credits: AP (Calculus), or CLEP (College Algebra, or any Calculus, or Statistics), or IB (Mathematics, or Math Studies, or Further Mathematics, or Statistics)	4-5
HO 100 Medical Terminology 1	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
CIS 101 Computer Fundamentals or documented computer proficiency	3
PSY 215 Lifespan Developmental Psychology	3-4
Current Certified Nursing Assistant (CNA)	
CPR Certified	

First Year	**Winter**
PN 101 Practical Nursing	12
WR 115 Introduction to College Writing	4
Total Credits	16
	Spring
PN 102 Practical Nursing	12
Human Relations Requirement	4
Total Credits	16
	Summer
PN 103 Practical Nursing	13
Total Credits	13

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 2013-14 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	$280

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 - Program website: *lanecc.edu/hp/nursing/. Application website: lanecc.edu/hp/nursing/pn-rn-bridge-application-information*
- 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 30, Room 101 or E-mail *NursingProgram@lanecc.edu* with your specific questions.

Program Coordinator Patricia Tully, RN, MS, *tullyt@lanecc.edu*

Course Requirements

1. Prerequisites are required for some courses. See course descriptions.

2. All courses must be passed with a letter grade of "C" or better to complete the Bridge Program. C- or less not accepted.
3. WR 121 or WR 121H and 122 or Wr122_H (prerequisite to program entry) are waived with completion of previous U.S. Bachelors Degree or higher from U.S. regionally accredited institution.
4. WR 123 and 227 are waived if WR 121 or WR 121_H and WR 122 or WR 122_H are taken as 4 credit courses effective summer term 2010.
5. The most recent BI 233 course must have been completed within 7 years prior to starting the nursing program. .
6. PSY 236 is not offered at Lane, but is available at other colleges in the OCNE consortium.

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	4
Note: see BI 231 course description for required prerequisites.	
BI 232 Human Anatomy and Physiology 2	4
BI 233 Human Anatomy and Physiology 3	4
FN 225 Nutrition	4
Human Development course, Choice of:	3-6
PSY 215 Lifespan Developmental Psychology or (PSY 235 Human Development 1 and PSY 236 Human Development 2) or (HDFS 226 Child Development and PSY 236 Human Development 2)	
Mathematics proficiency, choice of:	4-5
MTH 095 Intermediate Algebra or higher or Credit by Exam for MTH 095 or transcripted credits: AP (Calculus), or CLEP (College Algebra, or any Calculus, or Statistics), or IB (Mathematics, or Math Studies, or Further Mathematics, or Statistics)	
Choice of:	4
WR 121 Introduction to Academic Writing WR 121_H Introduction to Academic Writing WR 122 Composition: Style and Argument	
Human Relations Requirement	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	4
BI 112 Cell Biology for Health Occupations taken 2013 or later; or:	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	3
NRS 232 Pathophysiology Processes 1	3
	Spring
NRS 231 Clinical Pharmacology 2	3

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 2014-15 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 Marv Clemons, Occupational Skills Co-op Coordinator, Bldg. 19, Rm. 231, D, 541.463.3158

Program Lead Marv Clemons, *clemonsm@lanecc.edu*, 541.463.3158

Course Requirements

1. All required OST courses must be taken for a letter grade, not P/NP, and must be passed with a "C-" or better to fulfill program requirements.
2. The required WR course must be taken for a letter grade, not P/NP.
3. Occupation-specific course work must be graded unless course is offered as P/NP only and must be passed with a "C-" or better to fulfill program requirements.
4. See course descriptions for prerequisite and corequisite information.

	Fall
OST 280 Co-op Ed: Occupational Skills	6
Occupation-specific course work	6
Choice of:	3-4
WR115 Introduction to College Writing WR115W Introduction to College Writing: Workplace Emphasis	
Total Credits	15-16
	Winter
OST 280 Co-op Ed: Occupational Skills	6
Occupation-specific course work	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	9
Occupation-specific course work	3
CG 203 Human Relations at Work	3
Total Credits	15

Paramedicine

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 and Paramedics to serve in a career in EMS.

Learning Outcomes The graduate will:

- demonstrate personal behaviors consistent with public and employer expectations of professional EMS providers.
- demonstrate technical proficiency in the performance of EMT and/or paramedic skills.
- demonstrate technical proficiency with the operation of EMT and/or paramedic equipment.
- be able to understand, interpret, apply, evaluate and • effectively communicate EMS and general medical knowledge necessary to function in a healthcare setting.
- be able to verbally communicate effectively.

Job Openings Projected through 2022
Lane County openings - 5 annually
Statewide openings - 82 annually

Wages (Average of EMT and Paramedic)
Oregon average hourly - $18.12; average annual - $37,696

Costs (Estimate based on 2014-15 tuition and fees. Students attending part-time will incur additional term fees. Consult Lane's website for updated tuition.)

Resident Tuition	$9,898
Differential Fees*	$1,715
Student and Program Fees	$2,550
Other Course/Program Costs	$5,614
Personal Heath Insurance	varies
Total Estimate	$ 19,777

*This is the total of all the differential fees attached to Emergency Medical Technology-Paramedicine 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.

Licensing or Other Certification Exams Required Oregon State/National Registry EMT and/or Paramedic exams. Paramedic graduates qualify to test for Oregon Paramedic licensure. 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/Paramedicine program.

Students seeking EMT certification need only take EMT 151 and EMT 152. Students who successfully complete are eligible to apply for the Oregon EMT licensing exam. Admission is by application only. Please see the EMT application for details, *lanecc.edu/hp/emt*.

Prerequisite Requirements Students must be 18 years of age, have High School Diploma, GED or college degree, and satisfy placement testing requirements. Students enrolled in EMT programs are required to have a TB test, and MMR, Varicella, TDaP and Hepatitis B vaccinations as well as carry their own health insurance, submit to drug/alcohol test and criminal background check in accordance with the Administrative Standards for Health Professions Students Clinical Training (OAR 409-030-0100 to 409-030-0250). Paramedic applicants (for the second year) must have current, valid Oregon EMT, Oregon Advanced EMT, or Oregon EMT-Intermediate license, and maintain good standing with the Oregon Health Authority Department of Human Services, EMS and Trauma Systems Section.

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 EMT website, *lanecc.edu/hp/emt.*

Academic Advising/Counseling For questions about credit coursework contact Counseling and Advising, Student Services Building, or email *EMTParamedicProgram@lanecc.edu* . For information on the non-credit offerings in EMS visit the EMT website, *lanecc.edu/hp/emt.*

Cooperative Education (Co-op) Students earning the Paramedicine AAS two-year degree are required to take two Cooperative Education courses. Co-op courses provide opportunities for on-the-job experience to complete Paramedic training. . Contact Tom Brokaw, Paramedic Co-op Coordinator, *brokawt @lanecc.edu.*

Course Requirements

1. Prerequisites are required for some courses. See course descriptions.
2. EMT 271 and EMT 273 must be completed with a grade of "Pass" or "C-" or better.
3. MTH 095, PSY 110, WR 121, HE 275, COMM 111, and Social Science/Human Relations requirement must be completed with a letter grade, not P/NP.
4. All other courses must be completed with a letter grade, not P/NP, and must be passed with a grade of "C-" or better to satisfy program requirements.
5. Choices for Social Science/Human Relations requirement are listed on the Associate of Applied Science degree page.
6. Students pursuing a bachelor's degree need to complete a college level, transferable math course.
7. Prerequisites are required for BI 231. See course descriptions.

Paramedicine

Two-Year Associate of Applied Science Degree

First Year	**Fall**
BI 231 Human Anatomy and Physiology 1	4
EMT 151 Emergency Medical Technician Basic Part 1	5
EMT 152 Emergency Medical Technician Basic Part 2	5
EMT 175 Introduction to Emergency Services	4
Total Credits	18
	Winter
BI 232 Human Anatomy and Physiology 2	4
EMT 196 Crisis Intervention	3
MTH 095 Intermediate Algebra	5
WR 121 Introduction to Academic Writing	4
Total Credits	16
	Spring
BI 233 Human Anatomy and Physiology 3	4
EMT 169 Emergency Services Rescue	4

EMT 170 Emergency Response Communication/Documentation	2
EMT 171 Emergency Response Patient Transportation	2
PSY 110 Exploring Psychology	3
HO 100 Medical Terminology 1	3
Total Credits	18

Second Year	**Fall**
EMT 270 EMT-Paramedic Part 1	10
EMT 271 EMT-Paramedic Part 1 Clinical	1
COMM 111 Fundamentals of Public Speaking or higher Speech course	4
Total Credits	15
	Winter
EMT 272 EMT-Paramedic 2	10
EMT 273 EMT-Paramedic Clinical 2	3
HE 275 Lifetime Health and Fitness	3
Total Credits	16
	Spring
EMT 274 EMT-Paramedic 3	4
EMT 275 EMT-Paramedic Clinical 3	4
EMT 280P1 Co-op Ed: EMT Internship Part1	3
Total Credits	11
	Summer
EMT 280P2 Co-op Ed: EMT Internship Part 2	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 Paramedicine AAS offered throughout the state. All Community College paramedic programs follow the same curriculum and accept students transferring from community colleges that only provide the first-year courses.

Gainful Employment Disclosure

Standard Occupational Classification: 29-2041.00
For a profile of this occupation go to the U.S. Department of Labor's O*Net website:

Emergency Medical Technicians and Paramedics
onetonline.org/link/summary/29-2041.00
Or check on these O*Net Related Occupations:
Ambulance Drivers and Attendants, Except Emergency Medical Technicians
onetonline.org/link/summary/53-3011.00

How many students completed the Emergency Mdical Technician 1-year Certificate in 2013-14?
In academic year 2013-14, 21 students completed this certificate.

What was the on-time graduation rate for these students?
Of students who completed this certificate in the 2013-14 academic year, 0% completed on time.

The federally required method for calculating this rate assumes students will enroll full-time, declare a major immediately, and enroll in it continuously until certificate completion. In reality, many community college students attend part-time, explore several majors, stop out for a term or more, change majors, or brush-up academic skills to be better prepared for college level courses, affecting this narrowly defined on-time graduation rate.

Job Openings Projected through 2022
Lane County openings - 5 annually
Statewide openings - 82 annually

Wages (Average of EMT and Paramedic)
Oregon average hourly - $18.12; average annual - $37,696

How much will the program cost?
(Estimates based on 2013-14 data for full-time students. Students attending part-time will incur additional term fees. Consult Lane's website for updated tuition and fees.)

Resident tuition	$4,900
Differential fees*	$460
Student and Program Fees	$1,372
Books, supplies, other program costs	$3,363
On-campus room and board	Not offered
Total estimate	$10,095

What is the median loan debt incurred by students who completed the program in 2014?

Federal loans	$35,340
Private loans	Not available
Institutional financing	$769

*This is the total of all the differential fees attached to Emergency Medical Technician courses. These fees and other course fees may change during the year – see the online credit class schedule for fees assigned to courses.

Course Requirements

1. Prerequisites are required for some courses. See course descriptions.
2. MTH 095, PSY 110, and WR 121 must be completed with a letter grade, not P/NP.
3. All other courses must be completed with a letter grade, not P/NP, and must be passed with a grade of "C-" or better to satisfy program requirements.
7. Prerequisites are required for BI 231. See course descriptions.

	Fall
BI 231 Human Anatomy and Physiology 1	4
EMT 151 Emergency Medical Technician Basic Part 1	5
EMT 152 Emergency Medical Technician Basic Part 2	5
EMT 175 Introduction to Emergency Services	4
Total Credits	18
	Winter
BI 232 Human Anatomy and Physiology 2	4
EMT 196 Crisis Intervention	3
MTH 095 Intermediate Algebra or higher	5
WR 121 Introduction to Academic Writing	4
Total Credits	16
	Spring
BI 233 Human Anatomy and Physiology 3	4
EMT 169 Emergency Services Rescue	4
EMT 170 Emergency Response Communication/Documentation	2
EMT 171 Emergency Response Patient Transportation	2
PSY 110 Exploring Psychology	3
HO 100 Medical Terminology 1	3
Total Credits	18

Physical Therapist Assistant

Offered by the Health Professions Division, 541.463.5617

Two-Year Associate of Applied Science Degree

Refer to *lanecc.edu/custom/pathways/physicaltherapistassistant* 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 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.

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 2022

Lane County openings - 2 annually
Statewide openings - 34 annually

Wages

Lane County median hourly - $30.22; average annual - $62,850
Oregon median hourly - $26.31; average annual - $54,727

Costs (Estimate based on 2014-15 tuition and fees. Consult Lane's website for updated tuition and fees for prerequisite and program courses. Prerequisite costs will vary for transfer students.)

Resident Tuition	$9,300
Differential Fees*	$1,463
Student and Program Fees	$1,498
Other Program Costs	$3,709
Total estimate	$15,970

*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.

Admission Information Students are admitted once a year. Admission is restricted and is based on a program application. Please consult l*anecc.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 *ptaprogram@lanecc.edu*

Cooperative Education (Co-op) Co-op is required for second year students enrolled in the Physical Therapist Assistant Program. Students must complete 18 credits of Co-op a program-designated co-op site. Contact Beth Thorpe, PTA Cooperative Education Coordinator, Bldg. 30, Rm. 108, 541.463.3274, *thorpeb@lanecc.edu.*

Program Coordinator Christina Howard, MPT, Health Professions, Building 30, Room 110, 541.463.5764, *howardc@lanecc.edu*

Course Requirements

1. Prerequisites are required for some courses. See course descriptions.
2. All PTA courses must be completed with a letter grade of "C" or better to satisfy program requirements.
3. Non-PTA courses must be passed with a grade of Pass or "C" or better to satisfy program requirements.
4. No more than 16 credits with a grade of "Pass" are accepted.

Prerequisites Required to Apply	**Credits**
Proof of clinical observation hours with a PT or PTA	25
Choice of: WR 121 Introduction to Academic Writing WR121_H Intorduction Academic Writing WR 122 Composition: Argument, Style, and Research WR 122H Composition: Argument, Style, and Research WR 123 Composition: Research,or higher writing, or prior bachelor's degree, verified by transcript from US accredited institution.	3-4
HO 100 Medical Terminology	3
Choice of: HO 150 Human Body Systems BI 231 Human Anatomy and Physiology	3-4
Choice of: GS 104 Physical Science PH 101 Fundamentals of Physics PH 102 Fundamentals of Physics PH 201 General Physics	4-5

Choice of:	4
PSY 201 General Psychology	
PSY 202 General Psychology	
Total Credits	17-20

Two-Year Associate of Applied Science Degree

First Year	**Fall**
PTA 100 Introduction to Physical Therapy	3
PTA 101 Introduction to Clinical Practice 1	5
PTA 101L Introduction to Clinical Practice 1 Lab	2
MTH 065 Elementary Algebra	4
Choice of:	3-4
HO 152 Human Body Systems 2	
BI 233 Human Anatomy and Physiology 3	
**Note: Either HO 152 or BI 232 and BI 233 must be completed by fall term	
Total Credits	17-18
	Winter
PTA 103 Introduction to Clinical Practice 2	5
PTA 103L Introduction to Clinical Practice 2 Lab	2
PTA 132 Applied Kinesiology 1	2
PTA 132L Applied Kinesiology 1 Lab	2
COMM 115 Introduction to Intercultural Communication	4
Total Credits	15
	Spring
HE 262 First Aid 2 - Beyond the Basics	3
PTA 104 PT Interventions – Orthopedic Dysfunctions	5
PTA 104L PT Interventions – Orthopedic Dysfunctions Lab	2
PTA 133 Applied Kinesiology 2	2
PTA 133L Applied Kinesiology 2 Lab	2
Total Credits	14

Second Year	**Fall**
PTA 204 PT Interventions – Neurological Dysfunctions	5
PTA 204L PT Interventions – Neurological Dysfunctions Lab	2
PTA 280A Co-op Ed: First Clinical Internship	4-8
Total Credits	11-15
	Winter
PTA 205 PT Interventions – Complex Medical Dysfunctions	4
PTA 205L PT Interventions – Complex Medical Dysfunctions Lab	2
PTA 201 PT and Older Adults	2
PTA 280B Co-op Ed: Second Clinical Internship	4-8
Total Credits	12-16
	Spring
PTA 200 Professionalism, Ethics and Exam Preparation	4
PTA 203 Contemporary Topics in Physical Therapy	2
PTA 280C Co-op Ed: Third Clinical Internship	4-8
Total Credits	10-14

Respiratory Care

Offered by Health Professions Division, 541.463.5617

Two-Year Associate of Applied Science Degree

Refer to *lanecc.edu/custom/pathways/respiratorycare* for AAS RC degree career pathways.

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 2020

Lane County openings - 4 annually

Statewide openings - 33 annually

Wages

Oregon average hourly - $29.31; average annual - $60,960

Costs (Estimate based on 2014-15 tuition and fees. Consult Lane's website for updated tuition and fees for prerequiste and program courses. Prerequisite costs will vary for transfer students.)

Resident Tuition and Student Fees	$10,644
Differential Fees*	$1,313
Student Equipment and Textbook Costs	$1,730
Computer and Internet Service	$1200
Other Program Costs	$220
Total Estimate	$15,107

*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 $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 nationally offered credentialing exams to become a Certified Respiratory Therapist (CRT) or Registered Respiratory Therapist (RRT). National credentials are issued by the National Board for Respiratory Therapy (913.599.4200, nbrc.org). The CRT credential qualifies the graduate for state licensure as a Licensed Respiratory Care Practitioner. (Oregon State Respiratory Care Practitioner License - Oregon Health Licensing Agency, 503.378.8667, oregon.gov/OHLA/RT)

Admission Information The Respiratory Care Program blends online and on-campus learning activities. An applicant must complete a Respiratory Care Program application. The application information packet, submission timeline, and first-day enrollment requirements are found on the program web page, *lanecc.edu/hp/rc*

Prerequisites The most current information regarding the curriculum, program prerequisites, admission standards and procedures is available at *lanecc.edu/hp/rc.* Updates or changes to curriculum, prerequisites, or admission standards and procedures will be posted to program web page.

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 or WR 121_H 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)
- BI 233 Human Anatomy and Physiology 3 (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 Accreditation The Respiratory Care Program is accredited by the Commission on Accreditation for Respiratory Care, coarc.com.

Cooperative Education (Co-op)/Clinical Experience Respiratory care students earn college credit for participation in job-related activities in respiratory care professional settings under direct supervision. Through required Respiratory Care Clinical Practice Co-op courses, enrolled students develop skills, connect classroom theory with practice, expand career knowledge, and make contacts for potential future employment in respiratory care. Paid or unpaid internships may also be available as an elective co-op education course. Contact Norma Driscoll, Respiratory Care Co-op Coordinator, Bldg. 30, Rm. 210, 541.463.3176, *driscolln@lanecc.edu* for additional information.

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.

Course Requirements

1. Prerequisites are required for some courses. See course descriptions.
2. Human Relations and Health/PE choices are listed on the Associate of Applied Science degree page.
3. To enroll in RT 112, RT 114, or RT 146, a student must be accepted into the Respiratory Care program.
4. Clinical courses (RT 146, RT 280A, RT 280B, RT 280C, RT 280D, RT 270) are available Pass/No Pass only. All other courses must be completed with a letter grade, not P/NP, to meet program requirements.

Program Coordinator Norma Driscoll, BS, RRT, 541.463.3176, *driscolln@lanecc.edu*

Two-Year Associate of Applied Science Degree

First Year	**Fall**
BI 234 Microbiology	4
RT 112 Respiratory Care Science	2
RT 114 Fundamentals of Respiratory Care	2
RT 146 Introduction to Clinical Respiratory Care	3
Human Relations requirement	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
Health/PE requirement	3
Preferred: HE 275 Lifetime Health and Fitness	
RT 116 Basic Respiratory Assessment	2
RT 127 Respiratory Care Diseases and Medications	4
RT 141 Principles of Respiratory Care Lab	1
RT 144 Principles of Respiratory Care	3
Total Credits	13
	Spring
RT 126 Respiratory Care Case Review - Part 1	2
RT 280-A Respiratory Care Clinical Practice 1	8
RT 251 Pulmonary Diagnostics and Monitoring Lab	1
RT 254 Pulmonary Diagnostics and Monitoring	3
Total Credits	14
	Summer
RT 110 Introduction to Mechanical Ventilation	3
RT 136 Respiratory Care Case Review - Part 2	4
RT 280-B Respiratory Care Clinical Practice 2	6
Total Credits	13

Second Year	**Fall**
RT 216 Respiratory Care Case Review - Part 3	2
RT 241 Principles of Mechanical Ventilation Lab	1
RT 244 Principles of Mechanical Ventilation	3
RT 280-C Respiratory Care Clinical Practice 3	8
Total Credits	14
	Winter
RT 256 Respiratory Care Case Review - Part 4	2
RT 262 Neonatal/Pediatric Respiratory Care	3
RT 266 Emergency and Critical Care - Part 1	3
RT 280-D Respiratory Care Clinical Practice 4	8
Total Credits	16
	Spring
RT 270 Clinical Competency Assessment	1
RT 274 Credentialing Topics	2
RT 276 Emergency and Critical Care - Part 2	2
RT 280-R Co-op Ed: Respiratory Therapy (Practicum)	4
Arts and Letters	4
The following are preferred:	
COMM 111 Fundamentals of Public Speaking	
COMM 115 Introduction to Intercultural Communication	
COMM 218 Interpersonal Communication	

COMM 220 Communication, Gender and Culture	
Total Credits	13

Optional courses each term:

RT 298 Independent Study
RT 280X Co-op Ed: Respiratory Care Adv. Placement Clinical Practice

Retail Management

Offered by the Business Department, 541.463.5221

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. 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 multicultural 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
onetonline.org/link/summary/41-9099.00
Related Occupation:
First-Line Supervisors of Retail Sales Workers
onetonline.org/link/summary/41-1011.00

How many students completed the 1-year Certificate ?
In academic year 2013-14, 5 students completed this certificate.

What was the on-time graduation rate for these students for 2014?
Lane Community College is committed to protecting student privacy and does not publish this rate for fewer than ten graduates.

How much will the program cost?
(Estimate based on 2014-15 data. Consult Lane's website for updated tuition.)

Resident tuition and fees	$5,729
Books, supplies, program costs	$2,632
Total Estimate	$8,361

What's included?
Program Costs: *lanecc.edu/esfs/credit-fees-and-expenses*

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 2012-13 program graduates:

Federal Loans	Not disclosed
Institutional financing	Not disclosed

No 2010-11 program graduates used private educational loans.

How long will it take to complete this program?
The program is designed to take 4 terms, or about 15 months of study to complete.

How many jobs are forecast in this occupation between 2010-20?
Lane County openings - 19 annually
Statewide openings - 225 annually

Will I be able to pay back student loans?
Most Lane students graduating in 2012-13 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 - Rogue Community College
City - Grants Pass
2009 Graduates - 7

Course Requirements

1. Students must place at least into WR 121 or WR1221_H and MTH 060, or take classes to reach these levels before enrolling in program courses.
2. Foundational Requirements (WR 121 or WR1221_H, MTH 065, and Health/Wellness/Fitness courses) must be taken for a letter grade, and must be completed with a grade of "C-" or better to meet program requirements.
3. All program core courses (BA, BT, CS) must be taken for a letter grade, and must be completed with a grade of "C" or better to meet program requirements. See course listings for prerequisites.

Required Prerequisite

BT 108 Business Proofreading and Editing	4
Total Required Prerequisite Credits	4

	Fall
BA 101 Introduction to Business	4
CS 120 Concepts of Computing Information Processing	4
MTH 060 Beginning Algebra or higher	4
Choice of:	4
COMM 100 Basic Communication	
COMM 111 Fundamentals of Public Speaking	
COMM 130 Business and Professional Speech	
Total Credits	16

	Winter
BA 223 Marketing	4
BA 224 Human Resource Management	3

Choice of:	4
WR 121 Introduction to Academic Writing	
WR121_H Introduction to Academic Writing-Honors	
Choice of:	4
BT 165 Introduction to the Accounting Cycle	
BA 211 Financial Accounting	
Total Credits	15

	Spring
BA 214 Business Communications	4
BA 249 Retailing	4
BA 278 Leadership and Team Dynamics	4
BA 206 Management Fundamentals	3
Total Credits	15

Sustainability Coordinator

Offered by the Institute for Sustainable Practices, 541.463.5594

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:

- 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 2014-15 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees	$10,200
Books and supplies	$3,000
Total Estimate	$13,200

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 or WR 121_H 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 To enroll in this major, log into myLane. Click on the myEnrollment tab, in the "Student Status" box, click "View/Change Your Current Major." Select "Associate of Applied Science – Sustainability Coordinator" from the drop down menu.

Program Information For more information about the program, contact one of the co-coordinators – Susie Cousar, 541.463.5271, Margaret Robertson, 541.463.3143, Claudia Owen, 541-463-5052 – or one of the program advisors – Carolyn Litty, 541.463.5236, Claudia Riumallo, 541.463.5378.

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 Marv Clemons, Cooperative Education Coordinator, Bldg. 12, Rm. 120C, 541.463.3158.

Course Requirements

1. Prerequisites are required for some courses. See course descriptions.
2. All BI, DRF ECON, ENVS, IDS and PS courses must be completed with a letter grade of "C-" or better.
3. All CG, MTH, WR, and BT must be completed with a "C-" or better or Pass grade.

Two-Year Associate of Applied Science Degree

First Year	**Fall**
Choice of:	4
WR 121 Introduction to Academic Writing	
WR 121_H Introduction to Academic Writing	
HE 255 Global Health and Sustainability	4
ENVS 181 Terrestrial Environment	4
GS104 Physical Science	4
Total Credits	16

	Winter
ENVS182 Atmospheric Environment and Population	4
BT 120 MS Word for Business	4
CG 203 Human Relations at Work	3
CH 104 Introductory Chemistry	5
Total Credits	16

	Spring
BI 103J General Biology: Forest Ecology	4
BI 103M General Biology: Biodiversity and Sustainability	4
ENVS 184 Global Climate Change	4
MTH 095 Intermediate Algebra	5
Total Credits	17

Second Year	**Fall**
BT 123 MS Excel for Business	4
WR 227 Technical Writing	4
ENVS 183 Aquatic Environment	4
MTH 105 Introduction to Contemporary Mathematics	4
Total Credits	16

	Winter
PS 297 Environmental Politics	4
ECON 250 Class, Race and Gender in the US Economy	4
CST 201 Sustainable Building Practices	3
IDS 206S Co-op Ed: Sustainability Coordinator Seminar	1
WATR 202 Fostering Sustainable Practices	3
Total Credits	15

	Spring
IDS 201 Sustainability Systems Seminar	3
IDS 280S Co-op Ed: Sustainability Coordinator	3
DRF 211 Sustainable Building Systems	4
ECON 260 Introduction to Environmental and Natural Resource Economics: Water	4
Total Credits	14

Water Conservation Technician

Offered by the Institute for Sustainable Practices, 541.463.6160

Two-Year Associate of Applied Science Degree

This program is being revised during 2015-16. Students should work closely with their academic advisor and with program contacts in planning their courses.

Purpose This degree prepares individuals to evaluate water patterns; develop, implement, market and maintain water conservation programs/ perform public outreach; recommend water efficiency techniques; integrate alternative water sources; and perform systems analysis to solve problems. The graduate will be trained to fill positions such as Water Conservation Program Specialist, Water Resource Specialist, Stormwater Technician, Stewardship Coordinator, Resource Coordinator and many more. Jobs are in the Federal, State, Local, Non-Government and Private Sectors in both profit and non-profit venues.

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 and market water conservation programs to a broad audience.
- 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; basic hydraulics; quality issues; balance and 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 water shortage. In addition to openings resulting from growth and awareness of water conservation needs, new positions are being created across the country, providing numerous job openings. Graduates must consider the entire nation and overseas for job placement as those that do will substantially enhance their opportunities.

Wages In Oregon range from $32,000 to $48,500 annually plus benefits.

Costs (estimate based on 2014-15 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees	$9816
Other Course/Program Costs	$1000

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 Requirements A high school diploma (or equivalent) and completion of Math 065 or 070 with a grade of C, and turned in a completed Water Program application form.

Admission Information 541.463.6160, Downtown Campus 404, *ebbager@lanecc.edu*

Program Information Roger Ebbage, 541.463.6160

Cooperative Education (Co-op) Cooperative Education provides sustainability-related field experience to 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. Contact Marvin Clemons , Cooperative Education Coordinator, Bldg. 19, Rm 231D, clemonsm@lanecc.edu 541.463.3158.

Course Requirements

1. Prerequisites are required for some courses. See course descriptions.
2. All WATR courses except WATR 102 require instructor permission.
3. MTH 095 must be completed before spring term of the first year
4. WATR 280 Co-op Ed may also be taken during summer term.
5. Directed electives, Writing, Health/PE and CG 203can be taken any term.
6. See catalog for Health/PE choices in AAS degree requirements.
7. All courses must be taken for a letter grade except CG203, ENVS183, GIS 151, Health/PE, WATR 102, WATR 206, WATR 222, and WATR 280.
8. All courses must be passed with a "C-" or better except ENVS 183, GIS 151, Health/PE, MTH 095, WATR 102, WATR 222, and WR.

First Year	**Fall**
WST 102 Introduction to Watershed Field Methods	2
GS 101 General Science: Nature of the Northwest	4
BT 123 MS Excel for Business	4
Choice of	4
WR 121 Composition: Introduction to Academic Writing	
WR121_H Composition: Introduction to Academic Writing	
WATR 102 Water Careers: Exploration	4
Total Credits	18

	Winter
WATR 101 Intro to Water Resources	3
GIS 151 Digital Earth	4
MTH 095 Intermediate Algebra or higher	5
Human Relations (from list below)	3
WATR 206 Co-op Ed: Water Conservation Seminar	1
Total Credits	16

	Spring
WATR 105 Water Conservation: Residential	4
GIS 245 GIS 1	4
ENVS 183 Aquatic Environment	4
WST 205 Soils Field Methods	2
Total Credits	14

Second Year	**Fall**
WATR 150 Water Resource Economic	4
WR 227 Technical Report Writing	4
WATR 210 Water Conservation: Industrial, Commercial	4
WATR 261 Regional Water Policy	3
Total Credits	15

	Winter
WATR 202 Fostering Sustainable Practices	3
WATR 220 Water Conservation Program Development	4
WATR 222 Stormwater Best Management Practices.	4
WATR 280 Co-op Ed: Water Conservation	3
Total Credits	14

	Spring
WATR 215 Integrated Water Resources Management	4
WATR 221 Water Mechanical Systems	4
Health / PE requirement	3
WATR 280 Co-op Ed: Water Conservation	3
Total Credits	14

Approved Human Relations choices

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

Watershed Science Technician

Offered by the Science Division, 541.463.5446

Two-Year Associate of Applied Science Degree

This program is being revised during 2015-16. Students should work closely with their academic advisor and with program contacts in planning their courses.

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 5% to 19% growth in Oregon over the next decade. Forest and Conservation Technicians alone are expected to have 15 regional openings per year and 185 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 full-time beginning technician's salary may range from $28,269 to $39,000 annually.

Costs (Estimate based on 2014-15 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees	$10,124
Other Course/Program Costs	$1,665
Total Estimate	$11,789

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.

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 Marvin Clemons , Cooperative Education Coordinator, Bldg. 19, Rm 231D, 541.463.3158.

Prerequisite Courses

CS 120 Concepts of Computing: Information Processing and MTH 065 Elementary Algebra. Both of these course are prerequisites to BT 123 MS Excel for Business In the 1st Term of the Program.

Course Requirements

1. All Watershed Science Technician Program courses are competency based.
2. Prerequisites are required for some courses. See course descriptions.
3. ENVS, BI and GIS prefix and GS 101 courses meet the AAS Science/Math/Computer Science discipline studies requirement and are also AAOT transfer courses.
4. Students must meet the grade requirements for the AAS Degree.
5. BT 123 and MTH 095 should be completed before Fall of Year 2.
6. WST 280 Co-op Ed: Watershed Science Technician may also be taken in Summer Term. ENVS 183 and BI 103J may be offered in the summer.

First Year

	Fall
GS 101 General Science: Nature of the Northwest	4
WST 102 Introduction to Watershed Field Methods	2
BT 123 MS Excel for Business	4
Choice of: WR 121 Introduction to Academic Writing WR 121_H Introduction to Academic Writing	4
WATR 102 Water Careers Exploration	4
Total Credits	18

	Winter
WATR 101 Introduction to Water Resources	3
WST 206 Co-op Ed: Watershed Science Technician Seminar	2
GIS 151 Digital Earth	4
MTH 095 Intermediate Algebra or higher	5
Human Relations (see approved list below)	3
Total Credits	17

	Spring
ENVS 183 Aquatic Environment	4
BI 103F General Biology: Wildflowers of Oregon	4
GIS 245 GIS 1	4
WST 205 Soils Field Methods	2
Total Credits	14

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	4
Total Credits	15

	Winter
WATR 202 Fostering Sustainable Practices	3
WST 230 Watersheds and Hydrology	4
WATR 222 Stormwater Best Management Practices	4
WST 223 Prairies to Woodlands Field Methods	2
WST 280 Co-op Ed: Watershed Science Technician	3
Total Credits	16

	Spring
WST 234 Watershed Best Practices	4
WST 280 Co-op Ed: Watershed Science Technician	3
WST 221 Invasive Species Field Methods	1
WST 222 Threatened and Endangered Species	1
WST 224 Wetland Field Methods	2
Health / PE requirement	3
Total Credits	14

Students who entered the program prior to 2015-16 may complete their degree with 4 credits of field courses selected from WST 221, WST 222, WST 223, or WST 224.

Approved Human Relations choices

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

Recommended Health & PE courses:

HE 251 Wilderness First Aid
HE 252 First Aid
HE 255 Global Health and Sustainability
HE 262 First Aid 2: Beyond the Basics
HE 275 Lifetime Health and Fitness

Transfer Guides

Lane Community College's mission is to provide comprehensive, accessible, quality, learning centered educational opportunities that promote student success. To honor the mission statement, we have created Transfer Guides to assist students wanting to transfer to a four-year college or university to earn a Bachelor degree.

The Transfer Guides in this section are arranged in two categories:

1. Is for students pursuing a transfer degree through Lane's School of Arts and Sciences
2. Is for students pursuing a career technical degree through Lane's School of Professional and Technical Careers and wanting to continue to a four-year college or university to earn a Bachelor degree.

Transferring to a 4-year institution can be complicated. There are many variables students need to be aware of when moving from an Oregon Community College to an Oregon four-year college and/or university. Lane provides major/program Academic Advising teams to help you negotiate the transfer elements. We encourage student to visit with their major/program Academic Advising team as often as needed to be successful in reaching your academic goal.

Major requirements for first- and second-year coursework vary from college to college and from academic year to year. Grading options and GPA requirements for majors may differ from degree requirements. Some programs/majors at specific four-year colleges and/or universities may have a separate application process. All major courses listed in the Transfer Guides must be completed to meet lower division major requirements at the four-year institution.

It is imperative that students consult with the major Academic Advising team at Lane to assure the appropriate coursework is being chosen. For information about the Academic Advising teams, please see the "Transfer" section in this catalog. The guides are not meant as a substitute to meeting with the major Academic Advising team.

Transfer Guides in this section include various majors for specific four-year colleges and/or universities in Oregon. Lane Community College also offers courses and transfer information for students who would like to transfer to a four-year college or university that are not in the following Transfer Guides. Please meet with the Lane Academic Advising team for the major/program or four-year college you are interested in to learn about more possibilities. Lane does not endorse any specific four-year college.

School of Arts and Sciences

Lane's School of Arts and Sciences (S.A.S.) is made up of academic divisions that emphasize a liberal arts education, engaging primarily in transfer education although integrated with selected technical and professional programs. The following divisions that make up S.A.S offer curricula traditionally associated with the humanities, social sciences, sciences, business studies, and health and physical education:

Art
Business and Computer Information Technology
Language, Literature, and Communications
Math
Health, Physical Education, and Athletics
Science
Social Science

In addition, the School of Arts and Sciences has strong association with Honors and International Programs. It also supports undergraduate research, core learning outcomes, and a variety of high impact practices resulting in outstanding student educational experiences. If you are interested in obtaining a bachelors degree, then the School of Arts and Sciences has transfer degrees and programs to help you achieve your goal.

The Transfer Guides contain courses needed to complete Lane degrees, such as: the Associate of Arts Oregon Transfer (AAOT), the Associate of Science to University of Oregon (AS to UO), Associate of Science Oregon Transfer degree in Business (ASOT-Bus) or the Associate of Science to Oregon State University (AS to OSU). Each of the Transfer Guides contain requirements for a specific major to one specific four-year college and/or university and the general education requirements for one of the Lane degrees listed above.

We also offer Associate of Science Oregon Transfer (ASOT) degrees in Business and Computer Science that fulfill the general education requirements for all OUS institutions in the state. Business is a highly competitive, limited enrollment major at most four-year colleges and/or universities and completion of the ASOT in Business alone does not assure you have met the major requirements. Students must meet with the Lane major Academic Advising team to assure all requirements for the major have been met.

Major requirements for first- and second-year coursework vary from college/university to college/university and from academic year to year. Grading options and GPA requirements for majors may differ from degree requirements. Some programs/majors at specific four-year colleges and/or universities may have a separate application process. All major courses listed below in the Transfer Guides must be completed to meet lower division major requirements at the four year college and/or university.

It is imperative that students consult with the major Academic Advising team at Lane to assure the appropriate coursework is being chosen. For information about the Academic Advising teams, please see the "Transfer" section in this catalog. The Guides are not meant as a substitute for meeting with the Academic Advising team for the major.

Transfer Guides in this section include various majors for specific four-year colleges and/or universities in Oregon. Lane Community College offers courses and transfer information for transfer majors and/or four-year colleges that may not, at this time, be listed in the catalog. Please meet with the Lane Academic Advising team for the major/program or four-year college or university you are interested in to determine more possibilities. Lane does not endorse any specific four-year college.

Transfer Guides

Animal Sciences, pre-vet option

Transfer Guide for Associate of Science Direct Transfer: Oregon State University Degree

This Transfer Guide is for students transferring to Oregon State University only with a major in Animal Sciences

NOTE: All students must meet with your major Academic Advising team at Lane to assure information is accurate and current. Major requirements are different from four-year college to four-year college and may change every year. Associate degree requirements can also change from year to year. This is a Guide only and is not guaranteed to encompass all major/program requirements - these are obtained through your Lane Academic Advising team.

Lane Community College offers the lower division major and general education courses needed for students pursuing an Animal Sciences major at Oregon State University. The general education and major courses in the Transfer Guide meet the requirements for the Associate of Science Direct Transfer Oregon State University degree. Completing all courses may take longer than two years.

Transfer degrees require a total of 90 transferable credits, with specific general education requirements in Foundational Skills and Discipline Studies.

With the completion of the Associate of Arts Oregon Transfer (AAOT) degree or the Associate of Science Oregon Transfer -Bus/C.S. degree, students admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes. With the completion of the Associate of Science Direct Transfer to UO (AS to UO) degree or the Associate of Science Direct Transfer to OSU (AS to OSU) students admitted to each respective Transfer (UO/OSU) will fulfill many lower division general education requirements and are granted junior status for registration purposes. Some universities may have additional upper division general education requirements or GPA requirements for admission to a specific major. Oregon public universities allow students who have earned the AAOT with a GPA of 2.0 or better to apply for admission.

Students who graduated high school or received a GED in 1997 or thereafter are required to have a second 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 complete college-level second language coursework.

Prerequisites are required for some courses. See course descriptions.

See Associate of Science Direct Transfer: Oregon State University degree requirements for approved Discipline Studies.

Associate of Science Direct Transfer: Oregon State University courses must be completed with a minimum grade of Pass or C- with no more than 16 credits P graded. There is a minimum 2.0 GPA requirement for graduation.

Grading options and GPA requirements for majors may differ from degree requirements. All major courses listed below must be completed to meet lower division major requirements at the four year college. Some programs/majors at specific four-year colleges may have a separate application process. Please meet with the major Academic Advising team for up to date information. For information about the Academic Advising teams, please see the "Transfer" section in this catalog.

Transfer Guide for Animal Sciences, pre-vet option with Associate of Science Direct Transfer: Oregon State University degree	**Credits**
MTH 111 College Algebra	5
MTH 112 Trigonometry	4
MTH 243 Intro to Probability and Statistics	4
Choice of one course:	
MTH 241 Elementary Calculus 1	4
MTH 251 Differential Calculus	5
BI 211 Principles of Biology	4
BI 213 Principles of Biology	4
Z 213 Principles of Biology	4
BI 234 Introductory Microbiology	4
BA 226 Business Law	4
CH 221 General Chemistry 1	5
CH 222 General Chemistry 2	5
CH 223 General Chemistry 3	5
CH 241 Organic Chemistry 1[1]	5
CH 242 Organic Chemistry 2[1]	5
CH 243 Organic Chemistry 3[1]	5
PH 201 General Physics 1	5
PH 202 General Physics 2[2]	5
Remaining requirement for Associate of Science Direct Transfer: Oregon State University Degree	
Writing I – see AS to OSU approved listing	3-4
Writing II – see AS to OSU approved listing	3-4
Writing III/Speech – see AS to OSU approved listing	3-4
HE 275 Lifetime Health and Fitness	3
Cultural Diversity – see AS to OSU approved listing	3-4
Literature and the Arts – see AS to OSU approved listing	3-4
Social Processes and Institutions – see approved AS to OSU approved listing	3-4
Difference, Power and Discrimination – see AS to OSU approved listing	3-4

Taking CH 241-243 at Lane will satisfy OSUs Biology major requirement but student will receive lower-division credit at OSU. Upon passing the American Chemical Society (ACS) organic chemistry equivalency test offered to Lane students after completion of CH 243, students can receive up to 15 credits of upper-division organic chemistry credits at OSU.

[2] While PH 203 is not a requirement for the Animal Sciences major, many vet schools require a full year of Physics

Anthropology

Transfer Guide for Associate of Arts Oregon Transfer (AAOT) degree

This Transfer Guide is for students transferring to the University of Oregon only with a major in Anthropology

NOTE: All students must meet with your major Academic Advising team at Lane to assure information is accurate and current. Major requirements are different from four-year college to four-year college, and may change every year. Associate degree requirements can also change from year to year. This is a Guide only and is not guaranteed to encompass all major/program requirements - these are obtained through your Lane Academic Advising team.

Lane Community College offers the lower division major and general education courses needed for students pursuing Anthropology major at the University of Oregon. The general education and major courses in the Transfer Guide meet the requirements for the Associate of Arts Oregon Transfer (AAOT) degree. Completing all courses may take longer than two years.

Transfer degrees require a total of 90 transferable credits, with specific general education requirements in Foundational Skills and Discipline Studies.

With the completion of the Associate of Arts Oregon Transfer (AAOT) degree, students admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes. Some universities may have additional upper division general education requirements or GPA requirements for admission to a specific major. Oregon public universities allow students who have earned the AAOT with a GPA of 2.0 or better to apply for admission.

Students who graduated high school or received a GED in 1997 or thereafter are required to have a second 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 complete college-level second language coursework.

Prerequisites are required for some courses. See course descriptions.

See Associate of Arts Oregon Transfer (AAOT) degree requirements for approved Arts and Letters, Communication, Health/Wellness/Fitness and Social Science courses. One Arts and Letters or Social Science course must also satisfy the AAOT Cultural Literacy (*) requirement.

Associate of Arts Oregon Transfer (AAOT) degree courses must be completed with a minimum grade of Pass or C- with no more than 16 credits P graded. There is a minimum 2.0 GPA requirement for graduation.

Grading options and GPA requirements for majors may differ from degree requirements. Some programs/majors at specific four-year colleges may have a separate application process. All major courses listed below must be completed to meet lower division major requirements at the four year college. Please meet with the major Academic Advising team for up to date information. For information about the Academic Advising teams, please see the "Transfer" section in this catalog.

Transfer Guide for Anthropology with Associate of Arts Oregon Transfer (AAOT)	**Credits**
ANTH 101 Physical Anthropology	4
ANTH 102 World Archaeology	4
ANTH 103 Cultural Anthropology	4
Remaining Requirements for Associate of Arts Oregon Transfer (AAOT) degree	
WR 121 plus WR 122	8
Health/Wellness/Fitness – see AAOT listing for approved courses	3-4
Oral Communication – see AAOT Communication listing	4
Cultural Literacy – see AAOT Cultural Literacy listing	3-4
Arts & Letters – see AAOT approved Arts and Letters listing	9-12
Social Sciences – see AAOT approved Social Science listing	3-4
Sciences – see AAOT approved listing for 3 lab sciences	12-15
Electives – credits needed to bring total to 90, within limitations of AAOT	

Art

Associate of Science Direct Transfer: University of Oregon (AS to UO) degree

This Transfer Guide is for students transferring to the University of Oregon only with a major in Art

NOTE: All students must meet with your major Academic Advising team at Lane to assure information is accurate and current. Major requirements are different from four-year college to four-year college and may change every year. Associate degree requirements can also change from year to year. This is a Guide only and is not guaranteed to encompass all major/program requirements - these are obtained through your Lane Academic Advising team.

Lane Community College offers the lower division major and general education courses needed for students pursuing an Art major at the University of Oregon. The general education and major courses in the Transfer Guide meet the requirements for the Associate of Science to University of Oregon degree. Completing all courses may take longer than two years.

Transfer degrees require a total of 90 transferable credits, with specific general education requirements in Foundational Skills and Discipline Studies.

With the completion of the Associate of Arts Oregon Transfer (AAOT) degree or the Associate of Science Oregon Transfer - Bus/C.S. degree, students admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes. With the completion of the Associate of Science Direct Transfer UO (AS to UO) degree or the Associate of Science Direct Transfer OSU (AS to OSU) students admitted to each respective university (UO/OSU) will fulfill many lower division general education requirements and are granted junior status for registration purposes. Some universities may have additional upper division general education requirements or GPA requirements for admission to a specific major. Oregon public universities allow students who have earned the AAOT with a GPA of 2.0 or better to apply for admission.

Students who graduated high school or received a GED in 1997 or thereafter are required to have a second 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 complete college- level second language coursework.

Prerequisites are required for some courses. See course descriptions.

See Associate of Science Direct Transfer: University of Oregon degree requirements for approved Discipline Studies courses. Associate of Science Direct Transfer: University of Oregon courses must be completed with a minimum grade of Pass or C- with no more than 16 credits P graded. There is a minimum 2.0 GPA requirement for graduation.

Grading options and GPA requirements for majors may differ from degree requirements. Some programs/majors at specific four-year colleges may have a separate application process. All major courses listed below must be completed to meet lower division major requirements at the four year college. Please meet with the major Academic Advising team for up to date information. For information about the Academic Advising teams, please see the "Transfer" section in this catalog.

Transfer Guide for Art major with Associate of Science Direct Transfer: University of Oregon degree

These courses must be completed prior to enrolling in other studio courses at UO:	**Credits**
ART 115 Basic Design: Fundaments	3
ART 117 Basic Design: 3 Dimensional	3
Any one course from: ART 131, 134, 231, 234 Drawing	3
Additional required courses for the major	
Any three courses chosen from:	9
ART 204, 205, 206 History of Western Art	
ART 207, 208, 209 History of Asian Art	
ART 111 Intro to Visual Arts	
ART 113 , 213History of Photography 1, 2	

ART 200 Graphic Design History
ART 202 Survey of Western Art
ART 203 Survey of American Indian Art*
ART 211, 212 Survey of Visual Art
ART 214 American Art
ART 217 Islamic Art

Choice of two different curricular areas with only one course per area:

Photography ART 261 or 262
Ceramics ART 250 or 251 or 253
Painting ART 281 or 284
Sculpture ART 248 or 276 or 277 or 278 or 291 or 293
Printmaking ART 270 or 271 or 273 or 274 or 275 or 285 6

Associate of Science Direct Transfer: University of Oregon degree remaining requirements

WR 121 plus WR 122 or WR 123	8
Math 105 or college-level Math course with prerequisite of Math 95	4–5
Arts and Letters – see AS to UO approved Arts and Letters listing	6
Social Sciences – see AS to UO approved Social Science listing	15
Sciences – see AS to UO listing	15
Electives – see limitations on AS to UO and credits needed to bring total to 90 transfer credit	

Biochemistry

Transfer Guide for Associate of Arts Oregon Transfer (AAOT) degree

This Transfer Guide is for students transferring to the University of Oregon only with a major in Biochemistry

NOTE: All students must meet with your major Academic Advising team at Lane to assure information is accurate and current. Major requirements are different from four-year college to four-year college and may change every year. Associate degree requirements can also change from year to year. This is a Guide only and is not guaranteed to encompass all major/program requirements - these are obtained through your Lane Academic Advising team.

Lane Community College offers the lower division major and general education courses needed for students pursuing Biochemistry major at the University of Oregon. The general education and major courses in the Transfer Guide meet the requirements for the Associate of Arts Oregon Transfer degree. Completing all courses may take longer than two years.

Transfer degrees require a total of 90 transferable credits, with specific general education requirements in Foundational Skills and Discipline Studies.

With the completion of the Associate of Arts Oregon Transfer (AAOT) degree or the Associate of Science Oregon Transfer -Bus/C.S. degree, students admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes. With the completion of the Associate of Science Direct Transfer UO (AS to UO) degree or the Associate of Science Direct Transfer OSU (AS to OSU) students admitted to each respective university (UO/OSU) will fulfill many lower division general education requirements and are granted junior status for registration purposes. Some universities may have additional upper division general education requirements or GPA requirements for admission to a specific major. Oregon public universities allow students who have earned the AAOT with a GPA of 2.0 or better to apply for admission.

Students who graduated high school or received a GED in 1997 or thereafter are required to have a second 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 complete college-level second language coursework.

Prerequisites are required for some courses. See course descriptions.

See Associate of Arts Oregon Transfer degree requirements for approved Arts and Letters, Speech, Health/Wellness/Fitness and Social Science courses. One Arts and Letters or Social Science course must also satisfy the AAOT Cultural Literacy (*) requirement.

Associate of Arts Oregon Transfer courses must be completed with a minimum grade of Pass or C- with no more than 16 credits P graded. There is a minimum 2.0 GPA requirement for graduation.

Grading options and GPA requirements for majors may differ from degree requirements. All major courses listed below must be completed to meet lower division major requirements at the four year college. Some programs/majors at specific four-year colleges may have a separate application process. Please meet with the major Academic Advising team for up to date information. For information about the Academic Advising teams, please see the “Transfer” section in this catalog.

Transfer Guide for Biochemistry with Associate of Arts Oregon Transfer degree	**Credits**
Math 251 Differential Calculus	5
Math 252 Integral Calculus	5
Math 253 Infinite Series & Sequences	5
CH 221 General Chemistry 1	5
CH 222 General Chemistry 2	5
CH 223 General Chemistry 3	5
CH 241 Organic Chemistry 1*	5
CH 242 Organic Chemistry 2*	5
CH 243 Organic Chemistry 3*	5
PH 201 General Physics 1	5
PH 202 General Physics 2	5
PH 203 General Physics 3	5

Remaining requirements to complete Associate of Arts Oregon Transfer degree

WR 121, plus WR 122 or WR 227	8
Health/Wellness/Fitness – see AAOT listing for approved courses	3
Oral Communications – see AAOT Communication requirement listing	3-4
Cultural Literacy – see AAOT Cultural Literacy requirement listing	3-4
Arts and Letters – see AAOT approved Arts and Letters listing	9-12
Social Sciences – see AAOT approved Social Science listing	12-16

*Taking CH 241-243 at Lane will satisfy UO’s Biology major requirement but student will receive lower-division credit at UO. Upon passing the American Chemical Society (ACS) organic chemistry equivalency test offered to Lane students after completion of CH 243, students can receive up to 15 credits of upper-division organic chemistry credits at UO.

Biology

Transfer Guide for Associate of Arts Oregon Transfer (AAOT) degree

This Transfer Guide is for students transferring to the University of Oregon only with a major in Biology

NOTE: All students must meet with your major Academic Advising team at Lane to assure information is accurate and current. Major requirements are different from four-year college to four-year college and may change every year. Associate degree requirements can also change from year to year. This is a Guide only and is not guaranteed to encompass all major/program requirements - these are obtained through your Lane Academic Advising team.

Lane Community College offers the lower division major and general education courses needed for students pursuing a Biology major at the University of Oregon. The general education and major courses in the Transfer Guide meet the requirements for the Associate of Arts Oregon Transfer degree. Completing all courses may take longer than two years.

Transfer degrees require a total of 90 transferable credits, with specific general education requirements in Foundational Skills and Discipline Studies.

With the completion of the Associate of Arts Oregon Transfer (AAOT) degree or the Associate of Science Oregon Transfer -Bus/C.S. degree, students admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes. With the completion of the Associate of Science Direct Transfer: UO (AS to UO) degree or the Associate of Science Direct Transfer: OSU (AS to OSU) students admitted to each respective university (UO/OSU) will fulfill many lower division general education requirements and are granted junior status for registration purposes. Some universities may have additional upper division general education requirements or GPA requirements for admission to a specific major. Oregon public universities allow students who have earned the AAOT with a GPA of 2.0 or better to apply for admission.

Students who graduated high school or received a GED in 1997 or thereafter are required to have a second 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 complete college-level second language coursework.

Prerequisites are required for some courses. See course descriptions.

See Associate of Arts Oregon Transfer degree requirements for approved Arts and Letters, Speech, Health/Wellness/Fitness and Social Science courses. One Arts and Letters or Social Science course must also satisfy the AAOT Cultural Literacy (*) requirement.

Associate of Arts Oregon Transfer courses must be completed with a minimum grade of Pass or C- with no more than 16 credits P graded. There is a minimum 2.0 GPA requirement for graduation.

Grading options and GPA requirements for majors may differ from degree requirements. All major courses listed below must be completed to meet lower division major requirements at the four year college. Some programs/majors at specific four-year colleges may have a separate application process. Please meet with the major Academic Advising team for up to date information. For information about the Academic Advising teams, please see the “Transfer” section in this catalog.

Transfer Guide for Biology with Associate of Arts Oregon Transfer degree	**Credits**
Math 251 Differential Calculus	5
Math 252 Integral Calculus	5
BI 211 Principles of Biology	4
BI 212 Principles of Biology	4
BOT/Z 213 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 1*	5
CH 242 Organic Chemistry 2*	5
CH 243 Organic Chemistry 3*	5
PH 201 General Physics 1	5
PH 202 General Physics 2	5
PH 203 General Physics 3	5

Remaining requirements to complete Associate of Arts Oregon Transfer degree

WR 121, plus WR 122 or WR 227	8
Health/Wellness/Fitness – see AAOT listing for approved courses	3-4
Oral Communications – see AAOT Communication requirement listing	3-4
Cultural Literacy – see AAOT Cultural Literacy requirement listing	3-4
Arts and Letters – see AAOT approved Arts and Letters listing	9-12
Social Sciences – see AAOT approved Social Science listing	12-16

*Taking CH 241-243 at Lane will satisfy UO’s Biology major requirement but student will receive lower-division credit at UO. Upon passing the American Chemical Society (ACS) organic chemistry equivalency test offered to Lane students after completion of CH 243, students can receive up to 15 credits of upper-division organic chemistry credits at UO.

Business and Accounting

Transfer Guide for Associate of Science Oregon Transfer Business (ASOT Bus) degree

This Transfer Guide is for students transferring to Oregon State University only with a major in Business or Accounting

NOTE: All students must meet with your major Academic Advising team at Lane to assure information is accurate and current. Major requirements are different from four-year college to four-year college and may change every year. Associate degree requirements can also change from year to year. This is a Guide only and is not guaranteed to encompass all major/program requirements - these are obtained through your Lane Academic Advising team.

Lane Community College offers the lower division major and general education courses needed for students pursuing a Business or Accounting major at the Oregon State University. The general education and major courses in the Transfer Guide meet the requirements for the Associate of Science Oregon Transfer Business degree. Completing all courses may take longer than two years.

Transfer degrees require a total of 90 transferable credits, with specific general education requirements in Foundational Skills and Discipline Studies.

With the completion of the Associate of Arts Oregon Transfer (AAOT) degree or the Associate of Science Oregon Transfer -Bus/C.S. degree, students admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes. With the completion of the Associate of Science Direct Transfer: UO (AS to UO) degree or the Associate of Science Direct Transfer: OSU (AS to OSU) students admitted to each respective university (UO/OSU) will fulfill many lower division general education requirements and are granted junior status for registration purposes. Some universities may have additional upper division general education requirements or GPA requirements for admission to a specific major. Oregon public universities allow students who have earned the AAOT with a GPA of 2.0 or better to apply for admission.

Students who graduated high school or received a GED in 1997 or thereafter are required to have a second 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 complete college-level second language coursework.

Prerequisites are required for some courses. See course descriptions.

See Associate of Science Oregon Transfer Business degree requirements for approved Arts and Letters, Science and Social Science courses. One Arts and Letters or Social Science course must also satisfy the AAOT Cultural Literacy (*) requirement.

Associate of Science Oregon Transfer Business degree courses must be completed with a minimum grade of Pass or C- with no more than 16 credits P graded. There is a minimum 2.0 GPA requirement for graduation. Grading options and GPA requirements for majors may differ from degree requirements.

Grading options and GPA requirements for majors may differ from degree requirements. Some programs/majors at specific four-year colleges may have a separate application process. All major courses listed below must be completed to meet lower division major requirements at the four year college. Please meet with the major Academic Advising team for up to date information. For information about the Academic Advising teams, please see the “Transfer” section in this catalog.

Transfer Guide for Business and Accounting with Associate of Science Oregon Transfer Business degree	**Credits**
BA 101 Intro to Business	4
CIS 101 Computer Fundamentals	3
BA 211 Financial Accounting	4
BA 213 Managerial Accounting	4
BA 226 Business Law	4
Choice of one: COMM 111 Fundamentals of Speech COMM 112 Persuasive Speech	4
ECON 200, 201 and 202 Economics	9
MTH 241 Calculus	4
MTH 243 Probability and Statistics	4
WR 121 English Composition	4
WR 122 OR WR 227 English Composition	4

Remaining requirements for Associate of Science Oregon Transfer Business degree

MTH 111 or college level math course with prerequisite of MTH 095	4-5
Cultural Literacy – chosen from classes designated with * on ASOT list	4
Arts and Letters – see ASOT Bus approved Arts and Letters list	9-12
Social Sciences – see ASOT Bus approved Arts and Letters list	3-4
Sciences – see ASOT Bus approved 3 lab and 1 non lab Science listing	15-19
Electives – credits needed to bring total to 90 transfer credits	

Civil Engineering

Transfer Guide for Associate of Science Direct Transfer Oregon State University (AAOT) degree

This Transfer Guide is for students transferring to Oregon State University only with a major in Civil Engineering

NOTE: All students must meet with your major Academic Advising team at Lane to assure information is accurate and current. Major requirements are different from four-year college to four-year college and may change every year. Associate degree requirements can also change from year to year. This is a Guide only and is not guaranteed to encompass all major/program requirements - these are obtained through your Lane Academic Advising team.

Lane Community College offers the lower division major and general education courses needed for students pursuing Horticulture major at the Oregon State University. The general education and major courses in the Transfer Guide meet the requirements for the Associate of Science Direct Transfer: Oregon State University degree. Completing all courses may take longer than two years.

Transfer degrees require a total of 90 transferable credits, with specific general education requirements in Foundational Skills and Discipline Studies.

With the completion of the Associate of Arts Oregon Transfer (AAOT) degree or the Associate of Science Oregon Transfer -Bus/C.S. degree, students admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes. With the completion of the Associate of Science Direct to UO (AS to UO) degree or the Associate of Science Direct to OSU (AS to OSU) students admitted to each respective university (UO/OSU) will fulfill many lower division general education requirements and are granted junior status for registration purposes. Some universities may have additional upper division general education requirements or GPA requirements for admission to a specific major. Oregon public universities allow students who have earned the AAOT with a GPA of 2.0 or better to apply for admission.

Students who graduated high school or received a GED in 1997 or thereafter are required to have a second 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 complete college-level second coursework.

Prerequisites are required for some courses. See course descriptions.

See Associate of Science Oregon State University degree requirements for approved Arts and Letters, Speech, Health/Wellness/Fitness and Social Science courses. Associate of Science Direct Transfer:Oregon State University courses must be completed with a minimum grade of Pass or C- with no more than 16 credits P graded. There is a minimum 2.0 GPA requirement for graduation.

Grading options and GPA requirements for majors may differ from degree requirements. All major courses listed below must be completed to meet lower division major requirements at the four year college. Some programs/majors at specific four-year colleges may have a separate application process. Please meet with the major Academic Advising team for up to date information. For information about the Academic Advising teams, please see the “Transfer” section in this catalog.

Transfer Guide Civil Engineering with Associate of Science Direct Transfer: Oregon State University degree

Pre-Engineering (PRE-E) courses required by College of Engineering for admission into the Professional School and used for Pre-E GPA Calculation:	**Credits**
Math 251 Differential Calculus	5
Math 252 Integral Calculus	5
Math 253 Infinite Series & Sequences	5
Math 254 Vector Calculus 1	4
Math 256 Differential Equations	4
Math 261 Linear Algebra	2
PH 211 Physics with Calculus 1	5
PH 212 Physics with Calculus 2	5
PH 213 Physics with Calculus 3	5
CH 221 General Chemistry 1	5
ENGR 102 Engr. Orient. 2 (Matlab)	4
ENGR 211 Statics	4
ENGR 213 Strength of Materials	4

WR 121 Intro to Academic Writing	4
Choice of one: COMM 111 Fundamentals of Public Speaking COMM 112 Persuasive Speech	4

Additional courses expected by the School for entry into the Professional Program; these courses are prerequisites for junior year course work	**Credits**
CH 222 General Chemistry 2	5
ENGR 115 Engineering Graphics	3
Math 265 Statistics for Scientists and Engineers	4
ENGR 212 Dynamics	4

Required for completion of major requirements for B.S. degree; recommended, but not required to complete prior to admission to Pro School

WR 227 Technical Writing	4
ENGR 101 Engineering Orientation	3
ECON 201 Principles of Economics: Microeconomics	4
ENGR 221 Electrical Fundamentals 1	4

Remaining requirements for Associate of Science Direct Transfer: Oregon State University Degree

HE 275 Lifetime Health and Fitness	3
Western Culture – see AS to OSU approved listing	3-4
Cultural Diversity – see AS to OSU approved listing	3-4
Literature and the Arts – see AS to OSU approved listing	3-4
Difference, Power and Discrimination – see AS to OSU approved listing	3-4

Computer Information Science

Transfer Guide for Associate of Arts Oregon Transfer (AAOT) degree

This Transfer Guide is for students transferring to the University of Oregon only with a major in Computer Information Science

NOTE: All students must meet with your major Academic Advising team at Lane to assure information is accurate and current. Major requirements are different from four-year college to four-year college and may change every year. Associate degree requirements can also change from year to year. This is a Guide only and is not guaranteed to encompass all major/program requirements - these are obtained through your Lane Academic Advising team.

Lane Community College offers the lower division major and general education courses needed for students pursuing a Computer Information Science major at the University of Oregon. The general education and major courses in the Transfer Guide meet the requirements for the Associate of Arts Oregon Transfer degree. Completing all courses may take longer than two years.

Transfer degrees require a total of 90 transferable credits, with specific general education requirements in Foundational Skills and Discipline Studies.

With the completion of the Associate of Arts Oregon Transfer (AAOT) degree or the Associate of Science Oregon Transfer -Bus/C.S. degree, students admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes. With the completion of the Associate of Science Direct Transfer: UO (AS to UO) degree or the Associate of Science Direct Transfer: OSU (AS to OSU) students admitted to each respective university (UO/OSU) will fulfill many lower division general education requirements and are granted junior status for registration purposes. Some universities may have additional upper division general education requirements or GPA requirements for admission to a specific major. Oregon public universities allow students who have earned the AAOT with a GPA of 2.0 or better to apply for admission.

Students who graduated high school or received a GED in 1997 or thereafter are required to have a second 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 second language coursework.

Prerequisites are required for some courses. See course descriptions.

See Associate of Arts Oregon Transfer degree requirements for approved Arts and Letters, Speech, Health/Wellness/Fitness and Social Science courses. One Arts and Letters or Social Science course must also satisfy the AAOT Cultural Literacy (*) requirement.

Associate of Arts Oregon Transfer courses must be completed with a minimum grade of Pass or C- with no more than 16 credits P graded. There is a minimum 2.0 GPA requirement for graduation.

Grading options and GPA requirements for majors may differ from degree requirements. All major courses listed below must be completed to meet lower division major requirements at the four year college . Some programs/majors at specific four-year colleges may have a separate application process. Please meet with the major Academic Advising team for up to date information. For information about the Academic Advising teams, please see the "Transfer" section in this catalog.

Transfer Guide for Computer Information Science with Associate of Arts Oregon Transfer degree	**Credits**
CS 161C+ Beg. Programming C++	4
CS 162C+ Beg. Programming C++	4
CS 260 Data Structures	4
WR 227 Technical Writing	4
MTH 251 Differential Calculus	5
MTH 252 Integral Calculus	5
MTH 231 Discrete Math 1	4
MTH 232 Discrete Math 2	4
2 Additional Math courses from the following: MTH 253 Infinite Series & Sequences MTH 260 Linear Algebra MTH 265 Statistics for Scientists and Engineers	8-9
Choose 1 science sequence (3 terms): BI 211, BI 212, BOT/Z 213 Biology/Botany/Zoology or CH 221, CH 222, CH 223 Chemistry or PH 201, PH 202, PH 203 Physics or PH 211, PH 212, PH 213 Physics or G 201, G 202, G 203 Geology or PSY 201, PSY 202, PSY 203 Psychology	12-15

Remaining requirements of Associate of Arts Oregon Transfer degree

WR 121 English Composition	4
Health/Wellness/Fitness – see AAOT listing for approved courses	3
Oral Communications – see AAOT Communication requirement listing	3-4
Cultural Literacy – see AAOT Cultural Literacy requirement listing	3-4
Arts and Letters – see AAOT approved Arts and Letters listing	9-12
Social Sciences – see AAOT approved Social Science listing	12-16
Electives – see limitations on AAOT and credits needed to bring total to 90 transfer credits	

Dance

Associate of Arts Oregon Transfer (AAOT) degree

This Transfer Guide is for students transferring to Western Oregon University only with a major in Dance

NOTE: All students must meet with your major Academic Advising team at Lane to assure information is accurate and current. Major requirements are different from four-year college to four-year college and may change every year. Associate degree requirements can also change from year to year. This is a Guide only and is not guaranteed to encompass all major/program requirements - these are obtained through your Lane Academic Advising team.

Lane Community College offers the lower division major and general education courses needed for students pursuing a Dance major at the Western Oregon University. The general education and major courses in the Transfer Guide meet the requirements for the Associate of Art Oregon Transfer degree. Completing all courses may take longer than two years.

Transfer degrees require a total of 90 transferable credits, with specific general education requirements in Foundational Skills and Discipline Studies.

With the completion of the Associate of Arts Oregon Transfer (AAOT) degree, students admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes. Some universities may have additional upper division general education requirements or GPA requirements for admission to a specific major. Oregon public universities allow students who have earned the AAOT with a GPA of 2.0 or better to apply for admission.

Students who graduated high school or received a GED in 1997 or thereafter are required to have a second 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 second language coursework.

Prerequisites are required for some courses. See course descriptions.

See Associate of Art Oregon Transfer degree requirements for approved Arts and Letters, Speech, Health/Wellness/Fitness and Social Science courses. One Arts and Letters or Social Science course must also satisfy the AAOT Cultural Literacy requirement.

Associate of Arts Oregon Transfer degree courses must be completed with a minimum grade of Pass or C- with no more than 16 credits P graded. There is a minimum 2.0 GPA requirement for graduation.

Grading options and GPA requirements for majors may differ from degree requirements. All major courses listed below must be completed to meet lower division major requirements at the four year college. Some programs/majors at specific four-year colleges may have a separate application process. Please meet with the major Academic Advising team for up to date information. For information about the Academic Advising teams, please see the "Transfer" section in this catalog.

Transfer Guide for Dance majors with Associate Arts Oregon Transfer degree	**Credits**
D 251 Looking at Dance	4
D 257 Dance Improvisation	2
D 160 Dance Composition	3
D 256 Anatomy/Body Fundamentals	4
D 261 Rehearsal and Performance	1-3
D 260 Group Choreography	3
Maximum of 12 credits: D177, D 178, D 179 Modern Dance 1, 2 3	12
Maximum of 6 credits: D 185, D 186, D 187 Ballet 1, 2, 3	6
Maximum of 6 credits: D 188, D 189 Jazz Dance 1,2; D184, D 194 Hip Hop 1,2; D 196 Balinese	6

Remaining requirements for Associate of Arts Oregon Transfer Degree	**Credits**
WR 121 plus WR 122 or WR 227	8
Math 105 or college-level Math course with prerequisite of Math 95	4-5
Health/Wellness/Fitness – see AAOT listing for approved courses	3
Oral Communications – see AAOT Communication requirement listing	3-4
Cultural Literacy – see AAOT Cultural Literacy requirement listing	3-4
Arts and Letters – see AAOT approved Arts and Letters listing	3-4
Social Sciences – see AAOT approved Social Science listing	12-16
Sciences – see AAOT approved 3 lab and 1 non lab Science listing	15-16

Economics

Transfer Guide for Associate of Arts Oregon Transfer (AAOT) degree

This Transfer Guide is for students transferring to the University of Oregon only with a major in Economics

NOTE: All students must meet with your major Academic Advising team at Lane to assure information is accurate and current. Major requirements are different from four-year college to four-year college, and may change every year. Associate degree requirements can also change from year to year. This is a Guide only and is not guaranteed to encompass all major/program requirements - these are obtained through your Lane Academic Advising team.

Lane Community College offers the lower division major and general education courses needed for students pursuing an Economics major at the University of Oregon. The general education and major courses in the Transfer Guide meet the requirements for the Associate of Arts Oregon Transfer (AAOT) degree. Completing all courses may take longer than two years.

Transfer degrees require a total of 90 transferable credits, with specific general education requirements in Foundational Skills and Discipline Studies.

With the completion of the Associate of Arts Oregon Transfer (AAOT) degree, students admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes. Some universities may have additional upper division general education requirements or GPA requirements for admission to a specific major. Oregon public universities allow students who have earned the AAOT with a GPA of 2.0 or better to apply for admission.

Students who graduated high school or received a GED in 1997 or thereafter are required to have a second 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 complete college-level second language coursework.

Prerequisites are required for some courses. See course descriptions.

See Associate of Arts Oregon Transfer (AAOT) degree requirements for approved Arts and Letters, Communication, Health/Wellness/Fitness and Social Science courses. One Arts and Letters or Social Science course must also satisfy the AAOT Cultural Literacy (*) requirement.

Associate of Arts Oregon Transfer (AAOT) degree courses must be completed with a minimum grade of Pass or C- with no more than 16 credits P graded. There is a minimum 2.0 GPA requirement for graduation.

Grading options and GPA requirements for majors may differ from degree requirements. Some programs/majors at specific four-year colleges may have a separate application process. All major courses listed below must be completed to meet lower division major requirements at the four year college. Please meet with the major Academic Advising team for up to date information. For information about the Academic Advising teams, please see the “Transfer” section in this catalog.

Transfer Guide for Economics with Associate of Arts Oregon Transfer (AAOT)	**Credits**
ECON 200 Introduction to Economics	3
ECON 201 Principles of Economics: Microeconomics	3
ECON 202 Principles of Economics: Macroeconomics	3
MTH 111 College Algebra	5
MTH 112 Trigonometry	4
Choice of one sequence – check with Academic Advising team for best option:	
MTH 241 and 242 Elementary Calculus 1, 2 and	8
MTH 243 Probability and Statistics	4
-OR-	
MTH 251, 252, and 253 Calculus 1, 2 and 3	15

Remaining Requirements for Associate of Arts Oregon Transfer (AAOT) degree

WR 121 plus WR 122	8
Health/Wellness/Fitness – see AAOT listing for approved courses	3-4
Oral Communication – see AAOT Communication listing	4
Cultural Literacy – see AAOT Cultural Literacy listing	3-4
Arts & Letters – see AAOT approved Arts and Letters listing	9-12
Social Sciences – see AAOT approved Social Science listing	3-4
Sciences – see AAOT approved listing for 3 lab sciences	12-15
Electives-credits needed to bring total to 90, within limitations of AAOT	

Elementary Education

Transfer Guide for Associate of Arts Oregon Transfer (AAOT) degree

This Transfer Guide is for students transferring to Pacific University only with a major in Education (Elementary Education)

NOTE: All students must meet with your major Academic Advising team at Lane to assure information is accurate and current. Major requirements are different from four-year college to four-year college and may change every year. Associate degree requirements can also change from year to year. This is a Guide only and is not guaranteed to encompass all major/program requirements - these are obtained through your Lane Academic Advising team.

Lane Community College offers the lower division major and general education courses needed for students pursuing an Elementary Education major at the Pacific University. The general education and major courses in the Transfer Guide meet the requirements for the Associate of Arts Oregon Transfer degree. Completing all courses may take longer than two years.

Transfer degrees require a total of 90 transferable credits, with specific general education requirements in Foundational Skills and Discipline Studies.

With the completion of the Associate of Arts Oregon Transfer (AAOT) degree or the Associate of Science Oregon Transfer -Bus/C.S. degree, students admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes. With the completion of the Associate of Science Direct Transfer UO (AS to UO) degree or the Associate of Science Direct Transfer OSU (AS to OSU) students admitted to each respective university (UO/OSU) will fulfill many lower division general education requirements and are granted junior status for registration purposes. Some universities may have additional upper division general education requirements or GPA requirements for admission to a specific major. Oregon public universities allow students who have earned the AAOT with a GPA of 2.0 or better to apply for admission.

Students who graduated high school or received a GED in 1997 or thereafter are required to have a second 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 complete college-level second language coursework.

Prerequisites are required for some courses. See course descriptions.

See Associate of Arts Oregon Transfer degree requirements for approved Arts and Letters, Speech, Health/Wellness/Fitness and Social Science courses. One Arts and Letters or Social Science course must also satisfy the AAOT Cultural Literacy (*) requirement.

Associate of Arts Oregon Transfer degree courses must be completed with a minimum grade of Pass or C-. There is a minimum 2.0 GPA requirement for graduation.

Grading options and GPA requirements for majors may differ from degree requirements. Some programs/majors at specific four-year colleges may have a separate application process. All major courses listed below must be completed to meet lower division major requirements at the four year college. Please meet with the major Academic Advising team for up to date information. For information about the Academic Advising teams, please see the “Transfer” section in this catalog.

Transfer Guide for Elementary Education with Associate of Arts Oregon Transfer degree	**Credits**
Choice of two courses in the following subjects that are also approved to fulfill AAOT Arts and Letters requirement:	
ART, MUS, TA	6
Choice of two courses in the following subjects that are also approved to fulfill AAOT Social Science requirement:	
ANTH, ECON, PS, PSY, SOC	6-8
Choice of one sequence - see Academic Advising team for possible proficiency testing:	15
CW 101, 102, and 103 FR 101, 102 and 103 SPAN 101, 102 and 103	
Choice of two courses from the following:	8
Literature: ENG 100, ENG 104, ENG 105, ENG 106, ENG 151, ENG 215, ENG 222, ENG 232, ENG 250, ENG 253, ENG 254, ENG 259 Philosophy: PHL 201, PHL 202, PHL 205, PHL 221	
Choice of two courses in the following subjects that are also approved to fulfill AAOT Social Science requirements:	8
HST 100 or higher (recommend HST 201, 202 or 203) or PHL 100 or higher (only courses not used above will apply)	

ED 200 and 201 Foundations of Education Seminar 1,2	6
Choice of two courses in the following subjects that are also approved to fulfill AAOT Science with lab requirement: BI, G, PH, ASTR, and GS	8
Math 111, 211, 212 or 213 (three courses needed)	12-13
WR 122 and WR 123 English Composition	8

Remaining credits for Associate of Arts Oregon Transfer degree:

WR 121 English Composition	4
Health/Wellness/Fitness – FN 225 Nutrition (recommended)	4
Oral Communications – see AAOT Communication requirement listing	3-4
Cultural Literacy – see AAOT Cultural Literacy requirement listing	3-4
Sciences with Lab – see AAOT approved listing	4

English

Transfer Guide for Associate of Arts Oregon Transfer (AAOT) degree

This Transfer Guide is for students transferring to the University of Oregon only with a major in English

NOTE: All students must meet with your major Academic Advising team at Lane to assure information is accurate and current. Major requirements are different from four-year college to four-year college and may change every year. Associate degree requirements can also change from year to year. This is a Guide only and is not guaranteed to encompass all major/program requirements - these are obtained through your Lane Academic Advising team.

Lane Community College offers the lower division major and general education courses needed for students pursuing an English major at the University of Oregon. The general education and major courses in the Transfer Guide meet the requirements for the Associate of Arts Oregon Transfer (AAOT) degree. Completing all courses may take longer than two years.

Transfer degrees require a total of 90 transferable credits, with specific general education requirements in Foundational Skills and Discipline Studies.

With the completion of the Associate of Arts Oregon Transfer (AAOT) degree, students admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes. Some universities may have additional upper division general education requirements or GPA requirements for admission to a specific major. Oregon public universities allow students who have earned the AAOT with a GPA of 2.0 or better to apply for admission.

Students who graduated high school or received a GED in 1997 or thereafter are required to have a second 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 complete college level second language coursework.

Prerequisites are required for some courses. See course descriptions.

See Associate of Arts Oregon Transfer (AAOT) degree requirements for approved Arts and Letters, Communication, Health/Wellness/Fitness and Social Science courses. One Arts and Letters or Social Science course must also satisfy the AAOT Cultural Literacy (*) requirement.

Associate of Arts Oregon Transfer (AAOT) degree courses must be completed with a minimum grade of Pass or C- with no more than 16 credits P graded. There is a minimum 2.0 GPA requirement for graduation.

Grading options and GPA requirements for majors may differ from degree requirements. Some programs/majors at specific four-year colleges may have a separate application process. All major courses listed below must be completed to meet lower division major requirements at the four year college. Please meet with the major Academic Advising team for up to date information. For information about the Academic Advising teams, please see the "Transfer" section in this catalog.

Transfer Guide for English with Associate of Arts Oregon Transfer (AAOT):	**Credits**
ENG 204 Survey of British Literature	4
ENG 205 Survey of British Literature	4
ENG 253 Survey of American Literature	4
ENG 254 Survey of American Literature	4
Choice of one course: ENG 201 or ENG 202 or ENG 203 Shakespeare	4
Choice of two additional courses: ENG 100 Children's Literature ENG 107, 108, 109 Survey of World Literature* ENG 121 Detective Fiction ENG 151 African American Literature* ENG 194 Literature of Comedy ENG 195, 196, 197 Introduction to Film Studies ENG 201, 202, 203 Shakespeare 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 257 American Working Class In Fiction and Non-Fiction* ENG 258 Working Class Lives in Films ENG 259 African American Journey* ENG 260 Introduction to Women Writers* ENG 261 Science Fiction ENG 270 Bob Dylan: American Poet ENG 271, 272, 273 Film Genre FA 263 Film in the Fifties FA 264 Women Make Movies* FA 265 African American Film Images*	8

Remaining Requirements for Associate of Arts Oregon Transfer (AAOT) degree:

WR 121 plus WR 122	8
MTH 105 or college level math course with prerequisite of MTH 095	4
Health/Wellness/Fitness – see AAOT listing for approved courses	3-4
Oral Communication – see AAOT Communication listing	4
Cultural Literacy – see AAOT Cultural Literacy listing	3-4
Arts & Letters – see AAOT approved Arts and Letters listing	3-4
Social Sciences – see AAOT approved Social Science listing	12-16
Sciences – see AAOT approved listing for 3 lab and one non-lab class	15-19
Electives-credits needed to bring total credits to 90, within limitations of AAOT	

Environmental Engineering

Transfer Guide for Associate of Science Oregon State University degree

This Transfer Guide is for students transferring to Oregon State Universityonly with a major in Environmental Engineering

NOTE: All students must meet with your major Academic Advising team at Lane to assure information is accurate and current. Major requirements are different from four-year college to four-year college and may change every year. Associate degree requirements can also change from year to year. This is a Guide only and is not guaranteed to encompass all major/program requirements - these are obtained through your Lane Academic Advising team.

Lane Community College offers the lower division major and general education courses needed for students pursuing Horticulture major at the Oregon State University. The general education and major courses in the Transfer Guide meet the requirements for the Associate of Science Direct Transfer: Oregon State University degree. Completing all courses may take longer than two years.

Transfer degrees require a total of 90 transferable credits, with specific general education requirements in Foundational Skills and Discipline Studies.

With the completion of the Associate of Arts Oregon Transfer (AAOT) degree or the Associate of Science Oregon Transfer -Bus/C.S. degree, students admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes. With the completion of the Associate of Science Direct to UO (AS to UO) degree or the Associate of Science Direct to OSU (AS to OSU) students admitted to each respective university (UO/OSU) will fulfill many lower division general education requirements and are granted junior status for registration purposes. Some universities may have additional upper division general education requirements or GPA requirements for admission to a specific major. Oregon public universities allow students who have earned the AAOT with a GPA of 2.0 or better to apply for admission.

Students who graduated high school or received a GED in 1997 or thereafter are required to have a second 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 complete college-level second language coursework.

Prerequisites are required for some courses. See course descriptions.

See Associate of Science Direct Transfer: Oregon State University degree requirements for approved Discipline Studies.

Associate of Science Direct Transfer: Oregon State University courses must be completed with a minimum grade of Pass or C- with no more than 16 credits P graded. There is a minimum 2.0 GPA requirement for graduation.

Grading options and GPA requirements for majors may differ from degree requirements. All major courses listed below must be completed to meet lower division major requirements at the four year college. Some programs/majors at specific four-year colleges may have a separate application process. Please meet with the major Academic Advising team for up to date information. For information about the Academic Advising teams, please see the "Transfer" section in this catalog.

Transfer Guide Environmental Engineering with Associate of Science Transfer: Oregon State University degree

Pre-Engineering (PRE-E) courses required by College of Engineering for admission into the Professional School and used for Pre-E GPA Calculation:

	Credits
MTH 251 Differential Calculus	5
MTH 252 Integral Calculus	5
MTH 253 Infinite Series & Sequences	5
MTH 254 Vector Calculus 1	4
MTH 256 Differential Equations	4
MTH 261 Linear Algebra	2
PH 211 Physics with Calculus 1	5
PH 212 Physics with Calculus 2	5
PH 213 Physics with Calculus 3	5
CH 221 General Chemistry 1	5
ENGR 102 Engr. Orient. 2 (Matlab)	4
ENGR 211 Statics	4
ENGR 212 Dynamics	4
WR 121 Intro to Academic Writing	4

Choice of one:

COMM 111 Fundamentals of Public Speaking or COMM 112 Persuasive Speech	4

Additional courses expected by the School for entry into the Professional Program; these courses are prerequisites for junior year course work:

CH 222 General Chemistry 2	5
CH 223 General Chemistry 3	5
CH 241 Organic Chemistry 1*	5
CH 242 Organic Chemistry 2*	5
CH 243 Organic Chemistry 3*	5

Required for completion of major requirements for B.S. degree; recommended, but not required to complete prior to admission to Pro School:

WR 227 Technical Writing	4
ENGR 101 Engineering Orientation	3
ENGR 115 Engineering Graphics	3
ENGR 213 Strength of Materials	4
BI 234 Introductory Microbiology	4

Remaining requirements for the Associate of Science Direct Transfer: Oregon State University Degree

HE 275 Lifetime Health and Fitness	3
Western Culture – see AS to OSU approved listing	3-4
Cultural Diversity – see AS to OSU approved listing	3-4
Literature and the Arts – see AS to OSU approved listing .	3-4
Social Processes and Institutions – see approved AS to OSU approved listing	3-4
Difference, Power and Discrimination – see AS to OSU approved listing	3-4

*Taking CH 241-243 at Lane will satisfy OSU's Biology major requirement but student will receive lower-division credit at OSU. Upon passing the American Chemical Society (ACS) organic chemistry equivalency test offered to Lane students after completion of CH 243, students can receive up to 15 credits of upper-division organic chemistry credits at OSU.

Ethnic Studies

Transfer Guide for Associate of Arts Oregon Transfer (AAOT) degree

This Transfer Guide is for students transferring to the University of Oregon only with a major in Ethnic Studies

NOTE: All students must meet with your major Academic Advising team at Lane to assure information is accurate and current. Major requirements are different from four-year college to four-year college, and may change every year. Associate degree requirements can also change from year to year. This is a Guide only and is not guaranteed to encompass all major/program requirements - these are obtained through your Lane Academic Advising team.

Lane Community College offers the lower division major and general education courses needed for students pursuing an Ethnic Studies major at the University of Oregon. The general education and major courses in the Transfer Guide meet the requirements for the Associate of Arts Oregon Transfer (AAOT) degree. Completing all courses may take longer than two years.

Transfer degrees require a total of 90 transferable credits, with specific general education requirements in Foundational Skills and Discipline Studies.

With the completion of the Associate of Arts Oregon Transfer (AAOT) degree, students admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes. Some universities may have additional upper division general education requirements or GPA requirements for admission to a specific major. Oregon public universities allow students who have earned the AAOT with a GPA of 2.0 or better to apply for admission.

Students who graduated high school or received a GED in 1997 or thereafter are required to have a second 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 complete college level second language coursework.

Prerequisites are required for some courses. See course descriptions.

See Associate of Arts Oregon Transfer (AAOT) degree requirements for approved Arts and Letters, Communication, Health/Wellness/Fitness and Social Science courses. One Arts and Letters or Social Science course must also satisfy the AAOT Cultural Literacy (*) requirement.

Associate of Arts Oregon Transfer (AAOT) degree courses must be completed with a minimum grade of Pass or C- with no more than 16 credits P graded. There is a minimum 2.0 GPA requirement for graduation.

Grading options and GPA requirements for majors may differ from degree requirements. Some programs/majors at specific four-year colleges may have a separate application process. All major courses listed below must be completed to meet lower division major requirements at the four year college. Please meet with the major Academic Advising team for up to date information. For information about the Academic Advising teams, please see the "Transfer" section in this catalog.

Transfer Guide for Ethnic Studies with Associate of Arts Oregon Transfer (AAOT):

ES 101 Introduction to Ethnic Studies	4
Choice of two 4-credit courses:	
ES 211 or 212 or 213 Chicano/Latino Experience	4
ES 221 or 222 or 223 African American Experience	4
ES 231 or 232 or 233 Asian American Experience	4
ES 241 or 242 Native American Experience	4

Remaining Requirements for Associate of Arts Oregon Transfer (AAOT) degree:

WR 121 plus WR 122	8
MTH 105 or college level math course with prerequisite of MTH 095	4-5
Health/Wellness/Fitness – see AAOT listing for approved courses	3-4
Oral Communication – see AAOT Communication listing	4
Arts & Letters – see AAOT approved Arts and Letters listing	9-12
Social Sciences – see AAOT approved Social Science listing	3-4
Sciences – see AAOT approved listing for 4 science courses	15-19
Electives - credits needed to bring total to 90, within limitations of AAOT	

General Science

Transfer Guide for Associate of Arts Oregon Transfer (AAOT) degree

This Transfer Guide is for students transferring to the University of Oregon only with a major in General Science

NOTE: All students must meet with your major Academic Advising team at Lane to assure information is accurate and current. Major requirements are different from four-year college to four-year college and may change every year. Associate degree requirements can also change from year to year. This is a Guide only and is not guaranteed to encompass all major/program requirements - these are obtained through your Lane Academic Advising team.

Lane Community College offers the lower division major and general education courses needed for students pursuing a General Science major at the University of Oregon. The general education and major courses in the Transfer Guide meet the requirements for the Associate of Arts Oregon Transfer degree. Completing all courses may take longer than two years.

Transfer degrees require a total of 90 transferable credits, with specific general education requirements in Foundational Skills and Discipline Studies.

With the completion of the Associate of Arts Oregon Transfer (AAOT) degree or the Associate of Science Oregon Transfer -Bus/C.S. degree, students admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes. With the completion of the Associate of Science Direct Transfer: UO (AS to UO) degree or the Associate of Science Direct Transfer: OSU (AS to OSU) students admitted to each respective university (UO/OSU) will fulfill many lower division general education requirements and are granted junior status for registration purposes. Some universities may have additional upper division general education requirements or GPA requirements for admission to a specific major. Oregon public universities allow students who have earned the AAOT with a GPA of 2.0 or better to apply for admission.

Students who graduated high school or received a GED in 1997 or thereafter are required to have a second 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 complete college level second language coursework.

Prerequisites are required for some courses. See course descriptions.

See Associate of Arts Oregon Transfer degree requirements for approved Arts and Letters, Speech, Health/Wellness/Fitness and Social Science courses. One Arts and Letters or Social Science course must also satisfy the AAOT Cultural Literacy (*) requirement.

Associate of Arts Oregon Transfer courses must be completed with a minimum grade of Pass or C- with no more than 16 credits P graded. There is a minimum 2.0 GPA requirement for graduation.

Grading options and GPA requirements for majors may differ from degree requirements. All major courses listed below must be completed to meet lower division major requirements at the four year college. Some programs/majors at specific four-year colleges may have a separate application process. Please meet with the major Academic Advising team for up to date information. For information about the Academic Advising teams, please see the "Transfer" section in this catalog.

Transfer Guide for General Science with Associate of Arts Oregon Transfer degree:	**Credits**
Math 251 Differential Calculus	5
Math 252 Integral Calculus	5
Complete 3 of the following lower-division Science Sequences:	
BI 211, BI 212, BOT/Z 213 Principles of Biology	12
CH 221, CH 222, CH 223 General Chemistry	15
PH 201, PH 202, PH 203 General Physics	15
G 201, G 202, G 203 Geology	12
CS 161C+, CS 162C+, CS 260 Computer Science C++	12

Remaining requirements for the Associate of Arts Oregon Transfer degree:	Credits
WR 121, plus WR 122 or WR 227	8
Health/Wellness/Fitness – see AAOT listing for approved courses	3
Oral Communications – see AAOT Communication requirement listing	3-4
Cultural Literacy – see AAOT Cultural Literacy requirement listing	3-4
Arts and Letters – see AAOT approved Arts and Letters listing	9-12
Social Sciences – see AAOT approved Social Science listing	12-16
Electives – see limitations on AAOT and credits needed to bring total to 90 transfer credits	

Geography

Transfer Guide for Associate of Arts Oregon Transfer (AAOT) degree

This Transfer Guide is for students transferring to the University of Oregon only with a major in Geography

NOTE: All students must meet with your major Academic Advising team at Lane to assure information is accurate and current. Major requirements are different from four-year college to four-year college, and may change every year. Associate degree requirements can also change from year to year. This is a Guide only and is not guaranteed to encompass all major/program requirements - these are obtained through your Lane Academic Advising team.

Lane Community College offers the lower division major and general education courses needed for students pursuing a Geography major at the University of Oregon. The general education and major courses in the Transfer Guide meet the requirements for the Associate of Arts Oregon Transfer (AAOT) degree. Completing all courses may take longer than two years.

Transfer degrees require a total of 90 transferable credits, with specific general education requirements in Foundational Skills and Discipline Studies.

With the completion of the Associate of Arts Oregon Transfer (AAOT) degree, students admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes. Some universities may have additional upper division general education requirements or GPA requirements for admission to a specific major. Oregon public universities allow students who have earned the AAOT with a GPA of 2.0 or better to apply for admission.

Students who graduated high school or received a GED in 1997 or thereafter are required to have a second 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 complete college-level second language coursework.

Prerequisites are required for some courses. See course descriptions.

See Associate of Arts Oregon Transfer (AAOT) degree requirements for approved Arts and Letters, Communication, Health/Wellness/Fitness and Social Science courses. One Arts and Letters or Social Science course must also satisfy the AAOT Cultural Literacy (*) requirement.

Associate of Arts Oregon Transfer (AAOT) degree courses must be completed with a minimum grade of Pass or C- with no more than 16 credits P graded. There is a minimum 2.0 GPA requirement for graduation.

Grading options and GPA requirements for majors may differ from degree requirements. Some programs/majors at specific four-year colleges may have a separate application process. All major courses listed below must be completed to meet lower division major requirements at the four year college. Please meet with the major Academic Advising team for up to date information. For information about the Academic Advising teams, please see the "Transfer" section in this catalog.

Transfer Guide for Geography with Associate of Arts Oregon Transfer (AAOT):	Credits
GEOG 141 Natural Environment	4
GEOG 142 Introduction to Human Geography*	4
GEOG 151 Digital Earth	4
Choice of one:	
GEOG 201 World Regional Geography	
GEOG 206 Geography of Pacific Asia	3-4
GIS 245 GIS 1	4
GIS 246 GIS 2	4

Remaining Requirements for Associate of Arts Oregon Transfer (AAOT) degree:	
WR 121 plus WR 122	8
MTH 105 or college level math course with prerequisite of MTH 095	4-5
Health/Wellness/Fitness – see AAOT listing for approved courses	3-4
Oral Communication – see AAOT Communication listing	4
Arts & Letters – see AAOT approved Arts and Letters listing	9-12
Social Sciences – see AAOT approved Social Science listing	3-4
Sciences – see AAOT approved listing for 3 lab sciences	12-15
Electives-credits needed to bring total credits to 90, within limitations of AAOT	

History

Transfer Guide for Associate of Arts Oregon Transfer (AAOT) degree

This Transfer Guide is for students transferring to the University of Oregon only with a major in History

NOTE: All students must meet with your major Academic Advising team at Lane to assure information is accurate and current. Major requirements are different from four-year college to four-year college, and may change every year. Associate degree requirements can also change from year to year. This is a Guide only and is not guaranteed to encompass all major/program requirements - these are obtained through your Lane Academic Advising team.

Lane Community College offers the lower division major and general education courses needed for students pursuing a History major at the University of Oregon. The general education and major courses in the Transfer Guide meet the requirements for the Associate of Arts Oregon Transfer (AAOT) degree. Completing all courses may take longer than two years.

Transfer degrees require a total of 90 transferable credits, with specific general education requirements in Foundational Skills and Discipline Studies.

With the completion of the Associate of Arts Oregon Transfer (AAOT) degree, students admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes. Some universities may have additional upper division general education requirements or GPA requirements for admission to a specific major. Oregon public universities allow students who have earned the AAOT with a GPA of 2.0 or better to apply for admission.

Students who graduated high school or received a GED in 1997 or thereafter are required to have a second 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 complete college-level second language coursework.

Prerequisites are required for some courses. See course descriptions.

See Associate of Arts Oregon Transfer (AAOT) degree requirements for approved Arts and Letters, Communication, Health/Wellness/Fitness and Social Science courses. One Arts and Letters or Social Science course must also satisfy the AAOT Cultural Literacy (*) requirement.

Associate of Arts Oregon Transfer (AAOT) degree courses must be completed with a minimum grade of Pass or C- with no more than 16 credits P graded. There is a minimum 2.0 GPA requirement for graduation.

Grading options and GPA requirements for majors may differ from degree requirements. Some programs/majors at specific four-year colleges may have a separate application process. All major courses listed below must be completed to meet lower division major requirements at the four year college. Please meet with the major Academic Advising team for up to date information. For information about the Academic Advising teams, please see the "Transfer" section in this catalog.

Transfer Guide for History with Associate of Arts Oregon Transfer (AAOT):	**Credits**
Choice of one three-term sequence:	
HST 101, 102 & 103 Western Civilization or HST 104, 105 & 105 World History or HST 201, 202 & 203 History of the United States	12
Remaining Requirements for Associate of Arts Oregon Transfer (AAOT) degree:	
WR 121 plus WR 122	8
MTH 105 or college level math course with prerequisite of MTH 095	4-5
Health/Wellness/Fitness – see AAOT listing for approved courses	3-4
Oral Communication – see AAOT Communication listing	4
Cultural Literacy – see AAOT Cultural Literacy listing	3-4
Arts & Letters – see AAOT approved Arts and Letters listing	9-12
Social Sciences – see AAOT approved Social Science listing	3-4
Sciences – see AAOT approved listing for 4 science courses	15-19
Electives-to bring total credits to 90, within limitations of AAOT	29

Horticulture, General Horticulture Option

Transfer Guide for Associate of Direct Transfer: Science Oregon State University (AS to OSU) degree

This Transfer Guide is for students transferring to Oregon State University only with a major in Horticulture

NOTE: All students must meet with your major Academic Advising team at Lane to assure information is accurate and current. Major requirements are different from four-year college to four-year college and may change every year. Associate degree requirements can also change from year to year. This is a Guide only and is not guaranteed to encompass all major/program requirements - these are obtained through your Lane Academic Advising team.

Lane Community College offers the lower division major and general education courses needed for students pursuing Horticulture major at the Oregon State University. The general education and major courses in the Transfer Guide meet the requirements for the Associate of Science Direct Transfer: Oregon State University degree. Completing all courses may take longer than two years.

Transfer degrees require a total of 90 transferable credits, with specific general education requirements in Foundational Skills and Discipline Studies.

With the completion of the Associate of Arts Oregon Transfer (AAOT) degree or the Associate of Science Oregon Transfer -Bus/C.S. degree, students admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes. With the completion of the Associate of Science Direct Transfer: UO (AS to UO) degree or the Associate of Science Direct Transfer: OSU (AS to OSU) students admitted to each respective university (UO/OSU) will fulfill many lower division general education requirements and are granted junior status for registration purposes. Some universities may have additional upper division general education requirements or GPA requirements for admission to a specific major. Oregon public universities allow students who have earned the AAOT with a GPA of 2.0 or better to apply for admission.

Students who graduated high school or received a GED in 1997 or thereafter are required to have a second 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 complete college-level second language coursework.

Prerequisites are required for some courses. See course descriptions.

See Associate of Science Direct Transfer: Oregon State University degree requirements for approved Discipline Studies courses. Associate of Science Direct Transfer: Oregon State University courses must be completed with a minimum grade of Pass or C- with no more than 16 credits P graded. There is a minimum 2.0 GPA requirement for graduation.

Grading options and GPA requirements for majors may differ from degree requirements. All major courses listed below must be completed to meet lower division major requirements at the four year college. Some programs/majors at specific four-year colleges may have a separate application process. Please meet with the major Academic Advising team for up to date information. For information about the Academic Advising teams, please see the "Transfer" section in this catalog.

Transfer Guide for Horticulture, general horticulture option with Associate of Science Direct Transfer: Oregon State University degree	**Credits**
WR 121 Intro to Academic Writing	4
Choice of one math course from list below:	
MTH 112 Trigonometry MTH 241 Elementary Calculus 1	4
BI 211 Principles of Biology	4
BI 213 Principles of Biology	4
BOT 213 Principles of Biology	4
CH 221 General Chemistry 1	5
CH 222 General Chemistry 2	5
CH 223 General Chemistry 3	5

Choice of one Political Science course from list below: PS 201 U.S Government & Politics PS 205 International Relations	4

Remaining requirements for the Associate of Science Direct Transfer: Oregon State University Degree

Writing II – see AS to OSU approved listing	3-4
Writing III/Speech – see AS to OSU approved listing	3-4
HE 275 Lifetime Health and Fitness	3
Western Culture – see AS to OSU approved listing	3-4
Cultural Diversity – see AS to OSU approved listing	3-4
Literature and the Arts – see AS to OSU approved listing	3-4
Difference, Power and Discrimination – see AS to OSU approved listing	3-4
Electives – see limitations on AS to OSU and credits needed to bring total to 90 transfer credits	

Human Physiology

Transfer Guide for Associate of Arts Oregon Transfer (AAOT) degree

This Transfer Guide is for students transferring to the University of Oregon only with a major in Human Physiology

NOTE: All students must meet with your major Academic Advising team at Lane to assure information is accurate and current. Major requirements are different from four-year college to four-year college and may change every year. Associate degree requirements can also change from year to year. This is a Guide only and is not guaranteed to encompass all major/program requirements - these are obtained through your Lane Academic Advising team.

Lane Community College offers the lower division major and general education courses needed for students pursuing a Human Physiology major at the University of Oregon. The general education and major courses in the Transfer Guide meet the requirements for the Associate of Arts Oregon Transfer degree. Completing all courses may take longer than two years.

Transfer degrees require a total of 90 transferable credits, with specific general education requirements in Foundational Skills and Discipline Studies.

With the completion of the Associate of Arts Oregon Transfer (AAOT) degree or the Associate of Science Oregon Transfer -Bus/C.S. degree, students admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes. With the completion of the Associate of Science Direct Transfer: UO (AS to UO) degree or the Associate of Science Direct Transfer: OSU (AS to OSU) students admitted to each respective university (UO/OSU) will fulfill many lower division general education requirements and are granted junior status for registration purposes. Some universities may have additional upper division general education requirements or GPA requirements for admission to a specific major. Oregon public universities allow students who have earned the AAOT with a GPA of 2.0 or better to apply for admission.

Students who graduated high school or received a GED in 1997 or thereafter are required to have a second 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 complete college-level second language coursework.

Prerequisites are required for some courses. See course descriptions.

See Associate of Arts Oregon Transfer degree requirements for approved Arts and Letters, Speech, Health/Wellness/Fitness and Social Science courses. One Arts and Letters or Social Science course must also satisfy the AAOT Cultural Literacy (*) requirement.

Associate of Arts Oregon Transfer courses must be completed with a minimum grade of Pass or C- with no more than 16 credits P graded. There is a minimum 2.0 GPA requirement for graduation.

Grading options and GPA requirements for majors may differ from degree requirements. All major courses listed below must be completed to meet lower division major requirements at the four year college. Some programs/majors at specific four-year colleges may have a separate application process. Please meet with the major Academic Advising team for up to date information. For information about the Academic Advising teams, please see the "Transfer" section in this catalog.

Transfer Guide for Human Physiology with Associate of Arts Oregon Transfer degree:

Math 251 Differential Calculus	5
BI 211 Principles of Biology	4
BI 213 Principles of Biology	4
BOT/Z 213 Principles of Biology	4
CH 221 General Chemistry 1	5
CH 222 General Chemistry 2	5
CH 223 General Chemistry 3	5
PH 201 General Physics 1	5
PH 202 General Physics 2	5
PH 203 General Physics 3	5
HO 100 Medical Terminology	3

Remaining requirements for Associate of Arts Oregon Transfer degree:

WR 121, plus WR 122 or WR 227	8
Health/Wellness/Fitness – see AAOT listing for approved courses	3
Oral Communications – see AAOT Communication requirement listing	3-4
Cultural Literacy – see AAOT Cultural Literacy requirement listing	3-4
Arts and Letters – see AAOT approved Arts and Letters listing	9-12
Social Sciences – see AAOT approved Social Science listing	12-16
Electives – see limitations on AAOT and to bring credits needed total to 90 transfer credits	

Mechanical Engineering

Transfer Guide for Associate of Science Direct Transfer: Oregon State University AS to OSU degree

This Transfer Guide is for students transferring to Oregon State University only with a major in Mechanical Engineering

NOTE: All students must meet with your major Academic Advising team at Lane to assure information is accurate and current. Major requirements are different from four-year college to four-year college and may change every year. Associate degree requirements can also change from year to year. This is a Guide only and is not guaranteed to encompass all major/program requirements - these are obtained through your Lane Academic Advising team.

Lane Community College offers the lower division major and general education courses needed for students pursuing Horticulture major at the Oregon State University. The general education and major courses in the Transfer Guide meet the requirements for the Associate of Science Direct Transfer: Oregon State University degree. Completing all courses may take longer than two years.

Transfer degrees require a total of 90 transferable credits, with specific general education requirements in Foundational Skills and Discipline Studies.

With the completion of the Associate of Arts Oregon Transfer (AAOT) degree or the Associate of Science Oregon Transfer -Bus/C.S. degree, students admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes. With the completion of the Associate of Science Direct Transfer: UO (AS to UO) degree or the Associate of Science Direct Transfer: OSU (AS to OSU) students admitted to each respective university (UO/OSU) will fulfill many lower division general education requirements and are granted junior status for registration purposes. Some universities may have additional upper division general education requirements or GPA requirements for admission to a specific major. Oregon public universities allow students who have earned the AAOT with a GPA of 2.0 or better to apply for admission.

Students who graduated high school or received a GED in 1997 or thereafter are required to have a second 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 complete college-level second language coursework.

Prerequisites are required for some courses. See course descriptions.

See Associate of Science Direct Transfer: Oregon State University degree requirements for approved Discipline Studies courses. One Arts and Letters or Social Science course must also satisfy the AAOT Cultural Literacy (*) requirement.

Associate of Science Direct Transfer: Oregon State University courses must be completed with a minimum grade of Pass or C- with no more than 16 credits P graded. There is a minimum 2.0 GPA requirement for graduation.

Grading options and GPA requirements for majors may differ from degree requirements. All major courses listed below must be completed to meet lower division major requirements at the four year college. Some programs/majors at specific four-year colleges may have a separate application process. Please meet with the major Academic Advising team for up to date information. For information about the Academic Advising teams, please see the "Transfer" section in this catalog.

Transfer Guide Mechanical Engineering with Associate of Science Direct Transfer: Oregon State University degree

Pre-Engineering (PRE-E) courses required by College of Engineering for admission into the Professional School and used for Pre-E GPA Calculation:	**Credits**
Math 251 Differential Calculus	5
Math 252 Integral Calculus	5
Math 253 Infinite Series & Sequences	5
Math 254 Vector Calculus 1	4
Math 256 Differential Equations	4
Math 261 Linear Algebra	2
PH 211 Physics with Calculus 1	5
PH 212 Physics with Calculus 2	5
PH 213 Physics with Calculus 3	5
CH 221 General Chemistry 1	5
ENGR 102 Engr. Orient. 2 (Matlab)	4
ENGR 211 Statics	4
ENGR 212 Dynamics	4
WR 121 Intro to Academic Writing	4
Choice of one:	
COMM 111 Fundamentals of Public Speaking	
COMM 112 Persuasive Speech	4

Additional courses expected by the School for entry into the Professional Program; these courses are prerequisites for junior year course work:

CH 222 General Chemistry 2	5
ENGR 115 Engineering Graphics	3
ENGR 213 Strength of Materials	4
ENGR 221 Electrical Fundamentals 1	4

Required for completion of major requirements for B.S. degree; recommended, but not required to complete prior to admission to Pro School:	**Credits**
WR 227 Technical Writing	4
ENGR 101 Engineering Orientation	3
Math 265 Statistics for Scientists and Engineers	4
ECON 201 Principles of Economics: Microeconomics	4

Associate of Science Direct to Oregon State University Degree	
HE 275 Lifetime Health and Fitness	3
Western Culture – see AS to OSU approved listing	3-4
Cultural Diversity – see AS to OSU approved listing	3-4
Literature and the Arts – see AS to OSU approved listing	3-4
Difference, Power and Discrimination – see AS to OSU approved listing	3-4

Music

Transfer Guide for Associate of Arts Oregon Transfer (AAOT) degree

This Transfer Guide is for students transferring to Southern Oregon University only with a major in Music

NOTE: All students must meet with your major Academic Advising team at Lane to assure information is accurate and current. Major requirements are different from four-year college to four-year college and may change every year. Associate degree requirements can also change from year to year. This is a Guide only and is not guaranteed to encompass all major/program requirements - these are obtained through your Lane Academic Advising team.

Lane Community College offers the lower division major and general education courses needed for students pursuing a Music major at the Southern Oregon University. The general education and major courses in the Transfer Guide meet the requirements for the Associate of Arts Oregon Transfer degree. Completing all courses may take longer than two years.

Transfer degrees require a total of 90 transferable credits, with specific general education requirements in Foundational Skills and Discipline Studies.

With the completion of the Associate of Arts Oregon Transfer (AAOT) degree or the Associate of Science Oregon Transfer -Bus/C.S. degree, students admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes. With the completion of the Associate of Science Direct Transfer: UO (AS to UO) degree or the Associate of Science Direct Transfer: OSU (AS to OSU) students admitted to each respective university (UO/OSU) will fulfill many lower division general education requirements and are granted junior status for registration purposes. Some universities may have additional upper division general education requirements or GPA requirements for admission to a specific major. Oregon public universities allow students who have earned the AAOT with a GPA of 2.0 or better to apply for admission.

Students who graduated high school or received a GED in 1997 or thereafter are required to have a second 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 complete college-level second language coursework.

Prerequisites are required for some courses. See course descriptions.

See Associate of Arts Oregon Transfer degree requirements for approved Arts and Letters, Speech, Health/Wellness/Fitness and Social Science courses. One Arts and Letters or Social Science course must also satisfy the AAOT Cultural Literacy (*) requirement.

Associate of Arts Oregon Transfer degree courses must be completed with a minimum grade of Pass or C-. There is a minimum 2.0 GPA requirement for graduation.

Grading options and GPA requirements for majors may differ from degree requirements. Some programs/majors at specific four-year colleges may have a separate application process. All major courses listed below must be completed to meet lower division major requirements at the four year college. Please meet with the major Academic Advising team for up to date information. For information about the Academic Advising teams, please see the "Transfer" section in this catalog.

Transfer Guide for Music with an Associate of Arts Oregon Transfer degree:	**Credits**
MUS 111, 112, and 113 Music Theory I	12
MUS 211, 212, and 213 Music Theory II	9
MUS 114, 115 and 116 Sight-Reading Ear Training	6
MUS 224, 225 and 226 Sight-Reading Ear Training	6
MUS 127, 128 and 129 Keyboard Skills I	6
MUS 214, 215 and 216 Keyboard Skills II	6
MUP 100 level Individual Lessons	6
MUP 200 level Individual Lessons	6

These courses can be taken at Lane or SOU, check with Academic Advising team for best option:

MUS 261, 262 and 263 Music History I, II, III	12

Remaining Requirements for Associate of Arts Oregon Transfer (AAOT) degree:	**Credits**
WR 121 and WR 122 or 227 English Composition	8
Math 105 or college-level Math course with prerequisite of Math 95	4-5
Health/Wellness/Fitness – see AAOT listing for approved courses	3
Oral Communications – see AAOT Communication requirement listing	3-4
Cultural Literacy – see AAOT Cultural Literacy requirement listing	3-4
Arts and Letters – see AAOT approved Arts and Letters listing	3-4
Social Sciences – see AAOT approved Social Science listing	12-16
Sciences – see AAOT approved 3 lab and 2 non lab Science listing	15-16

Political Science

Transfer Guide for Associate of Arts Oregon Transfer (AAOT) degree

This Transfer Guide is for students transferring to the University of Oregon only with a major in Political Science

NOTE: All students must meet with your major Academic Advising team at Lane to assure information is accurate and current. Major requirements are different from four-year college to four-year college, and may change every year. Associate degree requirements can also change from year to year. This is a Guide only and is not guaranteed to encompass all major/program requirements - these are obtained through your Lane Academic Advising team.

Lane Community College offers the lower division major and general education courses needed for students pursuing a Political Science major at the University of Oregon. The general education and major courses in the Transfer Guide meet the requirements for the Associate of Arts Oregon Transfer (AAOT) degree. Completing all courses may take longer than two years.

Transfer degrees require a total of 90 transferable credits, with specific general education requirements in Foundational Skills and Discipline Studies.

With the completion of the Associate of Arts Oregon Transfer (AAOT) degree, students admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes. Some universities may have additional upper division general education requirements or GPA requirements for admission to a specific major. Oregon public universities allow students who have earned the AAOT with a GPA of 2.0 or better to apply for admission.

Students who graduated high school or received a GED in 1997 or thereafter are required to have a second 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 complete college-level second language coursework.

Prerequisites are required for some courses. See course descriptions.

See Associate of Arts Oregon Transfer (AAOT) degree requirements for approved Arts and Letters, Communication, Health/Wellness/Fitness and Social Science courses. One Arts and Letters or Social Science course must also satisfy the AAOT Cultural Literacy (*) requirement.

Associate of Arts Oregon Transfer (AAOT) degree courses must be completed with a minimum grade of Pass or C- with no more than 16 credits P graded. There is a minimum 2.0 GPA requirement for graduation.

Grading options and GPA requirements for majors may differ from degree requirements. Some programs/majors at specific four-year colleges may have a separate application process. All major courses listed below must be completed to meet lower division major requirements at the four year college. Please meet with the major Academic Advising team for up to date information. For information about the Academic Advising teams, please see the "Transfer" section in this catalog.

Transfer Guide for Political Science with Associate of Arts Oregon Transfer (AAOT):	**Credits**
Choice of three or four classes from the following:	9-16

- PS 201, 202 US Government & Politics
- PS 203 State & Local Government and Politics
- PS 204 Introduction to Comparative Politics
- PS 205 International Relations
- PS 208 Introduction to Political Theory
- PS 225 Political Ideology
- PS 297 Environmental Politics6

Remaining Requirements for Associate of Arts Oregon Transfer (AAOT) degree:

WR 121 plus WR 122	8
Math 105 or college level math courses with prerequisite of MTH 095	4-5
Health/Wellness/Fitness – see AAOT listing for approved courses	3-4
Oral Communication – see AAOT Communication listing	4
Cultural Literacy – see AAOT Cultural Literacy listing	3-4
Arts & Letters – see AAOT approved Arts and Letters listing	9-12
Social Sciences – see AAOT approved Social Science listing	3-4
Sciences – see AAOT approved listing for 4 science courses	15-19
Electives-to bring total credits to 90, within limitations of AAOT	

Pre-Professional Health

NOTE: All students must meet with your major Academic Advising team at Lane to assure information is accurate and current. Major requirements are different from four-year college to four-year college, and may change every year. Associate degree requirements can also change from year to year. This is a Guide only and is not guaranteed to encompass all major/program requirements - these are obtained through your Lane Academic Advising team.

Admission into a professional health graduate school is competitive and most programs require a bachelor's degree before applying. Students are encouraged to excel in their science sequences as many serve as prerequisites for graduate programs. Transfer institutions require additional upper division coursework to be accepted into any of the professional health graduate programs and may change prerequisites from year-to-year. Any student interested in transfer must accept responsibility to work very closely with the Lane Academic Advising team for the major/program and be aware of changes in program prerequisites at potential transfer institutions.

Please note Science majors will need to be at a MTH 111 level before starting most science sequences

Commonly selected undergraduate majors:

Pre-Chiropractic: Biology, General Science, Human Physiology
Pre-Dentistry: Biology, Biochemistry, Human Physiology
Pre-Medicine: Biology, Biochemistry/Biophysics, Human Physiology, Microbiology
Pre-Occupational Therapy: Human Physiology, Psychology
Pre-Optometry: Biology, General Science, Human Physiology
Pre-Pharmacy: Biology, General Science
Pre-Physical Therapy: Biology, General Science, Human Physiology
Pre-Physician's Assistant: Biology, General Science, Human Physiology
Pre-Veterinary Medicine: Animal Science, Biology, General Science

For additional information on specific majors listed above and Pre-Professional Health programs in general, please meet with the Academic Advising team for that area. The commonly selected majors listed above have individual Transfer Guides within this section of the catalog.

Psychology

Transfer Guide for Associate of Arts Oregon Transfer (AAOT) degree

This Transfer Guide is for students transferring to the University of Oregon only with a major in Psychology

NOTE: All students must meet with your major Academic Advising team at Lane to assure information is accurate and current. Major requirements are different from four-year college to four-year college, and may change every year. Associate degree requirements can also change from year to year. This is a Guide only and is not guaranteed to encompass all major/program requirements - these are obtained through your Lane Academic Advising team.

Lane Community College offers the lower division major and general education courses needed for students pursuing a Psychology major at the University of Oregon. The general education and major courses in the Transfer Guide meet the requirements for the Associate of Arts Oregon Transfer (AAOT) degree. Completing all courses may take longer than two years.

Transfer degrees require a total of 90 transferable credits, with specific general education requirements in Foundational Skills and Discipline Studies.

With the completion of the Associate of Arts Oregon Transfer (AAOT) degree, students admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes. Some universities may have additional upper division general education requirements or GPA requirements for admission to a specific major. Oregon public universities allow students who have earned the AAOT with a GPA of 2.0 or better to apply for admission.

Students who graduated high school or received a GED in 1997 or thereafter are required to have a second 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 complete college-level second language coursework.

Prerequisites are required for some courses. See course descriptions.

See Associate of Arts Oregon Transfer (AAOT) degree requirements for approved Arts and Letters, Communication, Health/Wellness/Fitness and Social Science courses. One Arts and Letters or Social Science course must also satisfy the AAOT Cultural Literacy (*) requirement.

Associate of Arts Oregon Transfer (AAOT) degree courses must be completed with a minimum grade of Pass or C- with no more than 16 credits P graded. There is a minimum 2.0 GPA requirement for graduation.

Grading options and GPA requirements for majors may differ from degree requirements. Some programs/majors at specific four-year colleges may have a separate application process. All major courses listed below must be completed to meet lower division major requirements at the four year college. Please meet with the major Academic Advising team for up to date information. For information about the Academic Advising teams, please see the "Transfer" section in this catalog.

Transfer Guide for Psychology with Associate of Arts Oregon Transfer (AAOT):	**Credits**
PSY 201, 202, & 203 General Psychology	12
MTH 111 College Algebra	5
College level (100 or higher) Biology, Chemistry, or Physics 12 credits total from one subject	12

Remaining Requirements for Associate of Arts Oregon Transfer (AAOT) degree:	
WR 121 plus WR 122	8
Health/Wellness/Fitness – see AAOT listing for approved courses	3-4
Oral Communication – see AAOT Communication listing	4
Cultural Literacy – see AAOT Cultural Literacy listing	3-4
Arts & Letters – see AAOT approved Arts and Letters listing	9-12
Social Sciences – see AAOT approved Social Science listing	3-4
Sciences – see AAOT approved listing for 4 science courses	3-4
Electives-credits needed to bring total credits to 90, within limitations of AAOT	

Theater Arts

Associate of Science to the University of Oregon degree

This Transfer Guide is for students transferring to University of Oregon only with a major in Theater Arts

NOTE: All students must meet with your major Academic Advising team at Lane to assure information is accurate and current. Major requirements are different from four-year college to four-year college and may change every year. Associate degree requirements can also change from year to year. This is a Guide only and is not guarantee to encompass all major/program requirements - these are obtained through your Lane Academic Advising team.

Lane Community College offers the lower division major and general education courses needed for students pursuing a Theater Arts major at the University of Oregon. The general education and major courses in the Transfer Guide meet the requirements for the Associate of Science Direct Transfer: University of Oregon degree. Completing all courses may take longer than two years.

Transfer degrees require a total of 90 transferable credits, with specific general education requirements in Foundational Skills and Discipline Studies.

With the completion of the Associate of Arts Oregon Transfer (AAOT) degree or the Associate of Science Oregon Transfer -Bus/C.S. degree, students admitted to Oregon public universities are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes. With the completion of the Associate of Science Direct Transfer: UO (AS to UO) degree or the Associate of Science Direct Transfer: OSU (AS to OSU) students admitted to each respective university (UO/OSU) will fulfill many lower division general education requirements and are granted junior status for registration purposes. Some universities may have additional upper division general education requirements or GPA requirements for admission to a specific major. Oregon public universities allow students who have earned the AAOT with a GPA of 2.0 or better to apply for admission.

Students who graduated high school or received a GED in 1997 or thereafter are required to have a second 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 complete college-level second language coursework.

Prerequisites are required for some courses. See course descriptions.

See Associate of Science Discipline Sudies Direct Transfer: University of Oregon degree requirements for approved Discipline Studies.

Associate of Science Direct Transfer: University of Oregon degree courses must be completed with a minimum grade of Pass or C- with no more than 16 credits P graded. There is a minimum 2.0 GPA requirement for graduation.

Grading options and GPA requirements for majors may differ from degree requirements. Some programs/majors at specific four-year colleges may have a separate application process. All major courses listed below must be completed to meet lower division major requirements at the four year college. Please meet with the major Academic Advising team for up to date information. For information about the Academic Advising teams, please see the "Transfer" section in this catalog.

Transfer Guide for Theater Arts with Associate of Science Direct Transer: University of Oregon (AS to UO) degree	**Credits**
TA 141 Acting 1	3
TA 142 Acting II	3
TA 150 Technical Production	3
TA 250 Technical Productions II	3
TA 121 Intro to Costume Design	3
TA 227 Stage Makeup	3
TA 272 Intro to Theatre Art	3
Associate of Science Direct Transfer: University of Oregon degree remaining requirements:	
WR 121 plus WR 122 or WR 123	8
MTH 105 or college-level Math course with prerequisite of MTH 095	4-5
Arts and Letters – see AS to UO approved Arts and Letters listing	15
Social Sciences – see AS or UO approved Social Science listing	15
Sciences – see AS to UO approved Science listing	15
Electives – see limitations on AS to UO and credits needed to bring total to 90 transfer credits	

School of Professional and Technical Careers

Lane Community College offers students the option to transfer toward a Bachelor degree after completing an Associate of Applied Science (AAS) degree for specific majors going into specific four-year college majors. This enables students to use a greater number of Career Technical courses toward a Bachelor degree.

The Transfer Guides in this section include Lane Career Technical programs that lead toward a specific Bachelor degree at a specific four-year college. These guides include major requirements for the program requirements and general education requirements for the specific four-year college.

Some of these programs are offered in an online format by the four-year college and universities. Some of these programs are in a classroom format.

Major requirements for first- and second-year coursework vary from college to college and from academic year to year. Grading options and GPA requirements for majors may differ from degree requirements. Some programs/majors at specific four-year institutions may have a separate application process. All major courses listed below must be completed to meet lower division major requirements at the four-year institution.

It is imperative that students consult with the major Academic Advising team at Lane to assure the appropriate coursework is being chosen. For information about the Academic Advising teams, please see the "Transfer" section in this catalog. The guides are not meant as a substitute to meeting with the major Academic Advising team.

Transfer Guides in this section include various majors for specific four-year colleges and universities in Oregon. Lane Community College offers courses and transfer information for transfer majors and/or four-year colleges that may not, at this time, be listed in the catalog. Please meet with the Lane Academic Advising team for the major/program or four-year college you are interested in to determine more possibilities. Lane does not endorse any specific four-year college or university.

Associate of Applied Science in any field except Business and Accounting to Bachelor of Applied Science in Management

This Transfer Guide is for students transferring to Southern Oregon University.

NOTE: All students must meet with your major Academic Advising team at Lane to assure information is accurate and current. Major requirements are different from four-year college to four-year college and may change every year. Associate degree requirements can also change from year to year. This is a Guide only and is not guarantee to encompass all major/program requirements - these are obtained through your Lane Academic Advising team.

Lane offers students the option to transfer toward a Bachelor degree after completing an Associate of Applied Science (AAS) degree for specific majors going into specific four-year college majors. This enables students to use a greater number of Career Technical courses toward a Bachelor degree.

This Transfer Guide is for students transferring to Southern Oregon University with a major in Management and an Associate of Applied Science in any field except Business and Accounting. Student must meet all admission requirements for the four-year college, including but not limited to: WR 121, Math 100 or higher, and GPA requirement. Students must also complete all coursework listed below. General Education requirements for the specific four-year college can be completed with either a Direct Transfer to that specific university or with an Associate degree for transfer. For more information about these options, please meet with your program/major Academic Advising team.

Students who graduated high school or received a GED in 1997 or thereafter are required to have a second 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 complete college-level second language coursework.

Prerequisites are required for some courses. See course descriptions.

Grading options and GPA requirements for majors may differ from degree requirements. Some programs/majors at specific four-year colleges may have a separate application process. All major courses listed below must be completed to meet lower division major requirements at the four year college. Please meet with the major Academic Advising team for up to date information. For information about the Academic Advising teams, please see the "Transfer" section in this catalog.

Transfer Guide for students with Lane's Associate of Applied Science in any field except Business or Accounting.

Additional required major coursework includes:	**Credits**
Choice of one: COMM 111 Public Speaking or COMM 218 Interpersonal Communications or COMM 219 Small Group Discussion	4
ECON 200, 201 and 202 Economics	9
BA 211 Financial Accounting	4
BA 213 Managerial Accounting	4
Math 243 Probability and Statistics	4
WR 121 English Composition	4
WR 122 English Composition	4

Additional required courses for transfer to Southern Oregon University with a major in Management:

Humanities – see Academic Advising team for options	9-12
Sciences (including 2 Lab courses) – see Academic Advising team for options	11-12

Associate of Applied Science in Dental Hygiene to Bachelor of Science In Dental Hygiene

This Transfer Guide is for students transferring to Oregon Institute of Technology

NOTE: All students must meet with your major Academic Advising team at Lane to assure information is accurate and current. Major requirements are different from four-year college to four-year college and may change every year. Associate degree requirements can also change from year to year. This is a Guide only and is not guarantee to encompass all major/program requirements - these are obtained through your Lane Academic Advising team.

Lane offers students the option to transfer toward a Bachelor degree after completing an Associate of Applied Science (AAS) degree for specific majors going into specific four-year college majors. This enables students to use a greater number of Career Technical courses toward a Bachelor degree.

This Transfer Guide is for students transferring to Oregon Institute of Technology with a major in Dental Hygiene and an Associate of Applied Science in Dental Hygiene. Student must meet all admission requirements for the four-year college, including but not limited to: WR 121, Math 100 or higher ,and GPA requirement. Students must also complete all coursework listed below. General Education requirements for the specific four-year college can be completed with either a Direct Transfer to that specific university or with an Associate degree for transfer. For more information about these options, please meet with your program/major Academic Advising team.

Students who graduated high school or received a GED in 1997 or thereafter are required to have a second 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 complete college-level second language coursework.

Prerequisites are required for some courses. See course descriptions.

Grading options and GPA requirements for majors may differ from degree requirements. Some programs/majors at specific four-year colleges may have a separate application process. All major courses listed below must be completed to meet lower division major requirements at the four year college. Please meet with the major Academic Advising team for up to date information. For information about the Academic Advising teams, please see the "Transfer" section in this catalog.

Transfer Guide for students with Lane's Associate of Applied Science in Dental Hygiene:

Additional required major coursework includes:	**Credits**
B! 112 Cell Biology for Health Occupations	3
BI 231, 232, 233 Human Anatomy and Physiology	12
BI 234 Microbiology	4
CH 112 Chemistry for Health Occupations	3
FN 225 Nutrition	4
Choice of one: SOC 204, 205 or 206 Sociology, MTH 52 Math for Intro Physical Sciences or higher	3-4
Choice of one: PSY 201, 202 or 203 General Psychology	4
Choice of one: COMM 100 Basic Communications COMM 111 Public Speaking	4

WR 121 English Composition	4
Choice of one:	
WR 123 Composition: Research	
WR 227 Technical Writing	4

Additional required courses for transfer to Oregon Institute of Technologyonly with a major in Dental Hygiene:

HO 100 Medical Terminology	3
Choice of one:	
MTH 105 Contemporary Math	
MTH 111 College Algebra	4-5
Any PSY 100 or higher (in addition to PSY requirement listed above)	3-4
COMM 111 Public Speaking (only needed if not chosen for requirement listed above)	4
WR 122 English Composition	4
Choice of one sequence:	
BI 112 Cell Biology, BI 211 Principles of Biology, CH 112 Chemistry for Health, and CH 221 General Chemistry OR CH 221, 222 and 223 General Chemistry	15-17

Associate of Applied Science in Flight Technology to Bachelor of Applied Science in Technology and Management

This Transfer Guide is for students transferring to Oregon Institute of Technology

NOTE: All students must meet with your major Academic Advising team at Lane to assure information is accurate and current. Major requirements are different from four-year college to four-year college and may change every year. Associate degree requirements can also change from year to year. This is a Guide only and is not guarantee to encompass all major/program requirements - these are obtained through your Lane Academic Advising team.

Lane offers students the option to transfer toward a Bachelor degree after completing an Associate of Applied Science (AAS) degree for specific majors going into specific four-year college majors. This enables students to use a greater number of Career Technical courses toward a Bachelor degree.

This Transfer Guide is for students transferring to Oregon Institute of Technology with a major in Technology and Management and an Associate of Applied Science in Flight Technology. Student must meet all admission requirements for the four-year college, including but not limited to: WR 121, Math 100 or higher ,and GPA requirement. Students must also complete all coursework listed below. General Education requirements for the specific four-year college can be completed with either a Direct Transfer to that specific university or with an Associate degree for transfer.

Students who graduated high school or received a GED in 1997 or thereafter are required to have a second 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 complete college-level second language coursework.

Prerequisites are required for some courses. See course descriptions.

Grading options and GPA requirements for majors may differ from degree requirements. Some programs/majors at specific four-year colleges may have a separate application process. All major courses listed below must be completed to meet lower division major requirements at the four year college. Please meet with the major Academic Advising team for up to date information. For information about the Academic Advising teams, please see the "Transfer" section in this catalog.

Transfer Guide for students with Lane's Associate of Applied Science in Flight Technology:

Additional required major coursework includes:	**Credits**
Math 111 College Algebra	5
ECON 200, 201 and 202 Economics	9
BA 101 Intro to Business	4
BA 206 Management Fundaments	3
BA 211 Financial Accounting	4
BA 213 Managerial Accounting	4
BA 223 Marketing	4
BA 226 Business Law	4
BT 123 MS EXCEL	4
CIS 125D Software Tools: Databases	4
COMM 111 Public Speaking	4
WR 122 Composition: Argument, Style and Research	4
WR 227 Technical Writing	4

Additional required courses for transfer to Oregon Institute of Technologyonly with a major in Technology and Management

Arts and Letters – see Academic Advising team for choices	3
Science with lab – see Academic Advising team for choices	4

Associate of Applied Science in Computer Information Systems-Health Informatics to Bachelor of Science in Information Technology, Health Informatics Option

This Transfer Guide is for students transferring to Oregon Institute of Technology

NOTE: All students must meet with your major Academic Advising team at Lane to assure information is accurate and current. Major requirements are different from four-year college to four-year college and may change every year. Associate degree requirements can also change from year to year. This is a Guide only and is not guarantee to encompass all major/program requirements - these are obtained through your Lane Academic Advising team.

Lane offers students the option to transfer toward a Bachelor degree after completing an Associate of Applied Science (AAS) degree for specific majors going into specific four-year college majors. This enables students to use a greater number of Career Technical courses toward a Bachelor degree.

This Transfer Guide is for students transferring to Oregon Institute of Technology with a major in Information Technology, Health Informatics Option and an Associate of Applied Science in Computer Information Systems-Health Informatics. Student must meet all admission requirements for the four-year college, including but not limited to: WR 121, Math 100 or higher, and GPA requirement. Students must also complete all coursework listed below. General Education requirements for the specific four-year college can be completed with either a Direct Transfer to that specific university or with an Associate degree for transfer. For more information about these options, please meet with your program/major Academic Advising team.

Students who graduated or received a GED in 1997 or thereafter are required to have a second 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 second language.

Prerequisites are required for some courses. See course descriptions.

Grading options and GPA requirements for majors may differ from degree requirements. Some programs/majors at specific four-year colleges may have a separate application process. All major courses listed below must be completed to meet lower division major requirements at the four year college. Please meet with the major Academic Advising team for up to date information.

Transfer Guide for students with Lane's Associate of Applied Science (AAS) in Computer Information Systems-Health Informatics:

Additional required major coursework includes:	Credits
BA 211 Financial Accounting	4
BA 213 Managerial Accounting	4
BA 223 Marketing	4
BI 102I Human Biology-if not taken as part of AAS	4
BT 123 MS Excel for Business	4
COMM 111 Fundamentals of Public Speaking-If not taken as part of AAS	4
COMM 219 Small Group Discussion-if not taken as part of AAS	4
CS 279 Essentials of Network Admin-If not taken as part of AAS	4
CS 133N and CS 233N Programming-if not taken as part of AAS	8
CS 240W Microsoft Server-if not taken as part of AAS	4
CIS 140W Intro to Operating Systems-If not taken as part of AAS	4
Human Relations requirement – see Academic Advising team for options	3-4
ECON 201 and 202 Micro/Macro Economics	6
Math 111 College Algebra	5
WR 121 English Composition	4
WR 227 Technical Writing	4

Additional required courses for transfer to Oregon Institute of Technology nameonly with a major in Information Technology, Health Informatics Option:

Arts and Letters – see major/program Academic Advising team for options	9

Associate of Applied Science in Human Services: Criminal Justice to Bachelor of Science in Criminal Justice

This Transfer Guide is for students transferring to Northwest Christian University - Adult Degree Program

NOTE: All students must meet with your major Academic Advising team at Lane to assure information is accurate and current. Major requirements are different from four-year College to four-year College and may change every year. Associate degree requirements can also change from year to year. This is a Guide only and is not guarantee to encompass all major/program requirements - these are obtained through your Lane Academic Advising team.

Lane offers students the option to transfer toward a Bachelor degree after completing an Associate of Applied Science (AAS) degree for specific majors going into specific four-year college majors. This enables students to use a greater number of Career Technical courses toward a Bachelor degree.

This Transfer Guide is for students transferring to Northwest Christian University Adult Degree Program with a major in Criminal Justice and an Associate of Applied Science in Human Services: Criminal Justice Student must meet all admission requirements for the four-year college, including but not limited to: WR 121, Math 105 or higher ,and GPA requirement. Students must also complete all coursework listed below. General Education requirements for the specific four-year college can be completed with either a Direct Transfer to that specific university or with an Associate degree for transfer. For more information about these options, please meet with your program/major Academic Advising team.

Students who graduated high school or received a GED in 1997 or thereafter are required to have a second 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 complete college-level second language coursework.

Prerequisites are required for some courses. See course descriptions.

Grading options and GPA requirements for majors may differ from degree requirements. Some programs/majors at specific four-year colleges may have a separate application process. All major courses listed below must be completed to meet lower division major requirements at the four year college. Please meet with the major Academic Advising team for up to date information. For information about the Academic Advising teams, please see the "Transfer" section in this catalog.

Transfer Guide for students with Lane's Associate of Applied Science in Human Services: Criminal Justice

Additional required coursework includes:	Credits
COMM 100 Basic Communications	4
COMM 105 Listening and Critical Thinking	4
CJA 100 and CJA 110 Introduction to Criminal Justice 1 and 2	6
CJA 101 Introduction to Criminology	3
CS 120 Concepts of Computing	4
Any Lane CC History course (100 or higher)	4
One ENG course (100 or higher)	4
Choice of one: PHL 201 Ethics PHL 205 Contemporary Moral Issues	4
PS 201 American Government	3
PSY 203 General Psychology	4
MTH 105 or college level math course with prerequisite of MTH 095	4-5
SOC 204 and SOC 205 and SOC 206 Sociology	9
Lab Science – see Academic Advising team for best option	4-5
WR 121 and WR 122 English Composition	8

Areas of Interest

The Areas of Interest allow for a broader exploration into a specific theme with courses crossing multiple disciplines and subjects. In some of the Areas of Interest, multiple Lane departments work together to provide a cohesive learning environment related to a theme or subject matter. In other Areas of Interest, all courses are within one subject or discipline.

The Areas of Interest do not fulfill major requirements for specific four-year colleges and do not fulfill degree requirements. If you are interested in finding out more about transferring to a four-year college in Oregon and/or pursuing a specific major, please meet with the Academic Advising team for that area.

American Indian Experience

The Areas of Interest do not fulfill major requirements for specific four-year colleges and do not fulfill degree requirements. If you are interested in finding out more about transferring to a four-year college in Oregon and/or pursuing a specific major, please meet with the Academic Advising team for that area.

Students who directly benefit from the American Indian Experience Area of Interest include:

- students who wish to study an American Indian language;
- students who prefer a less institutional educational experience that is more in keeping with American Indian culture and tradition; and
- anyone who has a strong interest in American Indian cultures, histories, languages, or literatures.

A notable feature of this area of interest is the opportunity to participate in two 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.

The Learning Communities for this Area of Interest are:

Native Circles CG 101: College Success Native American Style An entry for students into career planning and college success accomplished in an American Indian cultural context.

Reconnecting with Nature: consisting of BI 103G Global Ecology; REL 243 Nature, Religion, and Ecology; and PS 297 OR PS 297_H Environmental Politics. The Learning Community provides exploration of reconnecting with nature from the perspectives of science, spirituality, and political activism.

NOTE: Prerequisites are required for some classes. See course descriptions.

Courses for this Area of Interest include:

American Indian Languages
CW 101, 102 and 103 Chinuk Wawa – first year
CW 201, 202 and 203 Chinuk Wawa – second year
CW 280 Cooperative Education, integrates classroom learning with field experience
ART 203 or ART 203_H Survey of American Indian Art and Architecture: North and Central America
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
BI 103G Global Ecology, examine nature through Indian eyes and western science
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
ES 244 Native American Storytelling
ENG 232 Native American Literature

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 America 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

Exercise and Sport Science

The Areas of Interest do not fulfill major requirements for specific four-year colleges and do not fulfill degree requirements. If you are interested in finding out more about transferring to a four-year college in Oregon and/or pursuing a specific major, please meet with the Academic Advising team for that area.

NOTE: Prerequisites are required for some classes. See course descriptions.

Courses for this Area of Interest include:

BI 112 Cell Biology for Health Occupations and CH 112 Chemistry for Health Occupations
BI 231, 232 and 233 Human Anatomy and Physiology
BI 234 Microbiology
CH 221, CH 222 and CH 223 General Chemistry
COMM 111 Fundamentals of Public Speaking OR COMM 218 Interpersonal Communication
COMM 130 Business and Professional Speech OR COMM 115 Introduction to Intercultural Communication OR
COMM 220 Communication, Gender and Culture
HE 275 Lifetime Health and Fitness
MTH 097 Geometry
MTH 111 College Algebra
MTH 112 Trigonometry
PH 201 General Physics
PHL 201 Ethics
PSY 201 General Psychology
PSY 215 Lifespan Developmental Psychology
WR 121 OR WR 121_H Introduction to Academic Writing
WR 122 OR WR 122_H Composition: Argument, Style and Research OR WR 227 Technical Writing

Health Education

The Areas of Interest do not fulfill major requirements for specific four-year colleges and do not fulfill degree requirements. If you are interested in finding out more about transferring to a four-year college in Oregon and/or pursuing a specific major, please meet with the Academic Advising team for that area.

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 attaining and nurturing all areas of health remains a worldwide priority in the twenty-first century. The Area of Interest for Health Education is designed for students who would like to further their knowledge in multiple health areas.

NOTE: Prerequisites are required for some classes. See course descriptions.

Courses for this Area of Interest include:

HE 275 Lifetime Health and Fitness
HE 252 First Aid
HE 250 Personal Health
HE 222 Consumer Health or HE 240 Holistic Health
HE 152 Drugs Society and Behavior
HE 209 Human Sexuality
HE 125 Workplace Health and Safety
HE 255 Global Health
WR 121 OR WR 121_H Introduction to Academic Writing
WR 122 OR WR 122_H Composition: Argument, Style, and Research OR WR 227 Technical Writing
MTH 105 Introduction to Contemporary Mathematics OR MTH 111 College Algebra* (or any higher Math course)

Peace Studies

The Areas of Interest do not fulfill major requirements for specific four-year colleges and do not fulfill degree requirements. If you are interested in finding out more about transferring to a four-year college in Oregon and/or pursuing a specific major, please meet with the Academic Advising team for that area.

The Area of Interest in Peace Studies is defined in broad terms extending beyond the study of war, recognizing that peace is rooted in social, economic, racial, gender, and environmental justice.

NOTE: Prerequisites are required for some classes. See course descriptions.

Courses for this Area of Interest include:

The following three classes focus on the underlying causes of war and conflict, and on steps toward building peace.

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.

ANTH 103 Cultural Anthropology
COMM 115 Introduction to Intercultural Communication
ENG 222 Literature and Gender
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 OR PS 297_H 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

Pre-Journalism

The Areas of Interest do not fulfill major requirements for specific four-year colleges and do not fulfill degree requirements. If you are interested in finding out more about transferring to a four-year college in Oregon and/or pursuing a specific major, please meet with the Academic Advising team for that area.

NOTE: Prerequisites are required for some classes. See course descriptions.

Courses for this Area of Interest include:

J 216 Newswriting
MTH 105 Introduction to Contemporary Math or MTH 111 College Algebra
WR 121 OR WR 121_H Introduction to Academic Writing
WR 122 OR WR 122_H Composition: Argument, Style and Research
Choice of two in the same subject from this listing:
  ASTR 100 or higher - Astronomy
  BI 100 or higher - Biology
  CH 100 or higher -Chemistry
  ENVS 100 or higher - Environmental Science
  G 100 of higher - Geology
  GS 100 or higher - General Science
  PH 100 or higher - Physics
Two courses at 4 credits each from:
  ECON 100 or higher - Economics
Four courses at 4 credits each from:
  ENG 100 or higher - Literature
Two courses at 4 credits each:
  HST 100 or higher - History

Speech and Communication Studies

The Areas of Interest do not fulfill major requirements for specific four-year colleges and do not fulfill degree requirements. If you are interested in finding out more about transferring to a four-year college in Oregon and/or pursuing a specific major, please meet with the Academic Advising team for that area.

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 Area of Interest provides an opportunity for students to enhance speech and communication skills.

Cooperative Education (Co-op): Students 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. This opportunity enables students to apply the classroom knowledge to a practical work experience. Students may also be able to obtain letters of recommendation from the supervising employer.

NOTE: Prerequisites are required for some classes. See course descriptions.

Courses for this Area of Interest include:

COMM 115 Intercultural Communications OR COMM 220 Communication, Gender and Culture
COMM 100 Basic Communications OR COMM 111 Fundamentals of Public Speaking OR COMM 112 Persuasive Speech
Plus choice of four courses from those listed below.
  COMM 100 Basic Communication
  COMM 105 Listening and Critical Thinking
  COMM 111 Fundamentals of Public Speaking
  COMM 112 Persuasive Speech
  COMM 115 Introduction to Intercultural Communication
  COMM 130 Business and Professional Speech
  COMM 218 Interpersonal Communication
  COMM 219 Small Group Communication
  COMM 220 Communication, Gender and Culture
  COMM 221/222/223 Forensics
  COMM 262 Voice and Articulation

Women's Studies

The Areas of Interest do not fulfill major requirements for specific four-year colleges and do not fulfill degree requirements. If you are interested in finding out more about transferring to a four-year college in Oregon and/or pursuing a specific major, please meet with the Academic Advising team for that area.

Women's Studies is an interdisciplinary field that explores how gender relations structure our lives. Through feminist scholarship and a focus on women, this Area of Interest challenges and transforms existing thought and practices across academic boundaries. The courses contained within this Area of Interest 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.

NOTE: Prerequisites are required for some classes. See course descriptions.

Courses for this Area of Interest include:

COMM 220 Communication, Gender, and Culture
ENG 222 Literature and Gender OR ENG 260 Introduction to Women Writers

ES 250/ECON 250 Class, Race, and Gender in the U.S. Economy
FA 264 Women Make Movies
HST 266 U.S. Women's History
MTH 105 Intro to Contemporary Mathematics
SOC 108A Selected Topics in Women's Studies, Women's Bodies Women's Selves
SOC 207 Women and Work
SOC 218 Sociology of Gender
WR 121 OR WR 121_H Composition: Introduction to Academic Writing
WR 122 OR WR 122_H Composition: Argument, Style, and Research
WS 101 Introduction to Women's Studies

Academic Advising Online

Free online resources are available for ALL majors! moodle On lanecc.edu, choose the Moodle button. Select Academic Advising, find your specific major, and follow the instructions to Login or select Login as a Guest.

Course Descriptions

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: MTH095 or higher or test, BA 101 and WR 121 or WR 122 or WR 123. Sophomore standing recommended. Students will gain an understanding of the basic terms, the accounting model, and in the 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. 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 206 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.

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 165 and BT 163. 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 221 Budgeting for Managers ....4 credits
Prerequisite: BT 165 or BA 211. Recommend BT 123 MS EXCEL for Business. Course topics include: budget creation, parts of a budget, gathering information for budgets, creating a product budget, planning and budgeting a project, presenting the budget, budget tracking, HR budgets, small business budgets, and human behavior in relationship to budgets. 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, BT 206 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 273 Federal Income Tax 2..4 credits
Pre-requisites: BT 272, BT 206, BT 170 and BA 211. The second course in a two part series that looks in depth at Federal and Oregon income taxation. Completing BT 272 and BT 273 meets the Board of Tax Service Examiners educational requirements to take the Oregon Tax Preparer's Licensing Examination.

BT 276 Automated Accounting Systems..............................4 credits
Prerequisites: BA 211, BT 123 (formerly BT 114), and BT 163 (formerly BT 113) or BT 175. The purpose of this course is to provide students with a basic understanding of accounting information systems, including the differences between double-entry bookkeeping and database accounting. They will learn to use information technologies to understand how an accounting information system gathers and transforms data into useful decision-making information. The course will primarily teach students about business processes, accounting internal controls, and capturing accounting data and turning it into useful output. Students will learn automated accounting data management techniques, documentation, and accounting internal controls. Students will create an accounting procedures manual which documents and flowcharts the accounting system. May be offered online. Note: BT 276 was formerly numbered BT 250. 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: BT 272, BT 223, BT 163 and BT 221. This course continues to develop skills needed to become a full-cycle bookkeeper. Five primary areas of focus are accounting error correction, adjusting entries, payroll, depreciation and working papers. 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.

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 ....3-12 credits
Completion of BT 206 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.

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. Only offered online.

BT 030 Computer ABCs ....3 credits
Strongly recommend ability to type. This is a beginning computer skills course 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 prepare for entry-level computer courses. Focus is on student success.

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: BT 108, BT 120, and WR 121. Recommend the ability to accurately type at least 35 words per minute. Visit *lanecc.edu/business* for Business Department keyboarding guidelines or contact the instructor for details. This 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 work on developing soft skills and technical skills through projects, practice, and discussions. Keyboarding, formatting, and grammar skills will also be reinforced. 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* for Business Department keyboarding guidelines or contact the instructor for details. Information and document management in a paperless office; using Adobe Acrobat Professional in the paperless office to create and edit PDF documents, forms and portfolios. Research and planning of paperless office systems, electronic record keeping, ethical, legal, and technical issues of electronic data, disaster recovery, and data security. May be offered online.

BT 271 Administrative Office Professional Advanced Projects..4 credits
Prerequisites: BT 228. Recommend the ability to accurately type at least 45 words per minute. Visit *lanecc.edu/business* for Business Department keyboarding guidelines or contact the instructor for details. Students participate in dynamic business simulations while 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.

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-Honors ....4 credits
This honors class delves deeper into course topics and requires 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 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. This course also meets Lane Degree requirements that are fulfilled by the same course number without the _H.

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...4 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 ....4 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...4 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 231and 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 about course content or other questions, visit *boli.state.or.us* and lanecc.edu/apprenticeship or call 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. Note: This class may be taken to satisfy the ET 121 Shop Practices requirement in the Electronic Technology Program.

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. May be offered online.

APR 105 Residential Wiring....................4 credits
Pre-requisite: Complete MTH020 or equivalent course with a grade of C- or better or passed a placement test through the Testing Office. 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
Prerequisite of MTH 060 and 065 or MTH 070 within the past two years, or place at MTH 060 or higher on placement test through the Testing Office. 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 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 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 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. May be offered online.

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. May be offered online.

APR 142 Devices, Testing Equipment and Code....................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. May be offered online.

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. May be offered online.

APR 144 Communications..........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. May be offered online.

APR 150 The Millwright and Shop Safety..........5 credits
Prerequisite: Minimum Reading Score of 68. Within the past four terms, completed MTH020 or equivalent with a grade of "C-" or better or Test. 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
Prerequisite: Minimum Reading Score of 68. Within the past four terms, completed MTH020 or equivalent with a grade of "C-" or better or Test. 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
Prerequisite: Minimum Reading Score of 68. Within the past four terms, completed MTH020 or equivalent with a grade of "C-" or better or Test. 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-registered 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 185 Shielded Metal Arc Welding 1..........1-4 credits
Prerequisite: Minimum reading score of 68 OR RD 080 OR RD 087 And EL115 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.

APR 186 Wire Drive Welding 1..........1-4 credits
Prerequisite: Minimum reading score of 68 OR RD 080 OR RD 087 And EL115 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.

APR 187 Fundamentals of Metallurgy..........1-3 credits
Prerequisite: Minimum reading score of 68 OR RD 080 OR RD 087 And EL115 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.

APR 189 Shop Practices..........2 credits
Prerequisite: Minimum reading score of 68 OR RD 080 OR RD 087 And EL115 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.

APR 190 Electrical Theory 1..1-4 credits
Prerequisite: Minimum reading score of 68 OR RD 080 OR RD 087 And EL115 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 generators are used to measure electrical signals and troubleshoot basic electrical circuits.

APR 191 Electrical Theory 2..1-4 credits
Prerequisite: ET 129, EET 129, or APR 190. 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.

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. May be offered online.

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 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 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 240 Audio and Intrusion Systmes ....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 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. May be offered online.

APR 241 Fire Alarm Systems and Nurse Call........................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. May be offered online.

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. May be offered online.

APR 250 Millwright: Industrial Print Reading, Schematics, and Estimating..5 credits
Prerequisite: Minimum Reading Score of 68. Within the past four terms, completed MTH020 or equivalent with a grade of "C-" or better or Test. 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 conveyer 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
Prerequisite: Minimum Reading Score of 68. Within the past four terms, completed MTH020 or equivalent with a grade of "C-" or better or Test. 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
Prerequisite: Minimum Reading Score of 68. Within the past four terms, completed MTH020 or equivalent with a grade of "C-" or better or Test. 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
Prerequisite: Minimum Reading Score of 68. Within the past four terms, completed MTH020 or equivalent with a grade of "C-" or better or Test. 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.

APR 285 Motors..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.

APR 286 Motors 2...1-4 credits
Prerequisite: ET 229 or APR 285. This course is a continuation of 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.

APR 290 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.

APR 291 Programmable Controllers 2................................1-4 credits
Prerequisite: ET234 or APR 290. 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.

APR 292 Programmable Controllers 3...................................4 credits
Prerequisite: ET 235 or APR 291. 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.

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 203_H Survey of American Indian Art and Architecture: North and Central America-Honors.................4 credits
This honors class delves deeper into course topics and requires 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 information. 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. This course also meets Lane Degree requirements that are fullfilled by the same course number without the _H.

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 form 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 102 Art Survival Skills..3 credits
Prerequisite: ART 115, or ART 116, or ART 131 or ART 250. A specialized, in-depth study of the skills needed to survive as an artist in today's society.

ART 109 The Artist Experience ....1 credits
Introduction to a variety of art professions, including studio art, teaching, graphic design and multimedia. Topics will include guest speakers and successful studio practices such as personal responsibility, self-motivation, self-management, organizational skills and college transfer programs.

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 theories 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-Honors..................3 credits
This honors class delves deeper into course topics and requires 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 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. This course also meets Lane Degree requirements that are fullfilled by the same course number without the _H.

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
In this course, students will learn to construct a variety of basic folded and stitched book structures using pop-up techniques. Curriculum will focus on design process development, conceptual development and typographic layout. Students will learn the history of the book form throughout the world, the history of movable books, and the history of artist's books and fine press books. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total credits.

ART 120 Intermediate Artist Books and Pop-up ....4 credits
Prerequisite: ART118 An artist book is an intentional work of art created in the form of a book. Students will create basic folded and stitched books and learn pop-up techniques. Topics: design process, conceptual development, typographic layout; history of movable, fine press and artist 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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total credits.

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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 6 total credits.

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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total credits.

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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total credits.

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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total credits.

ART 240 Natural Science Drawing...3 credits
Natural Science Drawing introduces students to creating representational renderings through close observation of natural subjects including botanical, animal, insect, and aquatic life. Emphasis is on accuracy, form and structure. Suitable for art, science, and general study students. Repeatable 3 times.

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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total credits.

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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total credits.

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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total credits.

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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total credits.

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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total credits.

ART 255 Alchemy of Ceramics: Materiality, Chemistry, and Kiln Firing .... 3 credits
Prerequisite: ART 250. This class explores the basics of ceramic chemistry, materials and kiln firing practices. This information leads to experimentation, testing for various firing ranges, color, and textural possibilities which enhances student material literacy, personal direction and goals in their studio work.

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; feltmaking, papermaking, and fabric printing; resist techniques of surface design; and chemical and mechanical techniques to manipulate cloth. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total credits.

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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total credits.

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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total credits.

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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total credits.

ART 273 Intermediate Intaglio Print .... 3 credits
Prerequisite: ART 270 A course on multiple plate and other color intaglio techniques. This course explores traditional as well as contemporary issues in intaglio printmaking. The class is an in-depth study for students wanting to continue with Intaglio printmaking. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total credits.

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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total credits.

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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total credits.

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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total credits.

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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total credits.

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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total credits.

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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total credits.

ART 280A Co-op Ed: Art and Applied Design .... 3-12 credits
This course offers career-related work experience in community businesses and organizations. Students integrate theory and practice gleaned in the classroom with practical experience in the professional world. Contact the art co-op coordinator before registering. Course content and expected learning proficiencies vary term to term. Course may be repeated.

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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total credits.

ART 284 Painting: Intermediate .... 3 credits
Prerequisite: ART 281 and ART 131. An intermediate-level course in oil painting. Course 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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total credits.

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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total credits.

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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total credits.

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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total credits.

ART 294 Watercolor: Introduction .... 3 credits
Prerequisite: Art 131, Drawing experience, or instructor's consent. 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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total credits.

ART 295 Watercolor: Intermediate .... 3 credits
Prerequisite: Art 294, previous college watercolor class, or intructor consent. 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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total credits.

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. You must be accepted into the Auto Collision and Refinishing program to take these classes.

AB 132 Beginning Auto Paint .... 1-12 credits
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
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
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. You must be accepted into the Automotive program to take these classes.

AM 143 Brakes .... 1-8 credits
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
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
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
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
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
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
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
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.

Aviation Maintenance

Also see Flight

For information, contact the Lane Aviation Academy, Airport Road, 541.463.4195. You must be accepted into the Aviation Maintenance program to take these classes.

AV 192 General 101 ....1-6 credits
Prerequisite: Minimum reading score of 68, OR RD 080, OR RD 087, and EL115 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 RD 087 And EL115 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: Minimum reading score of 68 OR RD 080 OR RD 087 And EL115 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 RD 087, and EL115 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 075 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 075. 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 075, and MTH 085. 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 075, and MTH 085. 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
Basic cellular and organismal processes. Emphasis on how marine organisms demonstrate processes and systems that involve photosynthesis, respiration, cell division, genetics, cell structure and protein synthesis. Includes influences of physical, chemical, and geological oceanography on ocean life.

BI 101F General Biology-Survey of Biology..........................4 credits
Survey course providing an overview of the molecular, genetic 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 plant biology. 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.

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.

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 through distance learning. May be offered online.

BI 101_H General Biology: Honors...4 credits
This honors class delves deeper into course topics and requires 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 information. BI 101 topics: atoms, molecules, cellular processes, genetics, protein synthesis, photosynthesis, respiration. This course also meets Lane Degree requirements that are fullfilled by the same course number without the _H.

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 102C General Biology-Marine Biology..............................4 credits
Overview of the structure and function of tissues, organs, and organ systems in marine invertebrate phyla and selected marine vertebrates like fish and sharks. Examines how organisms maintain homeostasis in various conditions. Activities: lab, computer activities, lecture, group projects and discussion.

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 102_H General Biology: Genetics and Society-Honors ....4 credits
This honors class delves deeper into course topics and requires 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 information. 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. This course also meets Lane Degree requirements that are fullfilled by the same course number without the _H.

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¬ís 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 Biology: 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 and Sustainability...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 112 Cell Biology for Health Occupations ....4 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 ....3-12 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. Survey of comparative vertebrate anatomy, vertebrate evolution, cladistics, and ecology. Skills: dissection, digital documentation, cladogram construction, and mathematical models in biology. Designed for Life Science Majors. College-level writing and math skills strongly encouraged.

Botany-See Biology

Broadcasting-See Media Arts

Business

Also see Accounting, Administrative Support, 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
A survey course covering basic concepts and language of business, including the functional areas of business; management, marketing, accounting and finance, and human resource management; and the legal environment. Students will participate in a team project to conduct an 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: BT 108 and WR 121. Introduction to communication theory with emphasis in writing direct, indirect, and persuasive letters, and a formal researched report. Introduction to appropriate formatting of business documents using proper grammar, formatting, tone, and effectiveness. Business-related presentations that inform, recommend, and train will be given. 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 throughly 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 247 Nonprofit and Governmental Accounting................4 credits
Prerequisites: : BT 123, BT 272, and BA 211. This course is a survey course that develops the conceptual foundation underlying the financial management of governmental and nonprofit entities. Topics include fund accounting, regulatory and compliance issues, budgetary and expenditure controls, basics of auditing, internal controls, and accounting for different funds. May be offered online.

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, BA 223, and BT 221. 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 278 Leadership & Team Dynamics...................................4 credits
This course focuses on developing the leadership potential of emerging leaders, and it also enhances students' understanding of teams, thereby increasing their effectiveness as team members. Leadership philosophies, ethical issues, articulating visions, and ways to empower others will be explored through readings, activities, and discussions. 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.

BA 281 Personal Finance..4 credits
As a comprehensive introduction to personal finance, the course covers budgets, real estate, consumer credit, credit institutions, insurance, investing, stocks, bonds, retirement planning, and mutual funds. Analytical tools are applied to optimize personal decision making. May be offered online.

BT 181 Customer Service...4 credits
Learn basic concepts of high-quality customer service and how to identify and achieve customer expectations and provide consistent service through 1) effective communication, 2) problem-solving, and 3) teamwork, resulting in and ensuring a profitable business.

BT 206 Co-op Ed: Business Seminar......................................2 credits
Prerequisite: BA 101 and BT 120. 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 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.

PPPM 281 Introduction to the Nonprofit Sector..................4 credits
This course provides a multidisciplinary overview and survey of the nonprofit sector. We will look at the development, evolution, and future of the nonprofit sector; compare and contrast nonprofits with the private and public sector; and explore issues specific to nonprofit success and development.

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.

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.

CH 112 Chemistry for Health Occupations...........................4 credits
Prerequisite: MTH 052 or above with grade of 'C-' or better or pass placement test. Corequisite: BI 112. Introduction to atoms, bonding, acid/base chemistry and chemical reactions relevant to biological systems. Topics include metabolic pathways and function and structure of carbohydrates, lipids, proteins and nucleic acids. Lecture/Recitation. With BI 112, the prerequisite for Anatomy and Physiology BI 231.

CH 114 Introduction to Forensic Chemistry..........................4 credits
Prerequisite: MTH 020 or above with grade of "C-" or better or pass placement test. 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
Prerequisite: MTH 065 or above with grade of "C-" or better or pass placement test. Designed to prepare students with minimal chemistry experience to take CH221. Topics include measurement, significant figures, dimensional analysis, density, nomenclature, atoms, stoichiometry, gases, solutions and heat; includes problem solving methods and calculations. Lecture/Recitation.

CH 221 General Chemistry 1...6 credits
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 with online lecture for 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...6 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...6 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...6 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...............................3-12 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.

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.

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.

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.

Communication

For information, contact the Language, Literature and Communication Division, Center Bldg./Rm. 457, 541.463.5419.

COMM 100 Basic Communications .... 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.

COMM 105 Listening and Critical Thinking .... 4 credits
This course is designed to develop understanding and appreciation for listening as a vital element in the communication process. We expect students to improve proficiency through practice in a variety of settings and through exercises with diverse speakers and subjects.

COMM 111 Fundamentals of Public Speaking .... 4 credits
This course is designed to help students learn to express their ideas to an audience with confidence and clarity. The aim of this course is to teach students to speak in a public setting by preparing presentations on a number of diverse topics for use on a variety of occasions. This course provides students with opportunities to learn how to analyze an audience and tailor their messages to that audience. In addition, students will learn to become critical listeners by analyzing and critiquing other students' presentations.

COMM 112 Persuasive Speech .... 4 credits
This course is designed help students understand the persuasive communication process so that they can prepare effective persuasive presentations and evaluate persuasive messages. Students will develop their proficiency through speech preparation and presentation, written analyses, and argumentation practice.

COMM 115 Introduction to Intercultural Communication .... 4 credits
This course addresses how work, study or travel influences intercultural interactions. A variety of topics will illustrate how differing values, beliefs, attitudes, and social systems effect verbal and nonverbal human communication behaviors. Students will develop awareness, understanding, and sensitivity to cultural diversity of co-cultures as well as different nations. May be offered online.

COMM 130 Business and Professional Communication ...... 4 credits
Business and Professional Communication is designed to increase student understanding and implementation of effective communication behaviors and skills. Throughout the term students will learn to recognize, understand, and perform communication in settings common to business and the professions. Instruction includes interpersonal communication, small group communication, interviewing, proposal presentation and more. In addition, attention will be given to presentational aids, both traditional and computer generated. This class may be offered online.

COMM 218 Interpersonal Communication .... 4 credits
This course is designed to increase a student's understanding and use of effective interpersonal communication behaviors in a variety of face-to-face settings. The goal is to better 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 verbal and nonverbal communication, self-concept, effective listening, emotions, intimacy, gender/cultura, l differences and relationship development. This class may be offered online.

COMM 219 Small Group Communication .... 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 both in and out of the workplace. Students will consider the unique challenges found only in a group communication setting. Students will have the opportunity to participate in a variety of small groups activities as well as an on-going group that presents a solution to a problem.

COMM 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 feminine and masculine communication styles. We will explore how communication, gender, and culture interact to influence perceptions and expectations of gender roles. May be offered online.

COMM 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, speech pathology majors, and English Language Learners, as well as others who want to improve the sound of their speech.

COMM 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.

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) 463-5221.
SKD-Contact Academic Learning Skills, Center Bldg./Rm. 218, 541.463.5439.

CIS 100 Computing Careers Exploration .... 2 credits
This course introduces the field of computer technology through the introduction of fundamental technical concepts. Students will understand how hardware, software and networks are organized, how these systems are used by organizations, and the roles information technology professionals have in creating and maintaining these systems. This course provides an orientation for students who are considering programs of study and careers in computer information technology. 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, professional development, and ethical issues that confront computer 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 125D Software Tools 1: Databases .... 4 credits
Prerequisite: Basic computer literacy skills. Fundamental relational database concepts, vocabulary, functionality and skills are covered. Students will apply those skills in a series of hands-on case problems where they design, implement, test, debug and document relational database solutions to case problems. 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 125M Software Tools: Mobile Development ....4 credits
This course provides students with no programming background with an introduction to mobile application development. Students will use a visual, drag and drop tool to build applications for the Android and will be introduced to fundamental programming concepts and skills in the process. May be offered online.

CIS 125VW Introduction to Virtual Worlds...........................4 credits
This course is an introduction to virtual worlds. 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. May be offered online.

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. Note: CIS 125W was formerly numbered CIS 135W. 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.

CIS 126 Game Design: Principles&Pract. ....4 credits
In this course, students will learn and apply game design principles in order to turn their ideas into interesting and engaging games. Students will develop and refine these ideas through prototyping and testing throughout the course. No prior programming background is required for this course.

CIS 135G Software Tools 2: Game Development.................4 credits
Prerequisite: CIS 125G and one of CS 161J (formerly CS 161), CS 161C+ (formerly CS 133G), CS 133JS, or CS 133N (formerly CS 133C#) or instructor's permission. 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 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 140U Introduction to Unix/Linux....................................4 credits
Introduces the Unix/Linux operating system. Topics: Fundamental Unix/Linux command set, editors, shell scripts, file system security, and installation of the operating system. Provides experience using the graphical user interface as well as the command line to perform end-user operations and basic system administration.

CIS 140W Introduction to Operating Systems:
Windows Clients ....4 credits
Prerequisite: Digital Literacy. Introduction to operating system and components using Windows. This course provides theory and hands-on experience using and configuring Windows. Covered topics include: user interfaces, accounts, processes and scheduling memory, file systems and file permissions, multimedia codecs, networking, and basic security. Note: CIS 140W was formerly numbered CIS 140. A student who has taken this class under the previous number may not take it again under this new number and receive duplicate credit.

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 and file management. This course provides students with little computer experience with the concepts and skills necessary to create static web pages using the newest version of Hyper Text Markup Language and Cascading Style Sheets. Through hands-on practice students will master the concepts, tools and skills needed to construct web pages and post pages on the internet. 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 a 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 125D, and CS 179, or instructor consent. Prepares students to support end-users in a variety of organizational settings. Topics: End-user support functions, techniques for developing/delivery training, help-desk operations, troubleshooting/problem solving, and end-user interaction. Taught in a lab environment.

CIS 244 Systems Analysis ....4 credits
Prerequisite: CIS 125D and CS133N or CS 161C+ or CS 133P or instructor consent. This course provides foundational principles in systems analysis and development using an object oriented approach. Topics include: requirements gathering, iterative development, documenting work-flows, domain modeling with Unified Modeling Language (UML), database, agile techniques and use cases. Current issues of communication and connectedness via end of chapter case studies will take you through many aspects of system analysis. Students will use graphical and/or drawing software for modeling diagrams.

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 GIS 151 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 provides a wide range of topics in the Computer Information Technology field: including the basics of computer hardware and software, operating systems, word processing, spreadsheets, database management, network and internet communications, security, and the impact of information technology on individuals and society. NOTE: For the Associate of Arts Oregon Transfer degree (AAOT), CS 120 is now counted as an open elective. Offered as hybrid and online.

CS 133JS Beg. Programming: JavaScript.............................4 credits
Prerequisite: MTH 060 or higher and CIS 195 Web Authoring I (formerly CS 195) 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
Prerequisite: MTH 060 or higher. This is the first in a sequence of 3 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 development environment. Note: CS 133N was formerly numbered CS 133C#. 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.

CS 133P Beginning Programming: Python ....4 credits
Pre-requisite: MTH060 or higher. This course provides students with

little or no programming experience with an introduction to fundamental programming concepts and skills as well as the syntax and semantics of the Python programming language. May be offered online.

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 125G or CS 160 or MTH 095 or higher or instructor consent. This course is an introduction to software design, development and testing. It covers basic syntax and semantics of C++, data types, and algorithm and program design. Development tools and object-oriented programming are introduced. Note: CS 161C+ was formerly numbered CS 133G. 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.

CS 161J Computer Science 1..........4 credits
Prerequisite: CS 160 or CS161C+ (formerly CS 133G) or MTH 095 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 Java, problem solving, algorithm and program design, data types, and program control structures. Development tools and object-oriented programming concepts are introduced. Note: CS 161J was formerly numbered CS 161. A student who has taken this class under the previous number may not take it again under this new number and receive duplicate credit.

CS 162C+ Computer Science 2..........4 credits
Prerequisite: CS 161C+ (formerly CS133G) or instructor consent. This course is a continuation of Beginning C++ programming. 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 a graphics library. Note: CS 162C+ was formerly numbered CS 233G. 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.

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. Note: CS 162J was formerly numbered CS 162. A student who has taken this class under the previous number may not take it again under this new number and receive duplicate credit.

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 206 Co-op Ed: Computer Information Technology Seminar..........2 credits
Prequisite: CIS 100. Students will increase their understanding of industry expectations as well as 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, their professional careers.

CS 233N Intermediate Programming C#..........4 credits
Prerequisites: CS 133N (formerly CS133C#). This is the second in a sequence of 3 courses that teaches students to develop desktop applications in the .NET environment. The course introduces intermediate level programming concepts and skills and C# syntax and allows students to develop object oriented applications. Note: CS 233N was formerly numbered CS 233C#. 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.

CS 233P Intermediate Programming: Python..........4 credits
Prerequisite: CS133P. The course introduces intermediate level programming concepts and skills and Python syntax. Topics will include: list processing, interacting with the file system, file processing, regular expressions, and reporting.

CS 234G Advanced C++ Programming..........4 credits
Prerequisite: CS 260 or instructor consent. This is the final course in the C++ programming sequence. Students will learn to use a variety of advanced features of C++, including bitwise operators, file input/output, exceptions, templates, and STL containers. These skills will be used to design and code a challenging final project.

CS 234N Advanced Programming: C#..........4 credits
Prerequisite: CS233C#This is the third in a sequence of 3 courses that teaches students to develop desktop applications in the .NET environment. The course introduces advanced level programming concepts and skills and C# syntax. It allows students to develop more sophisticated object oriented, data driven desktop applications.

CS 235AM Intermediate Mobile Application Development: Android..........4 credits
Prerequisite: CS 233N (formerly CS 233 C#) or CS 162J (formerly CS 162) or CS 162C+ (formerly CS 233G). This course introduces students to applying object oriented programming to mobile application development and the Android System Devlopment Kit. Cross-platform mobile app developpment will be done using the Mono framework and the MonoDevelop IDE. May be offered online.

CS 235IM Int Mobile App Dev: IOS..........4 credits
Prerequisites: CS 233N or CS 162J or CS 162C+. This course introduces students to the application of object oriented programming to mobile application development for devices running IOS. May be offered online.

CS 240U Advanced Unix/Linux: Server Management..........4 credits
Prerequisite: CIS 140U and CS 179, or instructor consent. Covers network administration of Unix/Linux. Topics: Operating system installation, configuration, troubleshooting, and network server configuration (for example: DHCP, DNS, NFS, Samba, Apache, MySQL, Web 2.0, and security). The course has a hands-on focus.

CS 240W Advanced Windows: Server Management..........4 credits
Prerequisite: CIS140W (formerly CIS 140) or CS 179 or CIS 227N or instructor consent. This course covers advanced Windows Server operating system and networking concepts. Topics covered include: installation, configuration, virtualization, Active Directory, scripts, DNS, file systems, group policy, networking, web servers, and DHCP. Note: CS 240W was formerly numbered CS 279W. 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.

CS 246 System Design..........4 credits
Prerequisites: CS 234G or CS295N (formerly CS 295A). In this course, students will learn to design and plan software systems. Topics covered will include requirements gathering, design evaluation and documentation, and object-oriented program design. By the end of the course, students will have produced a design for a significant software project in a team environment. Note: CS 246 was formerly numbered CS 235G. A student who has taken this class under the previous number may not take it again under this new number and receive duplicate credit.

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. May be offered online.

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 assembly language. Topics include CPU design, logic gates and boolean algebra, data representations, assembly language semantics and syntax. Lab work includes performing arithmetic, input/output, and table lookups in assembly.

CS 275 Database Systems and Modeling ....4 credits
Prerequisites: CIS 125D and CS133N or CS 161C+ or CS 133P 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 usage and development.

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 279 Essentials of Network Administration ....4 credits
Prerequisite: CS 179. Provides students with an in-depth understanding of key networking concepts and tools enabling them to be successful in the more advanced networking courses and as networking professionals. Example topics: Network design/mapping, TCP/IP protocols, IP addressing, port numbers, routing protocols, and protocol analysis software. May be offered online.

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 280GD Co-op Ed: Computer Simulation &
Game Development ....3-12 credits
This internship course offers a work experience that integrates theory and practice in the field of computer 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 280HI 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 280IS Co-op Ed: Computer Information Systems ......3-12 credits
This internship course offers a work experience that integrates theory and practice in the field of computer information systems. 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 284 Network Security Fundamentals ....4 credits
Pre-requisite: CS 179 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, 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 240W and CS 284, or instructor consent. Corequisite: CS 240U. 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 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. Covers network monitoring and management for network administrators. Topics: Analyzing network traffic, monitoring servers and internetworking devices, troubleshooting network problems, and tools/skills for maintaining acceptable network performance. Functions as a capstone course for the network degree.

CS 289 Cisco Router and Switch Administration..................4 credits
Prerequisite: CS 279 or instructor consent. Covers configuration of Cisco routers and switches. Deals with modern networking processes and protocols used by internetworking devices with particular emphasis on routers. Wide area networking technologies are also covered. Course has a hands-on focus.

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. Note: CS 295N was formerly numbered CS 295A. A student who has taken this class under the previous number may not take it again under this new number and receive duplicate credit.

CS 295P Web Development 1: PHP..4 credits
Prerequisite: CS 133JS or instructor consent. This course provides students who have working knowledge of HTML 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. Note: CS 296N was formerly numbered CS 296A. A student who has taken this class under the previous number may not take it again under this new number and receive duplicate credit.

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) PHP 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 297 Programming Capstone..5 credits
Prerequisite: CS 246 or instructor consent. This is the final course for both the Computer Programming and Computer Simulation and Game Development programs. This course ties together the topics

covered in the first and second year courses. It emphasizes practical application and problem solving and is project oriented. Students will work in teams to create a working, non-trivial software application using current technologies and methodologies.. Note: CS 297 was formerly numbered CIS 297 and CS 297P. A student who has taken this class under a previous number may not take it again under this new number and receive duplicate credit.

HI 101 Introduction to Health Care and Public Health in the US..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. May be offered online.

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. May be offered online.

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 develop skills at customizing an EHR to meet the information needs and practices of various users in clinical settings. May be offered online.

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. May be offered online.

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. May be offered online.

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.

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...4 credits
Prerequisite: Recommend familiarity with Windows operating system and the ability to accurately type 30 words per minute. As an introduction to word processing, students apply MS WORD to create business documents. Focus is on reviewing Windows; editing and formatting documents; applying document refinements to enhance written communication; working efficiently using mail merge and macros; working with shared documents; and managing documents. May be offered online.

BT 122 MS POWERPOINT 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* 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.

BT 123 MS EXCEL for Business...4 credits
Prerequisite: CS120 or BT120 or CIS101 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* 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 150 Business Web Pages with WordPress......................3 credits
Introduction to web concepts, HTML5, CSS3, and incorporating graphics into a business web page with an emphasis on creating and maintaining business web page maintenances, including business web concepts, use of HTML5, CSS3, and incorporating business graphics into a business web page. Focus will be on project completion of a major web site update 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 and BT165. 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. 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* for Business Department keyboarding guidelines or contact the instructor for details. A review and extension of MS WORD for Business; application of advanced formatting features in the development of professional business documents. Using workgroup collaboration and file sharing features; formatting lengthy business documents; and methods for visually enhancing business documents, including business and educational reports. May be offered online.

BT 223 MS EXCEL for Business-Expert.................................4 credits
Prerequisites: BT 123 and MTH 095 or higher, or instructor consent. Recommend the ability to type 30 words per minute. Visit *lanecc.edu/business* 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
Prerequisites: BT 123, BT 144, BT 220. Recommend the ability to accurately type at least 40 words per minute. Visit *lanecc.edu/business* for Business Department keyboarding guidelines or contact the instructor for details. Advanced software applications course to review, apply, and expand skills. Students need a strong background in MS Word and MS Excel and familiarity with PowerPoint and Access. New skills include practice with other applications and current Web technologies. Emphasis on problem solving and creativity. Continued development of keyboarding skills.

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 RD 087 And EL115 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 RD 087 And EL115 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: CST110. 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 RD 087 And EL115 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: CST110. 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.

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 185
AM 280 Co-op Ed: Automotive....See page 186
ANTH 280 Co-op Ed: Anthropology....See page 177
ART 280A Co-op Ed: Art and Applied Design....See page 184
ART 280GD Co-op Ed: Graphic Design....See page 216
AV 280 Co-op Ed: Aviation Maintenance....See page 186
BA 280 Co-op Ed: Business Management....See page 188
BA 280AA Co-op Ed: Administrative Office....See page 176
BA 280AC Co-op Ed: Accounting....See page 176
BI 280 Co-op Ed: Biology....See page 187
BT 206 Co-op Ed: Business Seminar....See page 188
CA 280 Co-op Ed: Culinary Arts, Second Year....See page 197
CG 280HS Co-op Ed: Human Services....See page 221
CH 280 Co-op Ed: Physics-Chemistry....See page 189
CJA 280 Co-op Ed: Criminal Justice....See page 197
COMM 280 Co-op Ed: Speech....See page 190

COOP 206 Co-op Ed: Internship Seminar....1-2 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.

COOP 280 Co-op Ed....1-2 credits
See department for topics.

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.

COOP 280SV Service Learning: Food for All....1-3 credits
Work with community partners addressing hunger and the need for food by people in Lane County. 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. (This course may be part of the "What the World Eats" learning community.)

COOP 280_H Co-op Ed: Service Learning-Honors....3-12 credits
This honors class delves deeper into course topics and requires 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 information. Prerequisite: Instructor approval. Gain experience with community partners in addressing real community needs. Practice critical thinking, citizenship and civic responsibility, explore career options, and network with professionals while earning college credit. In this Honors section students will actively engage, investigate and reflect on topics leading to enhanced knowledge and skills.

CS 206 Co-op Ed: Computer Information Technology Seminar....See page 192
CS 280CN Co-op Ed: Computer Network Operations....See page 193
CS 280GD Co-op Ed: Computer Simulation & Game Development....See page 193
CS 280HI Coop Ed: Health Informatics....See page 193
CS 280IS Co-op Ed: Computer Information Systems....See page 193
CS 280PR Co-op Ed: Programming....See page 193
CST 280 Co-op Ed: Construction....See page 195
DA 206 Co-op Ed: Dental Assisting Seminar....See page 200
DA 280 Co-op Ed: Dental Assisting....See page 200
DH 280 Co-op Ed: Dental Hygiene....See page 201
DS 280 Co-op Ed: Diesel....See page 202
ED 280 Co-op Ed: Education....See page 205
ED 280EC Co-op Ed: Early Childhood Education....See page 203
ED 280SE Co-op Ed: September Experience....See page 205
EMT 280P1 Co-op Ed: EMT Internship Part 1....See page 207
EMT 280P2 Co-op Ed: EMT Internship Part 2....See page 207
ENGR 280 Co-op Ed: Engineering....See page 209
ENGR 280D Co-op Ed: Drafting....See page 203
ENGR 280E Co-op Ed: Electronic Technology....See page 205

ENGR 280M Co-op Ed: Manufacturing Technology......See page 229
ENGR 280W Co-op Ed: Welding......See page 212
ES 280 Co-op Ed: Ethnic Studies......See page 211
FL 280IW Co-op Ed: International Work Experience......See page 224
FR 280 Co-op Ed: French......See page 224
FT 280 Co-op Ed: Flight Tech......See page 214
G 280 Co-op Ed: Geology......See page 204
G 280ES Co-op Ed: Environmental Science......See page 204
GEOG 280 Co-op Ed: Geography......See page 215
GIS 280 Co-op Ed: Geographic Information Science......See page 215
GWE 180 Co-op Ed: General Work Experience......See page 241
GWE 280 Co-op Ed: General Work Experience......See page 241
HE 280 Co-op Ed: Health Occupations......See page 216
HIM 206 Co-op Ed: Employment in Healthcare: HIM Seminar......See page 217
HIM 280 Co-op Ed: Health Information Management......See page 217
HIT 280 Co-op Ed: Health Records......See page 218
HON 280_H Co-op Ed: International Work Experience-Honors......See page220
This course also meets Lane Degree requirements that are fulfilled by the same course number without the _H.

HRTM 280 Co-op Ed: Hospitality Management......See page 221
HST 280 Co-op Ed: History......See page 219
IDS 280S Co-op Ed: Sustainability Coordinator......See page 254
J 280 Co-op Ed: Journalism......See page 223
JPN 280 Co-op Ed: Japanese......See page 224
MA 206 Co-op Ed: Medical Office Assistant Seminar......See page 235
MA 280 Co-op Ed: Medical Office Assistant......See page 235
MDP 280 Co-op Ed: Multimedia......See page 234
MTH 280 Co-op Ed: Mathematics......See page 233
MUS 280 Co-op Ed: Music......See page 237
NRG 206A Co-op Ed: Energy Management Seminar 1......See page 209
NRG 206B Co-op Ed: Energy Management Seminar 2......See page 209
NRG 280 Co-op Ed: Energy Management......See page 209
NRS 280 Co-op Ed: Nursing......See page 240
OST 280 Co-op Ed: Occupational Skills......See page 241
PE 280 Co-op Ed: Physical Education......See page 211
PE 280A Co-op Ed: Athletics......See page 211
PE 280AR Co-op Ed: Aerobics......See page 211
PE 280AT Co-op Ed: Athletic Training......See page 211
PE 280C Co-op Ed: Coaching......See page 211
PE 280F Co-op Ed: Fitness......See page 211
PE 280M Co-op Ed: Fitness Management......See page 212
PE 280R Co-op Ed: Recreation......See page 212
PE 280RT Co-op Ed: Corrective Fitness......See page 212
PE 280W Co-op Ed: Wellness......See page 212
PS 280 Co-op Ed: Political Science......See page 249
PS 280LW Co-op Ed: Pre Law......See page 249
PSY 280 Co-op Ed: Psychology......See page 249
RT 280A Co-op Ed: Respiratory Care Clinical Practice 1......See page 251
RT 280B Co-op Ed: Respiratory Care Clinical Practice 2......See page 251
RT 280C Co-op Ed: Respiratory Care Clinical Practice 3......See page 251
RT 280D Co-op Ed:Respiratory Care Clinical Practice 4......See page 251
RT 280R Co-op Ed: Respiratory Care......See page 251
RT 280X Co-op Ed: Respiratory Care Advanced Placement Clinical Practice......See page 251
SLD 280 Co-op Ed: ASLCC......See page 252
SOC 280 Co-op Ed: Sociology......See page 252
SPAN 280 Co-op Ed: Spanish......See page 225
TA 280 Co-op Ed: Performing Arts......See page 253
WATR 206A Coop Ed: Water Conservation Seminar 1......See page 254
WATR 206B Co-op Ed: Water Conservation Seminar 2......See page 254
WLD 180 Co-op Ed: Welding......See page 212
WLD 206 Co-opo Ed: Welding Seminar......See page 213
WR 280 Co-op Ed: English/Writing......See page 257
WST 280 Co-op Ed: Watershed Science Technician......See page 255

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 placed on the interpretation of analytical test results as the 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 correction officers, 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
Open to the Public. 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
Prerequisite: CPC/CAHM Majors only. Course may be repeated for credit for up to eight credits. 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¬ís agricultural organic and sustainable values.

CA 121 Culinary Adventuring: The Composition of Cake ....2 credits
Prerequisite: CPC/CAHM Majors only. 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
Prerequisite: CPC/CAHM Majors only. 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
Open to the public 21 years or older. This course introduces students to the process of wine making 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 Fundamentals ....2 credits
Prerequisite/Corequisite: CA 175. This course will give hospitality students a hands-on experience in the professional kitchen; including the fundamentals of food safety, sanitation, mastering tools and equipment, basic cooking techniques, and basic skills that are found in kitchen operations.

CA 160 Introduction to Cooking Theories 1.......................0-6 credits
Prerequisite/Corequisite: CA 175. Culinary Arts majors only. 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 162 Introduction to Cooking Theories 2.......................0-7 credits
Prerequisite: CA 160This 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 through meat fabrication

CA 163 Introduction to Cooking Theories 3.......................0-7 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
Co-or prerequisite: CA 175, CPC/CAHM majors only. 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¬í 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
Open to the Public. 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. May be offered online.

CA 176 Concepts of Taste and Flavor...................................3 credits
Prerequisite: CA 163, CA 175, CA 200, HRTM 105, HRTM 106. This class will introduce students to the vocabulary and concepts of what we term "flavor". Students will explore how these concepts interplay between food items and between food and beverages.

CA 200 Menu Management..3 credits
Prerequisite: CAHM majors only, 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 280 Co-op Ed: Culinary Arts, Second Year ....1-12 credits
Prerequisite: CA majors only. 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 ....0-7 credits
Prerequisite: CA 163, CA175, CA 200, HRTM 105, HRTM 106. Contemporary and advanced food preparation emphasizing the cold kitchen, garde manger. Students practice and serve dishes to the public in the student-run dining room, rotating through restaurant and kitchen positions, developing, planning and serving a garde manger-themed dinner menu.

CA 293 Advanced Cooking Theories 2 ....0-7 credits
Prerequisite: CA 292. Contemporary and advanced food preparation, emphasizing international cuisine. Students practice and serve traditional dishes from many countries to the public in the student-run dining room, rotating through restaurant and kitchen positions, developing, planning and serving an International-themed dinner menu.

CA 294 Advanced Cooking Theories 3 ....0-7 credits
Prerequisite: CA 293. Contemporary and advanced food preparation, emphasizing American regional cuisine. Students practice and serve traditional dishes from many American regional cultures to the public in the student-run dining room, rotating through restaurant and kitchen positions, developing, planning and serving an American regional-themed dinner menu.

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, 541.463.3108.

PE-Contact the Health and PE Division, Bldg. 5/Rm. 205, 541.463.5545.

D 152 Dance Basics ....2 credits
This course introduces basic techniques of dance for students who have never taken a technique class. The course 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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

D 153 Pilates Workout..............................2 credits
This course explores the Pilates method of body conditioning, a unique system of stretching and strengthening exercises. Students gain strength, flexibility, and balance through specific exercises, which emphasize uniting the body and mind. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits. Class will focus on either mat work or barre. See schedule notes.

D 160 Dance Composition ....3 credits
Prerequisite: D257. Composition techniques are learned and applied, with specific emphasis on form, quality, spatial relationships, and rhythmic manipulation. This is a required course for dance majors, and meets the Arts and Letters requirement for the AAOT degree. Students in this course may present their work in the annual production of “The Works” Student Dance Concert. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits. Offered winter term only.

D 161 Strength, Stretch and Tone: Gyro..............................2 credits
Gyrokinesis (Gyro) 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. Gyro uses smooth, connected, fluid postures to unite movement and breath. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

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, focusing on interpretation and charcter study, are learned throughout the term. Previous dance experience is helpful but not required. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits

D 171 Contact Improvisation..............................2 credits
Fundamentals of Contact Improvisation will be introduced and explored, including weight sharing, release technique, counterbalance, rolling point, falling, inversions, and lifts. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

D 172 Dancing the Fluid Body..............................2 credits
This course explores the concepts of Continuum Movement through specific breath and sound techniques, wave motion, and spiral movements which vary 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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

D 173 African Dance..............................2 credits
This class is an introduction to African dance. Students learn contemporary and traditional dances while exploring rhythm and movement within the cultural context of community. Relevant history is explored through assigned readings, video, and class discussions. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

D 175 Tap Dance Beginning..............................2 credits
This course covers the basics of rhythm, including tempo, beat, meter, accent, syncopation, and musical structures of beginning Tap. Improvisational skills are developed as students integrate their understanding of tap with a sense of musicality and performance. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

D 176 Fluid Yoga..............................2 credits
This course explores traditional yoga postures and practices with emphasis on breath and fluidity. Students develop a yoga practice that encourages creativity and expression. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

D 177 Modern Dance 1..............................2 credits
For dancers with little or no previous dance experience, this beginning level class 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 twice before advancing to Modern 2. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

D 178 Modern Dance 2..............................2 credits
This intermediate level class accommodates the pre-major and non-major student. Students further develop their awareness of modern dance technique and vocabulary. Training continues with movements that incorporate: 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 for three terms. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

D 179 Modern Dance 3..............................2 credits
This intermediate-advanced level class accommodates the dance-major and non-major student. Modern dance technique is presented with more complex movement phrases that incorporate three-dimensional use of the spine and torso, joint articulation and mobility, core strength, expressivity and spatial awareness. Students at this level are encouraged to explore their artistry and personal expressivity. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

D 183 Body/Mind Stretch and Relaxation ....2 credits
This course explores the body-mind connection through stretch and relaxation exercises and techniques. Students learn to increase body awareness and integrate the body and the mind in movement. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

D 185 Ballet 1 ....2 credits
For dancers with little or no previous dance experience, this beginning level course accommodates the pre-major and non-major student. This course presents the fundamental principles and vocabulary of classical ballet with focus on correct body alignment and musicality. Given realistic progressive development, students repeat this level twice before advancing to Ballet 2. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

D 186 Ballet 2 ....2 credits
This intermediate level course accommodates the pre-major and non-major student. This course develops the student’s alignment, coordination and musicality. Students are introduced to 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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total 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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

D 188 Jazz Dance 1..............................2 credits
This beginning level class accommodates the pre-major and non-major student. 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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

D 189 Jazz Dance 2..............................2 credits
This beginning-intermediate level class accommodates the pre-major and non-major student. 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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

D 194 Hip Hop 2 .... 2 credits
This intermediate level course explores Hip-Hop dance vocabulary and style. 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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total 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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

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. A required course for dance majors,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
Introduction to body systems, muscular, skeleton, organ, fluid, nervous, fascial and endocrine system. Re-patterning movement is introduced through various somatic disciplines. 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 in a fun inviting atmosphere. Students work in solos, duets, and groups, to develop sponteneity, confidence, and awareness, as they experience dance as a creative process. This course is a pre-requisite for D160 and D260. May be used to meet Arts and Letters requirements for AAOT degree. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits. Offered fall term only.

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, spatial relationship, clarity and form. Students learn to articulate personal responses to choreographic projects, while exploring individual creativity. May be used to meet Arts and Letters requirement for the AAOT degree. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits. Offered spring 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 concert performances. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

ED 225 Multiple Intelligences-Motion .... 3 credits
Using the latest findings in brain research, this dynamic course invites 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, participants define, explore, and create best practices in education for every child. No prior dance experience necesary. Arts and Letters. Offered spring term only.

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. 30/Rm. 234, 541.463.5730. 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 and comparison of other states, roles of the dental health team, and an introduction to the dental office environment are also included in this course. Taught online.

DA 107 Dental Health Education 1 .... 1 credits
Prerequisite: 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. May be offered online.

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 and case presentation tools. Includes alginate impressions, patient motivation, coronal polishing, fluoride application, nutritional counseling, the recognition of normal and abnormal oral conditions and community service programs.

DA 115 Dental Anatomy .... 3 credits
Prerequisite: 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
Prerequisite: 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 dentistry, such as amalgam and composite, die construction, retainers, bleaching trays, denture relines, temporary crowns & restorations, sealants and custom trays.

DA 194 Dental Office Procedures .... 3 credits
Prerequisite: Currently enrolled in the Dental Assisting Program. Principles of appointment planning, telephone techniques, case presentation, communications & marketing, and management of client accounts using Eaglesoft dental software. Teaching is done both online and 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, charting, & operative dentistry. Microbiology, disease transmission, asepsis, infection control, and legalities of regulatory agencies are included.

DA 196 Chairside Procedures 2 .... 7 credits
Prerequisite: 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 in 4-handed dentistry are also included.

DA 206 Co-op Ed: Dental Assisting Seminar ....1 credits
Must be enrolled in the Dental Assisting program. This class must be co-enrolled with DA 280. Students will increase their understanding of industry expectations while developing job search tools and skills and learn/practice presenting themselves to employers in a competent and professional manner in preparation for a professional career in dental assisting.

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 ....3 credits
Must be enrolled in the Dental Assisting Program. Continuation of DA 210. Provides basis for occlusal film projections, digital radiology, 3D imaging and extra-oral radiographs. Students apply all skills learned in Fall term, and progress to exposure of dental images 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. Students can develop skills & explore career options.

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, use their preferred learning styles, study for tests, improve memory, read and study from textbooks, manage time effectively, use the library, and make visual study tools. 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..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: DH120A and DH120B 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 Patient and Dental Emergencies......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 critcal 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 Lab ....5 credits
Clinical lab required for DH 220A.

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 Lab ....6 credits
Clinical Lab required for DH 221A.

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 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. Current science, theories and implementation 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. Foundational skill development in 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 employments 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 nonsurgical procedures and maintenance. Periodontal and restorative considerations, occlusion and TMD, periodontal surgeries, gingival curettage, implants, periodontal emergencies. Review of evidence based periodontal research and newer treatment modalities to include lasers. May be offered online.

DH 275 Restorative Dentistry 1..3 credits
Introduction to restorative techniques with emphasis on posterior tooth anatomy, placement of amalgam restorations, rubber dam isolation, matrix and wedge placement. Includes etiology of the decay process, cavity classification, cavity preparation, properties of amalgam and maintenance of proper occlusal relationships with restorative treatment. May be offered online.

DH 276 Restorative Dentistry 2..3 credits
Prerequisites: Admission in Dental Hygiene Program or Instructor Permission. Continuation of study of restorative techniques with emphasis on anterior tooth anatomy. Introduction of composite restorations in restorative dentistry for anterior and posterior teeth. Bonding materials, bases and liners will be introduced. Bur identification for restorative prep and finishing. Lecture, lab and clinical practice in expanded functions as allowed by the Oregon Board of Dentistry Restorative Endorsement. May be offered online with onsite lab.

DH 277 Restorative Dentistry 3..1 credits
Continuation of study of restorative techniques. Clinical and laboratory practice in restorative expanded duties as allowed by the Oregon Board of Dentistry for dental hygiene restorative practice. This will include amalgam and composite placement in typodont and clinical patients, restorative treatment planning and case presentation, restorative care and anesthesia for children. The student will become increasingly skilled in typodont and patient treatment. May be offered online with onsite lab.

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, use their preferred learning styles, study for tests, improve memory, read and study from textbooks, manage time effectively, use the library, and make visual study tools. 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. You must be accepted into the Diesel program to take these classes.

DS 154 Heavy Duty Braking Systems...............................1-12 credits
This course covers technical information and shop projects necessary for the practical application and understanding of theories and principles used in the 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
This course covers technical information and shop projects necessary for the practical application and understanding of theories and principles used in the operation, diagnosis, testing, failure analysis, and repair of mobile and stationary hydraulic systems. This includes the following; technical information and shop projects to apply and understand theories, principles and applications: introduction to hydraulics; system components; reservoirs, seals, filters, pumps, accumulators, oil coolers, pressure, flow and directional control valves, linear and rotary actuators, connectors, conductors, circuits, ANSI and ISO symbols and schematics, manually controlled hydraulic systems, pilot controlled hydraulic systems and electronically controlled hydraulic systems.

DS 158 Heavy Equipment Chassis and Power Trains ......1-12 credits
This course covers technical information and shop projects necessary for the practical application and understanding of theories and principles used in the 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
This course covers technical information and shop projects necessary for the practical application and understanding of theories and principles used in the 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
This course covers technical information and shop projects necessary for the practical application and understanding of theories and principles used in the operation, diagnosing, testing, and repair of diesel electrical systems. This includes: Electrical fundamentals as they pertain to diesel electrical systems; operation and testing of batteries and battery banks; operation and testing of alternators and charging systems; operation and testing of starters and starting systems; heavy duty electrical circuits and schematics; maintenance and repair of OEM and aftermarket electrical connectors and conductors; safety; operation and testing of electronic control systems and components; operation and testing of air conditioning systems as they are used on highway trucks, off highway trucks, agriculture equipment and construction equipment.

DS 259 Diesel Engines and Engine Overhaul.................... 1-12 credits
This course covers technical information and shop projects necessary for the practical application and understanding of theories and principles used in the operation, diagnosing, testing, and repair of diesel engines and engine overhaul. This includes: development of the diesel engine; diesel engine operating principles; combustion chamber design and function; the cylinder block; cylinder head and components; crankshaft, main bearings, vibration damper and flywheel; pistons, rings, and connecting rod assembly; camshaft and timing gear train; lubrication systems and lube oil; cooling systems and coolant; air intake systems; exhaust systems and emissions; hand tools used in the disassembly, reassembly and overhead adjustment, precision measuring tools and shop equipment; engine disassembly, reassembly, diagnosis; and troubleshooting diesel engines as they apply to "on" and "off" the highway diesel equipment.

DS 260 Lift Truck/Material Handling Equipment .... 1-12 credits
Prerequisite: Instructor Consent. This course covers technical information and shop projects necessary for the practical application and understanding of theories and principles used in the operation, diagnosing, testing, and repair of lift trucks and other material handling equipment. This includes the mast/upright, transmission, diesel engine, gas engine, propane engine and electric powered lift trucks, electric controller, 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 as well as to 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 142 and DRF 167. 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 RD 087 And EL115 OR Prior College. An introductory course in drafting graphic concepts for the drafting program and transition to the CAD courses. Course includes visualization measuring and sketching techniques, geometry of objects, and introduction to drafting standards.

DRF 167 CAD 1.. 4 credits
Prerequisite:Minimum reading score of 68 OR RD 080 OR RD 087 And EL115 OR Prior College. 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 075 and MTH 085 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 075, MTH 085, 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, construction documents, and processes used in commercial structures.

DRF 211 Sustainable Building Systems .... 4 credits
Prerequisite: WR 121. Fundamental principles of mechanical systems used in high-performance or green buildings, including energy, water, lighting, heating, ventilation, and air conditioning.

DRF 220 Building Information Modeling................................ 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 105 Health and Safety Issues in Early Childhood Education ....2 credits
Introduction to health and safety practices in early childhood education environments for children 6 weeks through 6 years. Students will learn to guide children's understanding of healthy and safety through developmentally appropriate practices. Recognizing/Reporting Child Abuse/Neglect required to pass.

ECE 110 Observing Young Children's Behavior ....1 credits
Study of objective techniques for observing and recording children's behavior. Beginning connections between observing, curriculum planning and assessment will be introduced. Observations of preschool age children are assigned as homework. Some focus on linkages between observing and curriculum planning. Class is primarily a lecture format that includes on-site observations. The focus is on preschool age children 3-5 years old. May be offered online.

ECE 120 Introduction to Early Childhood..............................2 credits
Course is designed to give an overview of 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 Guidance of Young Children....................................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 Practicum 1-LCC Lab School ....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. Students will study types and benefits of play as the basis of curriculum planning.

ECE 170 Infants and Toddlers Development.........................4 credits
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
Prerequisites: ECE 160. Study of best practices and a Reggio-inspired approach to Early Childhood Education. There is an emphasis on the design of the environment as the third teacher. The outdoor environment and a study of science and math methods and materials is included. This is an advanced course in Early Childhood Curriculum focusing on group care of young children. The prerequisite course is Exploring Early Childhood Curriculum: ECE 160. If this course 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 family, 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 Practicum 2-LCC Lab School ....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
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 curriculum; and f) resources and references.

ECE 253 Diversity Issues in Early Childhood Education ....3 credits
Prerequisite: WR 115 or WR 121, or WR 122. 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 programs. Overall program planning, organizational structure, budgeting, personnel management and legal aspects of child care, including Oregon state licensing rules. May be offered online.

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
Study of children's physical, social-emotional, and intellectual development. 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. May be offered online.

HDFS 227 Children Under Stress ....3 credits
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 sociocultural environments.

HDFS 228 Young Children with Special Needs ....3 credits
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.

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 and their environmental consequences. Topics include terrestrial ecology, biodiversity, forests, agriculture, rangelands, soils, groundwater, geologic hazards, mineral and energy resources, mining, waste management, recycling, environmental justice, 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: weather, weather hazards, climate, biomes, population, urbanization, air pollution, ozone depletion, ice/glacier loss, desertification, and global climate change. Presents sustainable choices. Take ENVS 181-183 in any order.

ENVS 183 Aquatic Environment ....4 credits
Students learn about freshwater and marine systems including their biology, geology, chemistry, circulation, climate and interactions with humans. Topics include aquatic biodiversity, streams, water pollution, ocean currents, fisheries, sustaining aquatic systems 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 Earths Dynamic Interior ....4 credits
Introduces the geology of Earth's structure, formation of rocks, how plate interactions cause earthquakes and create volcanoes and mountains. Labs include problem solving, minerals, rocks, volcanology, seismology, resources, and simple geologic maps and structures. Take either G 101 or G 102 first.

G 102 Earths Dynamic Surface...4 credits
Introduces the geology of Earth's surface and related hazards. Topics include erosion, deposition, weathering, soils, landslides, streams, groundwater, oceans, coasts, glaciers, deserts, climate, problem solving, topographic maps and remote sensing of landforms. Take either G101 or G102 first.

G 103 Evolving Earth...4 credits
Surveys geologic history of Earth and life. Topics include sedimentary environments, strata, plant and animal evolution, and how plate tectonic actions built continents. Labs include problem solving, fossils, relative ages of rock layers, geologic maps and cross-sections. Advise G101 or G102 first.

G 146 Rocks and Minerals ....4 credits
Examines rocks, minerals, economic geology, resources, mining, environmental impacts, energy alternatives, resource conservation and problem solving. Labs explore how rocks, minerals and gems form, are classified, their symmetry, textures and structures, and how to decipher 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, causes and effects of geologic hazards, analyze the energy of earthquakes, volcanic eruptions, and meteorite impacts, the forces of landslides floods, 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
G 201, 202, 203,—for science majors (take G201 or G202 before G203). Global plate tectonic influences on Earth's internal structure, mountains, deformation, magnetism, earthquakes, volcanism, minerals and rocks. Labs explore rocks and minerals, geologic maps, structures and resources.

G 202 Earth's Surface Systems ....4 credits
Surface geologic processes. Includes landforms and hazardous geological systems, rocks and minerals, geologic and topographic maps, remote sensing, erosion, deposition, weathering, soils, mass wasting, streams, groundwater, coasts, glaciers, deserts, climate and plate tectonics. Take this course 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. Geology 203 explores how plate motions, climate change and other factors influence the distribution and evolution of continents and organisms through geologic time. Labs examine fossils, age relationship, stratigraphy and analysis of complex regions using geologic maps and cross-sections.

G 280 Co-op Ed: Geology...3-12 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 Science ....3-12 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 include geologic processes, time, hazards, atmosphere, and cosmology from asteroids, planets, stars, to galaxies and beyond. Labs include basic scientific techniques, minerals, rocks, maps, and space imagery. Take GS 104, GS 105, GS 106 in any order.

GS 142 Earth Science: Earth Revealed ....3-4 credits
Introduces geology and integrates topics of Earth's history, plate tectonics, minerals, rocks, volcanism, earthquake activity, weathering, rivers, groundwater, glaciers, and coasts. Optional 4th credit requires labs exercises completed at home. 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, marine resources and pollution. Optional 4th credit requires lab exercises. May be offered as a telecourse.

WST 230 Watersheds and Hydrology....................................4 credits
Prerequisite: ENVS 181 or ENVS 183 with grade of "C-" or better. 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.

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. May be offered online.

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 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 history 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 background, philosophy, methods, and curriculum that develop a culturally responsive educational setting. This course will enable students to meet the needs of all students and families from a variety of diverse backgrounds. Areas of study include equity, diversity, and social justice as related to various aspects and to all levels of education.

ED 280 Co-op Ed: Education ... 3-12 credits
Work as an intern 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 work with small groups. Course may be repeated to work with different age groups in different schools.

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.

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 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 credit toward a degree. Cooperative Education is a required class for the Electronic Technology Program.

ET 121 Shop Practices ... 2 credits
Prerequisite: Minimum reading score of 68 OR RD 080 OR RD 087 And EL115 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 RD 087 And EL115 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. This first term defines basic electrical units and laws of electrical theory as they apply to DC series, parallel, and combination circuits. AC waveforms and AC circuit components are introduced. Digital multimeters, oscilloscopes and function generators are used to measure electrical signals and troubleshoot basic 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. 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. This 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 powerful computer analysis tools such as PSPICE, students are able to simulate and analyze circuits. 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 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. 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 236 Programmable Controllers 3......................................4 credits
Prerequisite: ET 235 and 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 239 Microprocessor Applications..................................1-4 credits
Prerequisite: Second year standing. This is a study of microcontrollers and their programming. These small circuits are self contained computers, often found on a single chip and commonly embedded in consumer and industrial products where they control various processes. They are used by electronic engineers as well as by experimenters designing gadgets. A programming language such as BASIC or C is introduced. The course explores how microcontrollers can accept inputs, measure external quantities, perform math functions, light displays, control motors, produce sound and measure and react to 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 Radio Communications...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
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, use their preferred learning styles, study for tests, improve memory, read and study from textbooks, manage time effectively, use the library, and make visual study tools. Course work requires college-level reading skills.

EMT 151 Emergency Medical Technician Basic Part 1..........5 credits
This course is part 1 of a 2 part course in Emergency Medical Technician. Successful completion of this two part course qualifies candidate to sit for state and national practical and written licensing exams administered locally. This course provides instruction in a variety of medical and trauma related emergencies. This is a demanding course designed for those who will respond to 911 emergencies in an ambulance or fire rescue and will function within an emergency medical services system, often as a volunteer with a local rural fire department. 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 required for application into the second year of the AAS degree in Paramedicine.

EMT 152 Emergency Medical Technician Basic Part 2..........5 credits
Corequisite: EMT 151. This course is part 2 of a 2 part course in Emergency Medical Technician. Successful completion of this two part course qualifies candidate to sit for state and national practical and written licensing exams administered locally. This course provides instruction in a variety of medical and trauma related emergencies. This is a demanding course designed for those who will respond to 911 emergencies in an ambulance or fire rescue and will function within an emergency medical services system, often as a volunteer with a local rural fire department. 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 required for application into the second year of the AAS degree in Paramedicine.

EMT 169 Emergency Medical Technology Rescue................4 credits
Prerequisite: EMT 152 or Oregon EMT License. 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. This course is required for application into the second year of the AAS degree in Paramedicine.

EMT 170 Emergency Response Communication/ Documentation .... 2 credits
Prerequisite: EMT 152 or Oregon EMT License This course provides information on the following topics: proper documentation, including patient care report forms and charting, general communication systems both written and verbal, radio systems, the Hospital Emergency Ambulance Radio system, radio codes, verbal transfer of care reports and radio reports to hospital emergency departments. This course is required for application into the second year of the AAS degree in Paramedicine.

EMT 171 Emergency Response Patient Transportation .... 2 credits
Prerequisite: EMT 152 or Oregon EMT license. This is an emergency vehicle operations course (EVOC) that provides students with driving skills required to operate an ambulance. Additional topics include: ambulance operation, laws pertaining to emergency ambulance driving and parking; vehicle maintenance and safety check; emergency response driving and route planning. This course is required for application into the second year of the AAS degree in Paramedicine.

EMT 175 Introduction to Emergency Services .... 4 credits
Explores the role and responsibilities of a paramedic, to include, different kinds of emergency services systems, applicable Oregon law, relationship with governmental regulatory agencies, exposure risk to infectious disease and exposure to critical incident stress. This course is required for application into the second year of the AAS degree in Paramedicine.

EMT 196 Crisis Intervention .... 3 credits
Designed to provide students pursuing a degree in Paramedicine with the knowledge to effectively manage psychological emergencies. Included in this course: physiology of stress and managing acute stress reactions, suicide, rape and sexual assault, child abuse, death and dying, drug and alcohol emergencies, burnout of the emergency worker and coping with job-related stress This course is required for application into the second year of the AAS degree in Paramedicine.

EMT 270 Emergency Medical Technology-Paramedic Part 1 .... 10 credits
Prerequisite: Program acceptance through application process. Corequisite: EMT 271. This course begins with patient assessment, airway and ventilation, pathophysiology of shock and general pharmacology. The second half of the course focuses on assessment and treatment of respiratory and cardiovascular emergencies.

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 necessary for completion of program objectives. 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. Corequisite: EMT 273. Part 2 of a 3 part series of lecture and lab with a focus on burns, soft tissue injuries, orthopedic injuries, head injuries, environmental injuries; obstetrics, neonatology, gynecological emergencies, pediatrics, diabetes, nervous system disorders, abdominal problems, renal failure and anaphylaxis. Program graduates complete requirements for national paramedic certification and state licensure, which includes examinations administered by the National Registry of Emergency Medical Technicians.

EMT 273 Emergency Medical Technology-Paramedic Clinical Part 2 .... 3 credits
Prerequisite: 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. 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. Corequisite: EMT 275. Part 3 of a 3 part series of lecture and lab with focus on toxicological emergencies, psychiatric emergencies, patients with special needs, patients with chronic illness, and emergencies involving weapons of mass destruction.

EMT 275 Emergency Medical Technology-Paramedic Clinical Part 3 .... 4 credits
Prerequisites: 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. 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. First term of a two-term course where paramedic students continue their learning by interning on an advance life support ambulance that responds to 911 emergencies. Students are paired with highly skilled local paramedics for their learning experience.

EMT 280P2 Co-op Ed: EMT Internship Part 2 .... 5 credits
Prerequisite: EMT 280P1, EMT 275. Second term of a two-term course. A continuation of EMT 280. Designed for students to complete required hours on an advance life support ambulance that responds to 911 emergencies. Students will manage a variety of ambulance calls while being shadowed by their paramedic preceptor. The student completes the course when all requirements have been met, including consistent competency in providing paramedic-level care within the 911 EMS system.

Energy Management

For information, contact the Science Division, Bldg. 16/Rm. 253, 541.463.3997.

NRG 101 Introduction to Energy Management .... 3 credits
This course defines the need for energy management as an integral part of society at all levels. The course presents the various employment opportunities available to energy management students through lectures, video and guest speakers. Technical information includes basic energy accounting and analysis protocol.

NRG 102 Blueprint Reading: Residential and Commercial .... 3 credits
Reading commercial architectural plans, examining their characteristics for evaluating and maintaining 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
Introduces the relationship between sustainability and buildings. Addresses the "Three Es of Sustainability" in the built environment by exploring the ENVIRONMENTAL influences of buildings, ECONOMIC benefits of conservation and efficiency and social EQUALITY. The course explores the Leadership in Energy and Environmental (LEED) Design framework.

NRG 111 Residential/Light Commercial Energy Analysis .... 3 credits
Prerequisite: PH 101 or Department Approval. 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 or Department Approval. Emphasis is on the analysis of energy use in commercial buildings. Topics include utility bill analysis, identifying energy consumption sources and related 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 or Department Approval. 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 or Department Approval. Students investigate the physical principles of HVAC systems. Topics include related HVAC system equations, refrigeration, psychrometrics, central forced air

furnaces, ground couple heat pumps, 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 or Department Approval. Students learn to identify commercial HVAC system types and the energy impact of each type. Calculations will be used to determine HVAC system efficiency. 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 or Department Approval. 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 or Department Approval. Students learn analysus of energy systems with a focus on efficiencies of energy conversion devices. Students will gain proficiency in some common units and formulas required to work with energy and power and analyze the energy or cost savings associated with efficiency strategies.

NRG 131 Lighting Fundamentals...3 credits
Prerequisite: PH 101 and PH 102 or Department Approval. 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 or Department Approval. 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 Department Approval. 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, cost-benefit analysis, effects of tax credits, inflation, escalation, 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 renewable 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 Photovoltaic System Design and Installation 1 ....4 credits
Prerequisite: PH 101 and PH 102 and MTH 095 or Math Placement Test. Corequisite: NRG 157 or Department Approval. 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 Photovotaic 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 or Department Approval. 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 or Department Approval. 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 Photovoltaics System Design and Installation 3 ....4 credits
Prerequisites: NRG155 and NRG156. Students will understand PV performance characteristics, electrical code, electrical equipment with an emphasis on battery storage systems, and skills necessary for the design and installation of photovoltaic energy systems. Students will install a system and take the NABCEP 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
Students learn to conduct a greenhouse gas inventory focusing on reduced GHG emissions. This process includes reviewing existing protocols, setting inventory boundaries, collecting data for direct and indirect emissions sources, calculations, 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¬ís performance.

NRG 181 Direct Digital Controls 1 ....4 credits
Hands-on training using control system management software. Configuring alarms and user access, trend control points, generating reports, adjusting control loops, experiencing a functioning building control system. Dashboard and metering systems, with an emphasis on future smart grid functionality.

NRG 182 Commercial HVAC Controls ....4 credits
Controls perspective on commercial HVAC systems, ranging from older pneumatically controlled systems to newer digitally controlled systems. Comparing the benefits of different mechanical room systems and control systems. Retrofit opportunities and other energy conservation measures.

NRG 183 Controls Retuning and Troubleshooting................4 credits
Prerequisite: NRG 181 Diagnostics and troubleshooting building control systems. Use occupant comfort complaints or other alerts, determine causes, use trend logging and visual inspection of equipment, and determine problem solutions; set point changes, modify control loops, return control loops or schedule maintenance.

NRG 184 Direct Digital Controls 2 ....4 credits
Prerequisite: NRG181 Hands-on training modules and electronics used to implement building automation; control loop logic, schematics, and sequences of operation with applications for desired system behaviors. Controls design process, implementation, and commissioning using industry software and equipment.

NRG 185 Lighting Controls..4 credits
Students will gain functional knowledge of a variety of commercial building lighting control systems ranging from simple manual on/off switching to complex automatically-controlled systems to newer digitally controlled systems. Students will identify and describe lighting systems/types/technology, including control systems with emphasis on comparing the benefits of one system versus another. Students will modify control system parameters based on original design or new control sequences.

NRG 206A Co-op Ed: Energy Management Seminar 1.........1 credits
Prerequisite: Instructor approval. 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 or instructor consent. This course is a continuation of NRG 206A and further develops students’¬íunderstanding 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.

WATR 150 Water Resource Economics.................................4 credits
Prerequisite: MTH 095 Applies economic and financial fundamentals to water issues such as, efficient allocation; utility rate structures; benefit-cost analysis; water pricing; supply and demand; policy relationships; and scarcity links to pricing. This is an introduction to performing analysis of water projects.

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 four 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 four 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 four 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, 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 103 Post-Racial America: Challenges/Opportunities......4 credits
This course is designed to examine the current state of race relations and discourse on race in America in a “Post Civil Rights Era” environment. The course will examine the societal issues facing African Americans, Latino/Latinas, Native Americans and other underrepresented minority populations.

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 attitiudes 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 121 African American Leadership: History, Philosophy, and Practice.......4 credits
African American Leadership: History, Philosophy, and Practice is a course designed to examine the history, philosophy, key leadership strategies and practices of African American leaders. This course focuses on Leadership Theory; Foundations of AA Leadership and AA Leadership in Practice.

ES 212 Chicano/Latino Studies: 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 Studies: 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 Studies: Down From the Pyramids, Up From Slavery.......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 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.

ES 223 African American Studies: A Luta Continua: The Struggle Continues.......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 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.

ES 231 Asian American Studies: 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 233 Asian American Studies: 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 Studies: 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 243 Native American Studies: 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 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. 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 120 Research Methods in Exercise Science ....2 credits
Prerequisite: EXMS 194S, EXMS 194X and EXMS 196 Corequisites: EXMS 194T and EXMS 295 This class focuses on the scientific process that shapes the field of exercise science. We will use quantitative data to address questions in exercise epidemiology.,ÄÇStudents will gain experience working with primary research, evaluating information quality, and developing evidence-based conclusions.

EXMS 135 Applied Exercise Physiology 1.............................3 credits
This course introduces EXMS Program students to the neuromuscular, cardiovascular and respiratory responses to acute exercise, and long-term physical training. Exercise metabolism and hormonal control will also be discussed.

EXMS 194A Fitness Assessment ....3 credits
Prerequisite: EXMS 120 and EXMS 194P. Students learn field and laboratory fitness assessment procedures. Students collect data according to standardize protocols, interpret results and identify appropriate exercise progressions for clients. Students learn to identify effects of common pharmacological agents, disease status, and other conditions on exercise response and capacity.

EXMS 194F Professional Activity: Fitness Assessment and Exercise Prescription-Field Techniques ....3 credits
This course introduces EXMS students to fundamental principles and techniques of resistance training and programs/systems of conditioning. Includes program and exercise development for warm up, cool down, strength, power, speed, balance, core training, and flexibility. Provides students with foundational skills for exercise science careers.

EXMS 194L Fitness Assessment and Exercise Prescription-Laboratory Techniques......................................3 credits
Prerequisite: EXMS135 and EXMS194F. This course furthers the concepts introduced in 194F and introduces students to advanced assessment procedures performed in a laboratory setting. Students administer assessments (VO2max, hydrostatic weighing, anaerobic power, lactate threshold, etc.), interpret testing results and then prescribe appropriate exercise for various populations.

EXMS 194P Exercise Prescription..3 credits
Prerequisite: EXMS 194S and EXMS 196. This course introduces exercise science students to exercise prescription principles and exercise program design. Students learn to prescribe exercise for healthy populations or populations with medically controlled disease. Exercise type, volume, progression, client motivation, goals, safety, and enjoyment are emphasized.

EXMS 194S Professional Activity: Principles of Strength Training and Conditioning Instruction ....2 credits
This course introduces EXMS students to fundamental principles and 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
Students are introduced to group exercise leadership methods including safety, motivation, communication, organization and class/activity planning. Students experience leading/teaching in a variety of group fitness activities/genres for a variety of skill levels. This course is applicable to both personal trainers and group fitness leaders.

EXMS 196 Applied Anatomy and Kinesiology ....4 credits
This course introduces EXMS students to basic anatomy and kinesiology principles of movement and exercise. Topics include identification of major muscle groups and joints, skeletal structure, planes/axes of movement, and basic biomechanical factors. Course work focuses heavily on practical application of knowledge for the fitness professional.

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. May be offered online.

EXMS 235 Applied Exercise Physiology 2.............................3 credits
Prerequisite: EXMS135 and EXMS194L. This course focuses on advanced application of EXMS 135 concepts including: environmental influences on exercise performance, training/nutrition for optimal athletic/exercise performance, ergogenic aids, and the effects of age, disease, and medical conditions on exercise training and performance. Information literacy is emphasized.

EXMS 240 Mental Dynamics of Exercise and Sport ....3 credits
Prerequisite: program admission Course introduces students to the mental dynamics of exercise and sport. Designed for exercise professionals to explore and apply the concepts of motivation, adherence, anxiety, over training and behavior modification in an exercise and sport setting.

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, scope of practice, equipment acquisition, facility planning and maintenance. Students are also guided in job search practices and resume development.

EXMS 295 Injury Prevention and Management....................3 credits
Prerequisite: EXMS 194F, EXMS 194S, EXMS 196. This course builds on content from EXMS 194S and 196 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 and collaborate with other healthcare professionals.

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. 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. 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. 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. 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. 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. 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. 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. Journals and other written assignments required.

PE 280RT Co-op Ed: Corrective Fitness..........1-12 credits

Prerequisite: Instructor approval for site and credit load. Supervised internship in a corrective 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. Journals and other written assignments required.

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. 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.

WLD 111 Blueprint Reading for Welders..........3 credits

Prerequisite: Minimum reading score of 68 OR RD 080 OR RD 087 And EL115 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 RD 087 And EL115 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-S, 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 RD 087 And EL115 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..........1-3 credits

Prerequisite: Instructor consent and Minimum reading score of 68 OR RD 080 OR RD 087 And EL115 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 RD 087 And EL115 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 RD 087 And EL115 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. Preparing weld test specimens and performing weld tests is included in this course.

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. Preparing weld test specimens and performing weld tests is included in this course.

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 RD 087 And EL115 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 180 Co-op Ed: Welding..........1-12 credits

This course provides on-the-job learning experiences in community businesses and organizations in the field of Welding. 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.

WLD 206 Co-op Ed: Welding Seminar..........1 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.

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, assembly and final finishing. Also studied are concepts in ferrous metallurgy and their applications.

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. This course includes practice and testing for AWS D1.1 Welder Qualification Exams.

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.

WLD 242 Gas Tungsten Arc Welding 1..................................3 credits
Prerequisite: Minimum reading score of 68 OR RD 080 OR RD 087 And EL115 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 coure 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 Lane Aviation Acadmy, 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 specialities 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 Safety Development.....................................4 credits
Views aviation safety development through analysis of landmark accidents, their investigation, and aftermath to include technology development, procedural improvements, crew interaction (CRM and ORM), and regulatory developments that have improved flight safety. Student exits course able to apply safety lessons to flight operations.

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. May be offered online.

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 program requires completion of a Flight Technology Entrance Application, $500.00 flight deposit and obtain an Airman's Certificate and Student Pilor Certificate. 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. May be offered online.

FT 251 Commercial Pilot Ground School..............................4 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 ....4 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 of Instruction and Human Factors ....3 credits
Psychological principles of the human learning process with methods to improve instructor effectiveness. Human factors including hazardous attitudes, fatigue, human error, decision making, cockpit design and ergonomics of the man/machine interface are covered. Studies CRM to improve crew coordination and situational awareness.

FT 256 Flight Instructor-Airplane and Instrument Flight Instructor-Airplane Ground School ....3 credits
Details of airplane flight operations and maneuver analysis, FAA regulations, and recommended procedures for CFIs. CFI-I prep includes a concise review of airspace, regulations, radio navigation, and meteorology specific to IFR flight. Prepares students for the FAA Flight Instructor-Airplane and Instrument Flight Instructor written exams.

FT 261 Air Traffic Control and Airspace..................................1 credit
Co-requisite: FT 251. A review of Air Traffic Control (ATC) procedures and communications, radar and non-radar operations, navigational aids, and airspace classifications to include operational requirements for various airspace classifications. At completion of this course the student should be able to understand and apply critical elements of ATC within the National Airspace System. NOTE: FT 251 and FT 261 are co-requisites and must be taken concurrently.

FT 262 Aviation Law and Regulations.....................................1 credit
Co-requisite: FT 252. A review of regulations and enforcement actions primarily referencing 14 CFR but also including international (ICAO) regulations. Aircraft and pilot certification, rule-making legislation and implementation, and an analysis of aviation regulatory environments and processes will be reviewed, including legal decisions resulting from specific incidents. At completion of this course the student should be able to understand and apply pertinent regulations from 14 CFR to instrument and commercial flight operations. NOTE: FT 252 and FT 262 are co-requisites and must be taken concurrently.

FT 280 Co-op Ed: Flight Tech..3-12 credits
This course provides students with flight-related learning in businesses and public organizations 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 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

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 ENVS 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
Prerequisite: MTH 060 or above. CIS 101 is strongly recommended. 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 223 Geography of the Muslum World ....4 credits
Presents Islam as a major cohesive component of Muslim culture. Students will study cultural traits and physical environments influenced by Islam,Äôs distinctive and unifying cultural expression in the Muslim world. Spatial patterns, cultural landscapes, and non-western points of view are key.

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
Prerequisite: MTH 060 or above. CIS 101 is strongly recommended. 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 GIS 1 .... 4 credits
Prerequisite: GIS 151 or GEOG 151, or consent of the instructor. GIS 1 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 151. 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. If using a Mac, you will need to be able to run windows applications. Students who do not have access to a computer may be at a disadvantage.

GIS 246 GIS 2 .... 4 credits
Prerequisite: GIS 245 GIS 2 is the third in a series of Geographic Information Science and Technology courses. The course will focus on advanced 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, address matching, georeferencing, overlay analysis, spatial analysis, problem solving (related to spatial concepts and software), and visual design. 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 and Remote Sensing .... 4 credits
Prerequisite: GIS 246 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‚Äôs 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 253 Emerging Trends in GeospatialTechnology .... 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 249 or consent of instructor. Students will design and implement a capstone project that integrates GIS skills and knowledge. Students will apply critical thinking skills to solve geospatial problems. Students will develop project management workflows and create and manage a geodatabase. Students will use ArcGIS and other appropriate geospatial technologies to process and analyze spatial data then develop appropriate visual products to present project results. Students will gain workforce skills in time management, report writing, collaborative problem solving, and presenting information.

GIS 280 Co-op Ed: Geographic Information Science ....3-12 credits
Cooperative Education is a field experience opportunity for students who have completed four GIS classes: GIS 151 (also GEOG 151), GIS 245, GIS 246, and one GIS elective. Contact Lynn Songer, GIS Instructor *songerl@lanecc.edu*.

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. 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. 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 will concentrate on black and white

illustration techniques. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total credits.

ART 280GD Co-op Ed: Graphic Design ....3-12 credits
Prerequisite: Instructor approval. This course provides 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. Course content and expected learning proficiencies vary term to term. Course may be repeated.

ART 289 Web Production..3 credits
Prerequisite: CS 195 or CIS 195 and ART 216 or MUL 212. An intermediate web development course emphasizing web production best practices and strategies. Topics include site building and management, navigation and usability, web typography, and imagery for the web. Students will gain hands-on experience with modern tools and technologies including use of web-based tools and web authoring software. This course may be offered through Distance Learning, traditional classroom instruction, or as a hybrid course.

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 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. May be offered online.

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 class will explore the field of holistic health by learning about a variety of alternative healing practices and methods. We will examine how complementary and alternative medicine (CAM) contrasts with conventional western medicine so that students can 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 online.

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
Students will discover how current global systems of power and privilege can affect our health by exploring the connections between; economy, social stratification, poverty, violence, hunger, disease, ecological decline, consumption, pollution, exploitation, alternatives and social change.

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 training and skills needed to earn an American Heart Association BLS for Healthcare Providers certification, in addition to Heartsaver First Aid. Focus is on patient assessment, emergency care & prevention of breathing or cardiac emergencies, chronic disease and 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
Prequisite: Instructor approval required. 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 multifacited responsibility will be examined. May be offered online.

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 requirments, 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 approiateness for each student. 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.

HO 120 Survey of Health Professions.................................... 3 credits
Investigation and exploration of professions in the healthcare system. We will identify attributes/characteristics/skills required of an effective healthcare professional, and compare and contrast educational requirements, work responsibilities, environments, qualifications, skills and salary potential of various health professions.

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 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, use their preferred learning styles, study for tests, improve memory, read and study from textbooks, manage time effectively, use the library, and make visual study tools. Course work requires college-level reading skills.

HIM 120 Introduction to Health Information Management .... 3 credits
Survey class to introduce the student to the historical development of health information management. Focuses on the work and responsibilities of health information professionals and their relationship with other health care providers, also, content and structure of patient records; quantitative and qualitative analyses of the documentation of patient care; storage methods; and retrieving patient data elements will be explored. May be offered online.

HIM 183 Introduction to Health Information Systems .... 4 credits
This course examines the foundations of health information technology used by health care entities. Students will explore the use of information systems and their application through literature review and hands-on experiences. Topics include clinical and administrative applications used in the role of HIM professionals. May be offered online.

HIM 200 Healthcare Statistics.. 3 credits
Prerequisite: MTH 052 or higher. Healthcare statistics presents the collection and integration of given data. Computations of various formulas are used in analyzing and converting this data to useful information. Students learn appropriate methods to analyze, interpret, and present various types of data applicable to a variety of health care needs, i.e. patient care, management of a facility, and mandatory reporting requirements. May be offered online.

HIM 206 Co-op Ed: Employment in Healthcare: HIM Seminar... 2 credits
Acceptance to HRT or HIM program, or instructor consent. Students will develop job search tools and skills in preparation for internships and employment in health care including job research, resume writing, applications, and interviewing. Students will learn how to start and keep a job, leave a job with grace, and secure references.

HIM 230 Quality Improvement in Healthcare .... 3 credits
This course investigates the components of quality and performance improvement, and explores the functions of risk management, utilization management, and case management. Quality performance improvement components, along with regulatory requirements will be investigated. Students will learn skills in data analysis, performance improvement tools, and data presentation. HIM Program Students may be given enrollment priority. May be offered online.

HIM 241 Health Information Management Applications 1.. 4 credits
Prerequisites: HIM 120, HIM 183 with a C or higher. This course examines the foundations of health information technology used in the collection and management of clinical information. Topics covered: the function, content, and structure of the health record. Data sets and healthcare information requirements and standards will also be covered. May be offered online.

HIM 242 Health Information Management Applications 2.. 4 credits
Prerequisite: HIM 241. This course covers the history and use of clinical vocabularies, reimbursement methodologies, principles and supervisory management; including resources management responsibilities, such as job position descriptions, performance/practice standards, and policies and procedures. Students will study topics on Human Resources, RHIOs, PHRs, and medical identity theft. May be offered online.

HIM 270 ICD Coding .... 4 credits
Prerequisite: HO100, HO150 (or BI 232 with a C or better) Co-requisites: HO152 (or BI233 with a C or better). This is the first of a two part series. Examines the development of coding classification systems. Introduces ICD coding classification system, its format and conventions. Emphasizes the rules and guidelines of basic coding steps and guidelines according to body systems. May be offered online.

HIM 271 ICD-10 Coding 2.. 4 credits
Prerequiste: HIM 270, HO 152 (or BI233 with a C or better). Second part of a two part series. Continues with advanced ICD-10 coding classification systems and skills development, its format and conventions. Emphasizes basic coding steps and guidelines according to body systems. Provides advanced coding exercises in relation to each system covered. May be offered online.

HIM 273 CPT Coding 1 .... 4 credits
Prerequisite: HO100 and co-req/pre-req: HO152 (BI 231, BI 232, and BI 233 may be substituted for HO152). This is the first of a two part series. 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. May be offered online.

HIM 275 CPT Coding 2 .... 4 credits
Prerequisites: HIM 273. This is the second of a two part series. 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. May be offered online.

HIM 280 Co-op Ed: Health Information Management...... 3-12 credits
Prerequisites: HIM 241. Instructor consent required. Students will increase their understanding of industry expectations as well as technical work experience in a health care organization or virtual lab, or combination of both. In this course students will also explore career options, and network with professionals and employers while earning credit toward a degree.

HIT 154 Introduction to Disease Processes........................... 3 credits
Prerequisites: HO150 and HO152 with a C or higher, 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 and maintain electronic patient appointment and billing records, including data entry and storage of treatment information, matching CPT-4 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. Creation of patient statements, dunning letters, and insurance appeals. May be offered online.

HIT 207 EHR for the Provider Office....................................... 3 credits
Pre-req: HI107 or instructor consent. This course provides students the opportunity to deepen their understanding and establish proficiency in creating patient charts, complete electronic progress notes for a variety of practice patients, and will complete electronic history forms, lab requisition forms, electronic prescriptions, electronic telephone notes, proof of appointment letters and electronic forms, and enter coding and billing information. This course utilizes an applied approach using simulation software that features assignments directly mapped to ABHES and CAAHEP competencies. May be offered online.

HIT 222 Reimbursement Methodologies .... 3 credits
This course will provide students with the understanding of common healthcare reimbursement methodologies, compliance standards, and AHIMA approved coding principles. Students will also become familiar with value based purchasing and other revenue cycle management concepts. May be offered online.

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 approval 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
A programmed learning course covering basic medical terminology, derivation, pronunciation, and meaning. Oral exam(s) are required. Online and classroom sections are offered.

HO 110 Health Office Procedures... 3 credits
Principles of healthcare office procedures, including HIPAA compliance, filing and records management, legal and ethical concerns of confidentiality & privacy, fundamentals of client reception, appointment scheduling, telephone techniques, and letter composition. May be offered online.

HO 112 Medical Insurance Procedures.................................. 3 credits
Completion of MTH 025 is strongly recommended but not required. This course includes a computation component. 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-9/10-CM coding. Introduction to the CMS provider office billing form. May be offered online.

HO 114 Introduction to Coding .... 3 credits
Prerequisites: HO100, corequisites: HO150 (or BI231 with grade of C or higher); or work experience and instructor consent. A coding survey course for anyone involved in health care delivery, particularly dealing with insurance and/or Medicare and government regulations. Basics of ICD-9/10-CM and CPT-4 codes, 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. Part 1 of a 2 part series. 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: HO 150 Human Body Systems 1. Part 2 of a 2 part series. 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. May be offered online.

HO 190 Medical Formatting .... 3 credits
Prerequisite or corequisite: HO100. Computer file management and MS Word experience suggested. 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 online.

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 information management and medical assisting. 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 or online.

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 or online.

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 or online.

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 online.

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 offered online.

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 online.

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 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.

Honors

For information, contact *honors@lanecc.edu*.

ANTH 102_H World Archaeology-Honors .... 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.

ART 115_H Basic Design: Fundamentals-Honors .... 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 *lanecc.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 203_H Survey of American Indian Art and
Architecture: North and Central America-Honors .... 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. 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.

BI 101_H General Biology-Honors .... 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. 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 102_H General Biology:
Genetics and Society-Honors .... 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. 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.

COOP 280_H Co-op Ed: Service Learning-Honors .... 3-12 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. Prerequisite: Instructor approval. Gain experience with community partners in addressing real community needs. Practice critical thinking, citizenship and civic responsibility, explore career options, and network with professionals while earning college credit. In this Honors section students will actively engage, investigate and reflect on topics leading to enhanced knowledge and skills.

HON 201_H Honors Invitation to Inquiry .... 4 credits
Prerequisite: Formal admission into the Honors Program. WR 121 with a grade of B or higher or test out of WR 121. Examines the process of scholarly research through a variety of inquiry methods and applies critical thinking to the research process itself. Provides structured preparation for college research in a wide range of disciplines and lays a foundation for work undertaken in the Honors Capstone Seminar.

HON 202_H Honors Capstone Seminar .... 4 credits
Prerequisite: A grade B or higher in HON 201_H. Honors Capstone Seminar develops advanced undergraduate group research skills including planning, and presenting research findings at, a community-wide academic symposium. It also advances the level of critical thinking, effective communication, and applied learning in student ePortfolios.

HON 280_H Co-Op Ed:
International Work Experience-Honors .... 12 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 information. Prerequisite: Instructor approval. This is a structured program for honors students to do an

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 i*e3global.ous.edu*.

PHL 205_H Contemporary Moral Issues-Honors..................4 credits
This is an honors class open to any student 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 *lanecc.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.

PS 297_H Environmental Politics-Honors.............................4 credits
This is an honors-level 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 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.

WR 121_H Introduction to Academic Writing-Honors..........4 credits
Prerequisite: Appropriate scores on Lane's Writing Placement Test or a passing grade (C- or better) in WR 115. 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. See *lanecc.edu/honors* for more information. 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_H Composition: Argument, Style and Research-Honors..4 credits
Prerequisite: A passing grade (C- or better) in WR 121 or a passing score on the English Department's Waiver exam. 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. See *lanecc.edu/honors* for more information. 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. May be offered online.

Hospitality Management

For information, contact the Culinary Arts and Hospitality Management Department, Bldg. 19/Rm. 202, 541.463.3503.

HRTM 100 Introduction to Culinary and Hospitality............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. Open to the public.

HRTM 104 Introduction to Travel and Tourism.....................3 credits
Open to the Public. 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
Open to the Public. 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. May be offered online.

HRTM 109 Principles of Meetings and Convention Management..3 credits
Open to the Public. 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
Open to the Public. 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 140 Hospitality Law and Security...............................3 credits
Open to the Public. A basic study of hotel and restaurant law emphasizing in: safety and security, risk management, food and liquor service liability, employment law, civil rights and discrimination law, and how they apply to public accommodations and employment, internal security for asset protection and OSHA regulations.

HRTM 205 Managing the Restaurant Operation...................3 credits
Prerequisite: HRTM 105This course examines all aspects of a full-service restaurant operation. Students will be introduced to menu planning, beverage management, service, culinary arts, food safety, and sanitation principles. Current industry trends, such as organic food, buying local and environmental management will also be covered.

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 220 Sustainability in the Hospitality Industry............2 credits
Prerequisite: CAHM majors only. A multi-dimensional course introducing global sustainability and environmental movements, their impact on the hospitality industry, and responses to and opportunities associated with sustainability within the industry.

HRTM 225 Banquet Operations...2 credits
Prerequisite: CAHM 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 in addition to weekly in ¬nclass meetings covering all aspects of managing banquets and events.

HRTM 230 Hotel Operations 1..3 credits
Open to the Public. 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 Hospitality Human Resources and Supervision...3 credits
Prerequisite: CAHM majors only. Examines the fundamentals of supervision that include planning, basic management functions, and customer relations and service. Focus is on building relationships with diverse employees through communication, motivation, supervision and leadership, and the human resources environment.

HRTM 265 Hospitality Financials 1 ....3 credits
Prerequisite: CAHM majors only, HRTM 105, HRTM 106, CA 200. 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 280 Co-op Ed: Hospitality Management................1-12 credits
Prerequisite: HM majors only. 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 286 Bar and Beverage Management..........................3 credits
Open to the Public. This course is an introduction to the fundamental areas of beverage operations. Includes planning of the bar, bar staffing and training, legal regulations, standardized recipes, drink costing and pricing, and beverage production methods and mixology. Other topics will be included.

HRTM 290 Hospitality Leadership ....3 credits
Co-or Prerequisite: HRTM 265. 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.

HRTM 292 Dining Room and Kitchen Lab.............................2 credits
Prerequisite: CA 159. Students will learn food preparation skills, food theory, management responsibilities, and a progressive attitude toward food preparation and service. Students will be exposed to all aspects of restaurant work by rotating through a variety of different job positions.

Human Relations

For information, contact the Counseling Department, Bldg. 1/103, 541.463.5299.

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 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 213 Improving Parent Child Relations.............................3 credits
View real life in-home parent-child interactions with a focus on building creditability as a parent, encouragement, effective communication and stimulating childrens¬í healthy development. Typical parent/child problems are illustrated in a variety of family types and children. May be offered online.

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 course.

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.

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 151 Issues in Assessing and Treating the Problem Grambler ....1 credits
Assessing and treating the problem gambler: DSM critieria for problem and pathologial gambling, cognitive distortions related to problem gamblers, updated research on problem gambling and the brain, working with families of problem gamblers, and issues related to special populations and gambling.

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 158 Trauma: Theory to Practice ....2 credits
This class introduces students to the sources and prevalence of trauma, including physical, cognitive, emotional, social and

behavioral responses to traumatic experiences; how trauma impacts individuals who seek assistance from human service organizations. Best practices for both trauma specific and trauma-informed services.

HS 171 Community Health Worker......6 credits
This course introduces students to a new and emerging role that integrates human service activities within traditional and new health services. The content of the class focuses on working with individuals, as well s communities, to promote health and access to medical services. Students will learn how to help individuals, and communities, prevent and better manage common chronic diseases. Students will learn about social health indicators, outreach, and working as part of a multi-disciplinary team. Students completing this course along with HS 150 Personal Effectiveness for Human Service workers, HS 226 Ethics and Law, and Cooperative Education internship will be eligible for state certification as a Community Health Worker.

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 Substance Abuse......3 credits
This course will present a basic overview of concepts to facilitate an understanding of substance abusing adolescents and their families. The student will develop a working knowledge of adolescent development, as well as socio-economic, educational, gender, familial, societal and cultural factors as related to substance abuse. Interventions will be examined from a variety of treatment settings including juvenile corrections. Cultural diversity considerations are included throughout the course. Instructional methods will include lecture, discussion, films, small group activities, and guest speakers.

HS 206 The Criminal Addict: Issues & Interventions......3 credits
An overview of the complex relationship between drug abuse, dependency and criminality will be discussed. Socio-economic, gender, familial, societal and cultural factors will be examined and current best practice interventions with this population will be presented. The general function of the criminal justice and corrections systems will be studied. Instructional methods will include lecture, discussion, films, small group activities and guest speakers.

HS 209 Crisis Intervention and Prevention......3 credits
This course will provide an introduction to the current best practices approach to working with individuals who have dual diagnoses and their families. The course addresses the current emphasis in the field of human services to provide integrated services to individuals and their families when an individual has both a mental health diagnosis and a substance use diagnosis thereby supporting students in better meeting the entry level requirements of social service agencies in Oregon.

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 221 Co-occurring Disorders......3 credits
An introduction to best practices in working with individuals with dual diagnoses and their families. Emphasizes integrated services to individuals with both mental health diagnosis and substance use diagnosis. Supports students to meet entry-level requirements of social service agencies in Oregon.

HS 222 Best Practices in Human Services: Interventions......4 credits
An overview of Best Practices currently implemented for substance abuse, mental health, case management and a variety of other challenges facing adults and families will be examined with an emphasis on the impact of environmental/societal factors, gender and multicultural issues.

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 resilence 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 crossover 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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total credits.

Language Studies

For information, contact the Language, Literature and Communication Division, Center Bldg./Rm. 457, 541.463.5419.

CW 101 Chinuk Wawa..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 stuctures 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.

CW 102 Chinuk Wawa..4 credits
Prerequisite: AIL101 or CW 101 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.

CW 103 Chinuk Wawa..4 credits
Prerequisite: AIL 102 or CW 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.

CW 201 Chinuk Wawa..4 credits
Prerequisite: AIL 103 or CW 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 emplasis) 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.

CW 202 Chinuk Wawa..4 credits
Prerequisite: AIL 201 or CW 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 emplasis) 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.

CW 203 Chinuk Wawa..4 credits
Prerequisite: AIL 202 or CW 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 (a linguistic emplasis) 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.

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 *ie3global.ous.edu/.*

FR 101 First-Year French .... 5 credits
First course 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. Second course 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. Third course 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 107 Beginning French Conversation .... 1 credits
Prerequisite: FR101 Corequisite: FR 102 This course offers conversational practice in French at the beginning level of vocabulary and grammar structures that students have already studied or are currently learning. Offered P/NP, winter term only.

FR 201 Second-Year French .... 5 credits
Prerequisite: FR 103 or FR 151 with a passing grade of C-or above, or equivalent. First course 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 course 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 203 Second-Year French .... 5 credits
Prerequisite: FR 202 with a passing grade of C-or above, or equivalent. Third course 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 207 Intermediate French Conversation............................ 1 credits
Prerequisite: FR 201 This course offers conversational practice in French at the intermediate level of vocabulary and grammar structures that students have already studied or are currently learning. Offered P/NP, winter term only.

FR 211 Conversational French.. 2 credits
Prerequisite: FR 102, FR 151, or equivalent. This is an intensive weekend conversation class designed to give students the opportunity to improve their oral communication skills and intercultural competence. Students speak and hear only French while participating in cultural activities and games, discussions following guest speaker presentations, and French and Francophone-themed meals. We also view a film in French to introduce and expand on vocabulary and expressions in authentic cultural contexts. Students have the opportunity to share experiences and opinions, exchange ideas, and practice using various forms and functions of the target language.

FR 212 Conversational French.. 2 credits
Prerequisite: FR 102, FR 151, or equivalent. This is an intensive weekend conversation class designed to give students the opportunity to improve their oral communication skills and intercultural competence. Students speak and hear only French while participating in cultural activities and games, in discussions following guest speaker presentations, and in French and Francophone-themed meals. We also view a film in French to introduce and expand on vocabulary and expressions in authentic cultural contexts. Students have the opportunity to share experiences and opinions, to exchange ideas, and to practice using various forms and functions of the target language.

FR 213 Conversational French Through Film......................... 2 credits
Prerequisite: FR 102 or equivalent. A film-based conversation class wherein students focus on improving their oral communication skills (listening comprehension, speaking, and intercultural competence). 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. Students may work as language lab tutors at LCC, or in a limited number of K-12 school settings, or in community organizations, usually as interpreters. 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. These courses 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 writing, reading, listening, and learning about Hispanic cultures. The text for this course includes an onine workbook component. Course content is conducted entirely in Spanish.

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. These courses 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 writing, reading, listening, and learning about Hispanic cultures. The text for this course includes an online workbook component. Course content is conducted entirely in Spanish.

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 writing, reading, listening, and learning about Hispanic cultures. Tests are administered outside of class hours. The text for this

course includes an online workbook component. Course content is conducted entirely in Spanish.

SPAN 201 Spanish, Second-Year ....5 credits
Prerequisite: Credit level SPAN 103 minimum grade of C-, or an equivalent or placement by instructor. SPAN 201 is the first course of a three-term sequence (SPAN 201-202-203) designed to provide one full year of college level transfer courses at the intermediate (second year) level. These courses 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 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. Course content is cnducted entirely in Spanish.

SPAN 202 Spanish, Second-Year ....5 credits
Prerequisite: Credit level SPAN 201 minimum grade of C-, or an equivalent or placement by instructor. SPAN 202 is the second course of a three-term sequence (SPAN 201-202-203) designed to provide one full year of college level transfer courses at the intermediate (second year) level. These courses 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 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. Course content is conducted entirely in Spanish.

SPAN 203 Spanish, Second-Year ....5 credits
Prerequisite: Credit level SPAN 202 minimum grade of C-, or an equivalent, or placement by instructor. SPAN 203 is the third course of a three-term sequence (SPAN 201-202-203) designed to provide one full year of college level transfer courses at the intermediate (second year) level. These courses must be taken in sequence. SPAN 203 continues the development of and expands upon the five language skills practiced through emphasis on 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. Course content is conducted entirely in Spanish.

SPAN 211B Conversational Spanish Intermediate................3 credits
Prerequisite: Credit Level SPAN 103 or equivalent with min. grade of C-or placement by instructor. May be taken concurrently with any 200 level Spanish course. Spanish 211B is an Intermediate Spanish college level course in oral communication. The student has the 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, film, music, and literary and nonliterary texts. Oral presentations, short written essays, tests, and active participation in in-class activities are used to determine the student's final grade in the course. Course content is conducted entirely in Spanish.

SPAN 212B Conversational Spanish Intermediate................3 credits
Prerequisite: Credit Level SPAN 103 or equivalent with min. grade of C-or placement by instructor. May be taken concurrently with any 200 level Spanish course. Spanish 212B is an Intermediate Spanish college level course in oral communication. The student has the 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, film, music, and literary and nonliterary texts. Oral presentations, short written essays, tests, and active participation in in-class activities are used to determine the student's final grade in the course. Course content is conducted entirely 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 as language lab tutors at LCC, or in a limited number of K-12 school settings, or in community organizations, usually as 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.

LA 100 Legal Procedures ....4 credits
Co-requisite: LA102. Pre-requisites: Working knowledge of MS Word, accurate keyboarding speed of 45 wpm, and placement test scores into WR121 or WR115 or instructor permission. 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. May be offered online. Offered through Umpqua Community College. A host-provider fee may apply.

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. Offered through Umpqua Community College. A host-provider fee may apply.

LA 102 Legal Terminology ....3 credits
Co-requisite: LA100. 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. Offered through Umpqua Community College. A host-provider fee may apply.

LA 105 Civil Litigation ....3 credits
Prerequisite: LA 101 and LA 128 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. Offered through Umpqua Community College. A host-provider fee may apply.

LA 128 Legal Procedures 2 ....4 credits
Prerequisite: LA 100, BT 108, 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. Offered through Umpqua Community College. A host-provider fee may apply.

LA 132 Ethics for the Legal Professional................................3 credits
Prerequisite: LA 101 and LA 128, 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. Offered through Umpqua Community College. A host-provider fee may apply.

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 chidren 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 three-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 108 Survey of World Literature .... 4 credits
College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) strongly recommended for success. Survey of World Literature is a three-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 winter term comes from the early modern era.

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 three-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
Prerequisite: A passing score (C-/P or better) in WR 95 or it’s equilvalent, or placement into WR 115 (a score of 76RD and 76WR on the placement test). 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
Pre-requisite: a passing score (C-/P or better) in WR 95 or its equivalent, or placement into WR 115 (a score of 76RD and 76WR on the placement test). 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 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 217 Introduction to Digital Humanities..........4 credits
College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) strongly recommended for success. This course combines research into the impact of 21st century technologies and new media on the study of literature and culture with the use of digital humanities methods to analyze texts and create new knowledge and new theoretical and ethical considerations and other developments in the field.

ENG 218 Literature of the Islamic World..........4 credits
College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) strongly recommended for success. This course introduces students to historic and contemporary literature, comprised of poetry, fiction, essays, and drama, from nations and regions that are, or have been, strongly associated with the Islamic faith.

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 world view 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 it shares.

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
Prerequisite: Instructor permission or a passing grade (C-/P) in any of the following (or an equivalent course): ENG 195, ENG 196, FA 250, FA 263, FA 264, FA 265, VP 151, VP 152. Horror, 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 273 Film Genre: Film Noir...0-4 credits
Prerequisite: Instructor permission or a passing grade (C-/P) in any of the following (or an equivalent course): ENG 195, ENG 196, FA 250, FA 263, FA 264, FA 265, VP 151, VP 152. 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 of *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: a passing score (C-/P or better) in WR 95 or its equivalent, placement into WR 115 (a score of 76RD and 76WR on the placement test), or instructor permission. 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: a passing score (C-/P or better) in WR 115 or its equivalent, placement into WR 121 (a score of 76RD and 96WR on the placement test), or instructor permission. 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.

FA 265 African American Film Images................................0-4 credits
Prerequisite: a passing score (C-/P or better) in WR 95 or its equivalent, placement into WR 115 (a score of 76RD and 76WR on the placement test), or instructor permission. This course gives students an introduction to African Americans’ role in the history of Hollywood filmmaking, and the social, educational, and political climates that follow this cultural phenomenon of movie making. Several critical texts will reveal the historically complex and difficult relationship between black Americans and their desire to become an active, integral part of all aspects of the American film industry. Screenings of important films, class discussions, inside and outside of class group work, exams, and other relevant critical readings are essential aspects in guiding students’ understanding of the peculiar problems complicating African Americans’ full, rigorous admittance and participation into the Hollywood system. 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. You must be accepted into the Manufacturing program to take these classes.

ENGR 280M Co-op Ed: Manufacturing Technology ....3-12 credits
This course provides students with manufacturing-related learning in businesses and industrial sites to 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
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: Must have completed 24 credits of MFG 197 or instructor consent. 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: Must have completed 24 credits of MFG 197 or instructor consent. 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.

Mathematics

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. Concepts, problem solving, and applications 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. May be offered online

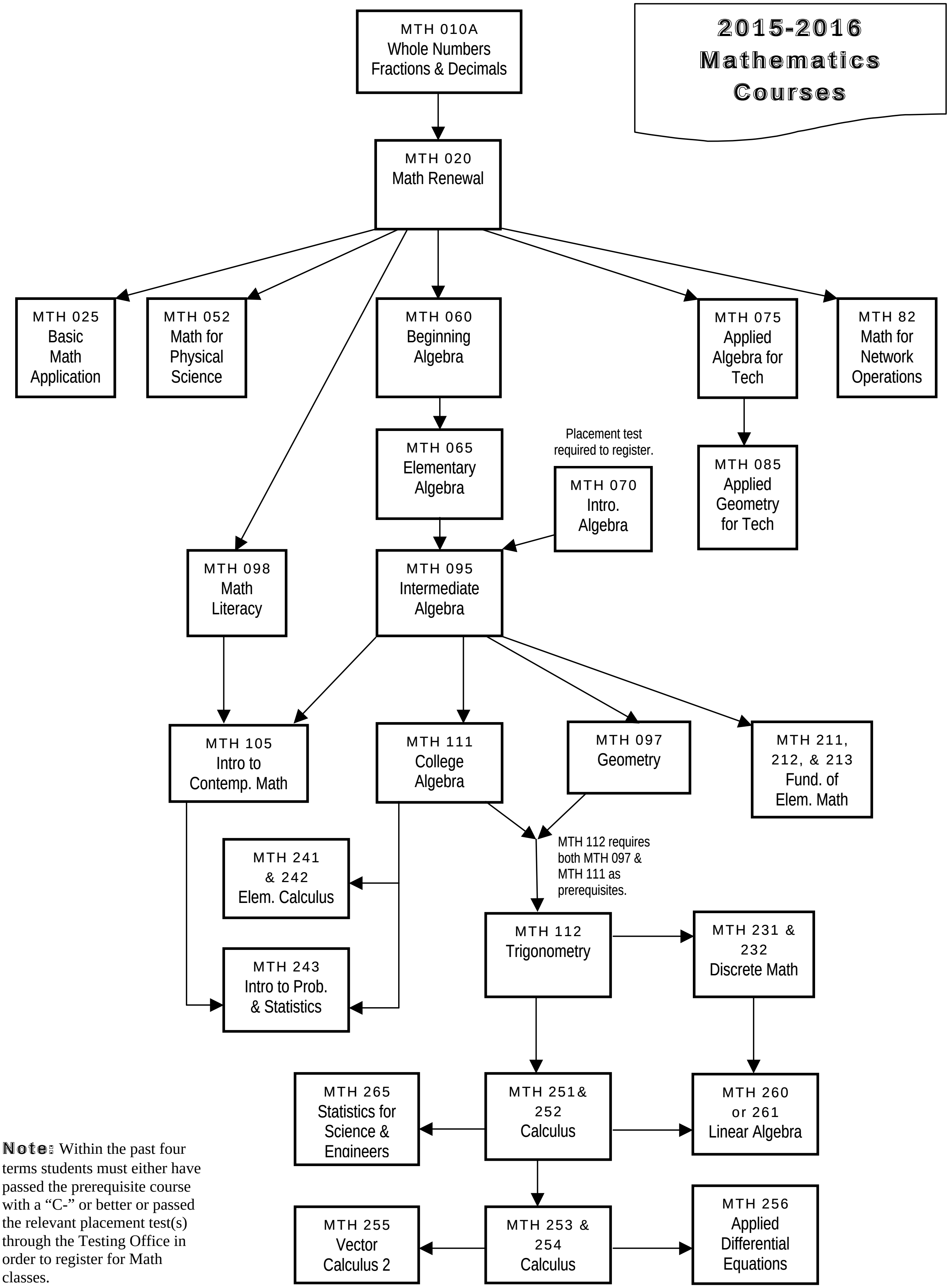
MTH 020 Math Renewal ....3 credits
Prerequisite: Within the past four terms completed MTH 010A, MTH 010T or equivalent course with a grade of "C-" or better or passed a placement test through the Testing Office. If you have taken a higher level math course than this and passed the course with a "C-" 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 *lanecc.edu/math.* May be offered online.

MTH 025 Basic Mathematics Applications ....3 credits
Prerequisite: Within the past four terms completed MTH 020 or equivalent course with a grade of "C-" or better or pass a placement test through the Testing Office. 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 *lanecc.edu/math.*

MTH 052 Math for Health and Physical Sciences.................4 credits
Prerequisite: Within the past four terms completed MTH 020 or equivalent course with a grade of "C-"or better or passed a placement test through the Testing Office. 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 through Distance Learning. Scientific Calculator is required. Please refer to the Calculator Recommendation Chart on *lanecc.edu/math.* May be offered online.

MTH 060 Beginning Algebra ....4 credits
Prerequisite: Within the past four terms completed MTH 020 or equivalent course with a grade of "C-" or better or pass a placement test through the Testing Office. 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,

2015-2016 Mathematics Courses


MTH 010A
Whole Numbers
Fractions & Decimals
MTH 020
Math Renewal
MTH 025
Basic
Math
Application
MTH 052
Math for
Physical
Science
MTH 060
Beginning
Algebra
MTH 075
Applied
Algebra for
Tech
MTH 82
Math for
Network
Operations
MTH 065
Elementary
Algebra
Placement test
required to register.
MTH 070
Intro.
Algebra
MTH 085
Applied
Geometry
for Tech
MTH 098
Math
Literacy
MTH 095
Intermediate
Algebra
MTH 105
Intro to
Contemp. Math
MTH 111
College
Algebra
MTH 097
Geometry
MTH 211,
212, & 213
Fund. of
Elem. Math
MTH 112 requires
both MTH 097 &
MTH 111 as
prerequisites.
MTH 241
& 242
Elem. Calculus
MTH 243
Intro to Prob.
& Statistics
MTH 112
Trigonometry
MTH 231 &
232
Discrete Math
MTH 265
Statistics for
Science &
Engineers
MTH 251&
252
Calculus
MTH 260
or 261
Linear Algebra
MTH 255
Vector
Calculus 2
MTH 253 &
254
Calculus
MTH 256
Applied
Differential
Equations

Note: Within the past four terms students must either have passed the prerequisite course with a "C-" or better or passed the relevant placement test(s) through the Testing Office in order to register for Math classes.

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.* May be offered online.

MTH 065 Elementary Algebra ....4 credits
Prerequisite: Within the past four terms completed MTH 060 or equivalent course with a grade of C-or better or pass a placement test through the Testing Office. 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, and exponents. Scientific Calculator is required. Please refer to the Calculator Recommendation Chart on *lanecc.edu/math.* May be offered online.

MTH 070 Introductory Algebra ....5 credits
Prerequisite: Within the past four terms placed into MTH 070 through the Testing Office. 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. (Qualified 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 075 Applied Algebra for Technicians............................4 credits
Prerequisite: Within the past four terms completed MTH 020 with a grade of "C-" or better, or instructor permission. MTH 075 Applied Algebra is a first course in algebra skills needed for technical mathematics, including the following: signed numbers, positive and negative exponents, scientific notation, forming expressions and equations from real situations, ratio and proportion, the Cartesian coordinate systems, linear equations, linear systems, quadratic equations, graphs, tables, charts, data analysis and problem solving. The course will emphasize clear communication of mathematical results. Application problems are realistic with some data to be collected, analyzed and discussed in group setting with results submitted in written form. Scientific Calculator is required. Please refer to the Calculator Recommendation Chart on *lanecc.edu/math.*

MTH 082 Math for Network Operations ....4 credits
Prerequisite: MTH 020 Satisfies math requirements for students in the Computer Networking program. Topics include understanding different number bases, binary math and logical operators, hexadecimal color representations, basic internet protocol math, hashing and checksum algorithms, and basic cryptography. Scientific calculator is required. Please refer to the Calculator Recommendation Chart on *lanecc.edu/math*.

MTH 085 Applied Geometry for Technicians........................4 credits
Prerequisite: Within the past four terms completed MTH 075 with a grade of "C-" or better. MTH 085 Applied Geometry includes the following: linear, square, and cubic units, dimensional analysis in metric and US customary measures, problem solving , angle measure, properties of pairs of angles formed by system of parallel, perpendicular, and transversal 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. Oblique triangle trigonometry is an optional topic. Algebra topics from MTH 075 will be applied throughout. The course will emphasize clear communication of mathematical results. Application problems are realistic with some data to be collected, analyzed and discussed in group setting with results submitted in written form. Scientific Calculator is required. Please refer to the Calculator Recommendation Chart on *lanecc.edu/math.*

MTH 095 Intermediate Algebra...5 credits
Prerequisite: Within the past four terms completed MTH 065, MTH 070 or equivalent course with a grade of "C-" or better or passed a placement test through the Testing Office. 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. May be offered online.

MTH 097 Geometry ....4 credits
Prerequisite: Within the past four terms completed MTH 095, MTH 111, or equivalent course with a grade of "C-" or better or passed a placement test through the Testing Office. 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, 231, 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 098 Math Literacy...5 credits
Prerequisite: Within the past four terms completed with a "C-" or better MTH 020 or equivalent course, a higher MTH course, or passed a placement test through the Testing Office. This course provides algebra, quantitative reasoning, and problem solving skills needed in Math 105 and in other college courses in programs not requiring calculus. For students who do not need calculus, Math 098 is an alternative to Math 060/065/095 as a pathway to Lane's MTH 105.

MTH 105 Math in Society ....4 credits
Prerequisite: Within the past four terms completed MTH 095 or equivalent course with a grade of "C-" or better or passed a placement test through the Testing Office. Survey of Applications of Mathematics for non-science majors including probability, statistics, finance and exponential modeling. May be offered through Distance Learning. Scientific Calculator or Graphing Calculator is required. Please refer to the Calculator Recommendation Chart on *lanecc.edu/math.*

MTH 106 Introduction to Contemporary Math 2..................4 credits
Prerequisite: MTH 105 completed with a grade of "C-" or better 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: Within the past for terms completed MTH 095 or equivalent course with a grade of "C-" or better or passed a placement test through the Testing Office. 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 *lanecc.edu/math.* However, students will be held accountable for many skills without a calculator.

MTH 112 Trigonometry...4 credits
Prerequisite: Within the past four terms competed both MTH 097 and MTH 111 or equivalent courses with a grade of "C-" or better or passed placement tests through the Testing Office. 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. A graphing calculator is required. Please refer to the Calculator Recommendation Chart on *lanecc.edu/math.*

MTH 211 Fundamentals of Elementary Mathematics 1 ....4 credits
Prerequisite: Within the past four terms completed MTH 095 or equivalent course with a grade of "C-" or better, or pass a placement test through the Testing Office. 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, numeration systems, number bases, arithmetic operations with whole numbers and integers, and number theory. A scientific calculator is required. Please refer to the Calculator Recommendation Chart on *lanecc.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. Surveys 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, rational numbers (as fractions and decimals), irrational and real numbers, proportional reasoning, percent, using elementary algebra (use of variables, equation solving, relations and functions), and an introduction to probability. A scientific calculator is required. Please refer to the Calculator Recommendation Chart on *lanecc.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. 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, elementary statistics, introductory geometry (basic definitions, vocabulary, polygons, angles, 2-3 dimensional geometry, congruence, constructions, similarity), transformational geometry, and measurement systems. A scientific calculator is required. Please refer to the Calculator Recommendation Chart on *lanecc.edu/math.*

MTH 231 Discrete Mathematics 1..4 credits
Prerequisite: Within the past four terms completed MTH 112 or equivalent course with a grade of "C-" or better or passed a placement test through the Testing Office. First course in a two-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 *lanecc.edu/math.*

MTH 232 Discrete Mathematics 2..4 credits
Prerequisite: MTH 231 completed with a grade of "C-" or better 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 *lanecc.edu/math.*

MTH 241 Elementary Calculus 1 ....4 credits
Prerequisite: Within the past four terms completed MTH 111 or equivalent course with a grade of "C-" or better or passed a placement test through the Testing Office. 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 *lanecc.edu/math.*

MTH 242 Elementary Calculus 2 ....4 credits
Prerequisite: MTH 241 completed with a grade of "C-" or better 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 *lanecc.edu/math.*

MTH 243 Introduction to Probability and Statistics ....4 credits
Prerequisite: Within the past four terms completed either MTH 105, MTH 111, or equivalent courses with a grade of "C-" or better or passed a placement test through the Testing Office. 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 *lanecc.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.

MTH 251 Calculus 1 (Differential Calculus)............................5 credits
Prerequisite: Within the past four terms completed MTH 112 or equivalent course with a grade of "C-" or better or passed placement tests through the Testing Office. 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 or equivalent course completed 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 completed with a grade of "C-" or better within the past four terms. This is the third term of a six-term sequence. Indeterminate forms and improper integrals. Sequences and series. Investigation of the convergence of series. 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 completed with a grade of "C-" or better 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 completed with a grade of "C-" or better 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 260 Linear Algebra ....4 credits
Prerequisite: Within the past four terms completed MTH 232 or 252 with a grade of "C-" or better or passed a placement test through the Testing Office. This course provides a foundation of linear algebra

computation, terminology and theory. Topics include systems of linear equations, vector spaces, matrices, determinants, theory of linear transformations, dot and cross products, eigenvalues, eigenvectors, and complex numbers. A graphing calculator is required. Please refer to the Calculator Recommendation Chart on *lanecc.edu/math.*

MTH 261 Introduction to Linear Algebra .... 2 credits
Prerequisite: MTH 252. Prerequisites must be completed with a "C-" or better within the past four terms. The course covers systems of linear equations, vectors, matrices, determinants, linear transformations, dot product and cross product, and eigenvalues and eigenvectors. Intended for engineering majors where MTH 261 & MTH 253 satisfy the MTH 306 requirement at OSU. 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: MTH 252 completed with a grade of "C-" or better within the past four 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 .... 3-12 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 263-265 and ENG - Contact the Language, Literature and Communication Division, Center Bldg./Rm. 457, 541.463.5419.
ART, AUD, FA, MDP, MUL, VP - 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 .... 3 credits
Prerequisite: CS 195 or CIS 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, through 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. May be offered as traditional classroom instruction, fully online, or as a hybrid course.

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
Prerequisite: A passing score (C-/P or better) in WR 95 or it's equilvalent, or placement into WR 115 (a score of 76RD and 76WR on the placement test). 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 scv®ne, 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
Pre-requisite: a passing score (C-/P or better) in WR 95 or its equivalent, or placement into WR 115 (a score of 76RD and 76WR on the placement test). 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 scv®ne, 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.).

FA 221 Computer Animation .... 4 credits
This course covers the historical beginnings of animation from flip-books to film. It allows students an opportunity to explore the application of animation from business presentations to entertainment. This is a projected oriented, hands-on course, which gives students an opportunity to design and produce 3D computer animation projects. The course will emphasize 2D animation tools and techniques and introduce 3D modeling and animation tools techniques.

FA 222 Computer Animation 2 .... 4 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
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: a passing score (C-/P or better) in WR 95 or its equivalent, placement into WR 115 (a score of 76RD and 76WR on the placement test), or instructor permission. 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: a passing score (C-/P or better) in WR 115 or its equivalent, placement into WR 121 (a score of 76RD and 96WR on the placement test), or instructor permission. 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.

FA 265 African American Film Images.................................0-4 credits
Prerequisite: a passing score (C-/P or better) in WR 95 or its equivalent, placement into WR 115 (a score of 76RD and 76WR on the placement test), or instructor permission. This course gives students an introduction to African Americans' role in the history of Hollywood filmmaking, and the social, educational, and political climates that follow this cultural phenomenon of movie making. Several critical texts will reveal the historically complex and difficult relationship between black Americans and their desire to become an active, integral part of all aspects of the American film industry. Screenings of important films, class discussions, inside and outside of class group work, exams, and other relevant critical readings are essential aspects in guiding students' understanding of the peculiar problems complicating African Americans' full, rigorous admittance and participation into the Hollywood system. 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, VP 151, AUD 120 and MUL 210 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 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. Course may be repeated.

MUL 101 Introduction to Media Arts.....................................3 credits
Introduction to Media Arts provides an overview of the Media Arts program as well as insight into what careers the program can lead to. Students will learn the expectations of the program and courses and what resources are available to afford them a greater chance of success in the program and the field. This course may be offered as a traditional, hybrid or online course.

MUL 105 Image Communication ....4 credits
A foundational course on Digital Single-Lens Reflex (DSLR) cameras and lenses, sensors, data capture, processing, pixels, resolution, asset managment, tagging, frames, depth of field, lighting, outputting, distribution, construction, image-making strategies, and emerging and experimental forms.

MUL 210 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...4 credits
Prerequisite: Art 216. Instruction in various aspects of digital imaging with an emphasis on bitmap (photographic) image design and processing using Adobe Photoshop.

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..........................3 credits
This course covers standard business practices relating specifically to the media industry. Develop the basic skills and resources for job searching, including writing a resume and proper business communication practices. Create a plan for developing your portfolio. Establish and organize an efficient workflow for a freelance business. Demonstrate an understanding of project management skills. This course is geared for Media Arts majors. It is recommended that you have completed at least one term of multimedia design, graphic design or web design coursework prior to taking this course. May be offered as a traditional, fully online or hybrid course.

MUL 220 Intermediate Typography.......................................3 credits
Prequisite: ART 119 This course provides students with an in depth understanding of how typography is used to communicate content both visually as image as well as through the invisibility of well chosen body type. Type hierarchy and grid systems will be explored in order to provide graphic design students with organizational layout skills commensurate with what is needed as a design professional. Communication of other information, i.e., data, graphs and tables will also be considered. The etiquette of whole page and multi-page document layout will also be taught. Students will perform a series of projects to demonstrate skill in these areas.

VP 151 Video Production 1: Camera......................................3 credits
Prerequisite: MUL 105 or ART 261, and 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 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, instructing patients with special needs, and dealing with office emergencies.

MA 150 Laboratory Orientation...3 credits
Prerequisites: Admission to the Medical Office Assistant program, successful completion of MA 110 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
Prequisite: Credit level MA 110 minimum grade of C and credit level HO 112 minimum grade of C. Students will increase their understanding of the medical profession, learn effective resume writing, interviewing techniques and job search skills. Students will learn and practice presenting themselves professionally to employers in preparation for a cooperative education internship.

MA 280 Co-op Ed: Medical Office Assistant ....5-12 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, 541.463.3108.

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. May be offered online.

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
Prerequisite: MUS 101 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 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 with MUS115 and MUS128 concurrently.

MUS 113 Music Theory 1 (Third Term)..................................4 credits
Prerequisites: 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.

MUS 114 Sight-reading and Ear Training (First Term)..........2 credits
Prerequisite: MUS 111. 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. May be taken with MUS111 and MUS127 concurrently.

MUS 115 Sight-reading and Ear Training (Second Term).....2 credits
Prerequisites: MUS 112 and 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.

MUS 116 Sight-reading and Ear Training (Third Term) ....2 credits
Prerequisites: MUS 113 and 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, May be taken 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
Prerequisite: MUS 111. 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. May be taken with MUS111 and MUS114 concurrently.

MUS 128 Keyboard Skills 1 (Second Term) ....2 credits
Prerequisites: MUS 127 and MUS112. 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.

MUS 129 Keyboard Skills 1 (Third Term) ....2 credits
Prerequisites: MUS 113 and MUS 128. 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. May be taken 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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 6 total credits. May be applied to transfer associate's degrees.

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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 6 total 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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 6 total 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. May be repeated up to 6 total credits

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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 6 total credits.

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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 6 total credits. May be applied to transfer associate's degrees.

MUS 201 Exploring Music: Introduction to Music and Its Literature..3 credits
The three terms of this course cover the development of Western Music from its beginnings through modern times. The sequence presents an overview of styles and practices with a focus on enjoyment through listening. A brief opening section on ethnomusicology helps define the thread that connects the music of world cultures. The first term covers the Medieval, Renaissance, Baroque, and Classical Eras. First course in sequence. Course can be taken out of sequence. No prerequisite. Course fulfills Arts and Letters requirement for AAOT.

MUS 202 Exploring Music: Introduction to Music and Its Literature........3 credits
The three terms of this course cover the development of Western Music from its beginnings through modern times. The sequence presents an overview of styles and practices with a focus on enjoyment through listening. A brief opening section on ethnomusicology helps define the thread that connects the music of world cultures. The second term covers the Romantic Era and the origins and rise of Opera through the Romantic Era. Second course in sequence. Course can be taken out of sequence. No prerequisite. Course fulfills Arts and Letters requirement for AAOT.

MUS 203 Exploring Music: Introduction to Music and Its Literature........3 credits
The three terms of this course cover the development of Western Music from its beginnings through modern times. The sequence presents an overview of styles and practices with a focus on enjoyment through listening. A brief opening section on ethnomusicology helps define the thread that connects the music of world cultures. The third term covers music of the Nineteenth and Twentieth/Twenty-first Centuries including some jazz and rock. Third course in sequence. Course can be taken out of sequence. No prerequisite. Course fulfills Arts and Letters requirement for AAOT.

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, MUS116, and MUS 129. 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. May be taken MUS224 and MUS214 concurrently.

MUS 212 Music Theory 2 (Second Term)........3 credits
Prerequisites: 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.

MUS 213 Music Theory 2 (Third Term)........3 credits
Prerequisites: MUS 212. Emphasis is on musical language of the 20th century, including modes, atonality, serialism, set theory, new forms and new organizations of rhythm and meter.

MUS 214 Keyboard Skills 2 (First Term)........2 credits
Prerequisite: MUS 129, MUS 211 and MUS 224. This course is part of a six-term sequence. It is designed to develop piano skills essential for all music majors. Keyboard Skills 2 focuses on chromatic harmony. Skills include the performance of scales and arpeggios, chord progressions with modulations (including altered chords) with corrective voice leading and resolution, harmonization, transposition, improvisation, realization of figured bass, sight-reading of two-part piano texture.

MUS 215 Keyboard Skills 2(Second Term)........2 credits
Prerequisite: MUS 212, MUS 214 and MUS 225. This course is part of a six-term sequence. It is designed to develop piano skills essential for all music majors. Keyboard Skills 2 focuses on chromatic harmony. Skills include the performance of scales and arpeggios, chord progressions with modulations (including altered chords) with corrective voice leading and resolution, harmonization, transposition, improvisation, realization of figured bass, sight-reading of two-part piano texture.

MUS 216 Keyboard Skills 2(Third Term)........2 credits
Prerequisite: MUS 215 six-term sequence. It is designed to develop piano skills essential for all music majors. Keyboard Skills 2 focuses on chromatic harmony. Skills include the performance of scales and arpeggios, chord progressions with modulations (including altered chords) with corrective voice leading and resolution, harmonization, transposition, improvisation, realization of figured bass, sight-reading of two-part piano texture.

MUS 224 Sight-reading and Ear Training (First Term)........2 credits
Prerequisites: MUS 211. Continues development of student's perception, knowledge, and skills needed to notate melodies, 2 and 4 part harmonies. May be taken with MUS211 and MUS214 concurrently.

MUS 225 Sight-reading and Ear Training (Second Term).....2 credits
Prerequisites: MUS 212 and MUS 224. Continues development of student's perception, knowledge, and skills needed to read and write music.

MUS 226 Sight-reading and Ear Training (Third Term)........2 credits
Prerequisites: MUS 213 and MUS 225. Continues development of student's perception, knowledge, and skills needed to read and write music.

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 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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits. 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 wellsprings of this music, which is native to the United States. No audition required; open to all Lane students. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total 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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total 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 combos 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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total 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). Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total 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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total 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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total 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 necessary, but ability to match pitch 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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits. May be transferred.

Music Lessons

For information, contact the Music, Dance and Theatre Arts Department, Bldg. 6/Rm. 204, 541.463.3108.

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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

MUP 171 Individual Lessons: Piano (First-year level) ....1-2 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. 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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

MUP 174 Individual Lessons: Voice (First-year level) ....1-2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 171. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

MUP 175 Individual Lessons: Violin (First-year level)...........2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 171. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits

MUP 178 Individual Lessons: Bass (First-year level).............2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 171. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

MUP 181 Individual Lessons: Flute (First-year level) ....2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 171. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits

MUP 183 Individual Lessons: Clarinet (First-year level) ....2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 171. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

MUP 184 Individual Lessons: Saxophone (First-year level)..2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 171. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

MUP 186 Individual Lessons: Trumpet (First-year level) ......2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 171. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

MUP 187 Individual Lessons: French Horn (First-year level)..2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 171. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

MUP 188 Individual Lessons: Trombone (First-year level)..2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 171. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

MUP 189 Individual Lessons: Baritone Horn (First-year level)..2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 171. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

MUP 190 Individual Lessons: Tuba (First-year level)..2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 171. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

MUP 191 Individual Lessons: Percussion (First-year level)..2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 171. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

MUP 192 Individual Lessons: Electric Bass (First-year level)..2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 171. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

MUP 194 Individual Lessons: Guitar (First-year level)..2 credits
Prerequisite: Jury required to enter this level. See course desctiption for MUP 171. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

MUP 274 Individual Lessons: Voice (Second-year level)..................2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 271. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

MUP 275 Individual Lessons: Violin (Second-year level)..................2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 271. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

MUP 281 Individual Lessons: Flute (Second-year level)..................2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 271. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

MUP 283 Individual Lessons: Clarinet (Second-year level)..................2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 271. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

MUP 284 Individual Lessons: Saxophone (Second-year level)..................2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 271. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

MUP 286 Individual Lessons: Trumpet (Second-year level)..................2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 271. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

MUP 287 Individual Lessons: French Horn (Second-year level)..................2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 271. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits

MUP 288 Individual Lessons: Trombone (Second-year level)..................2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 271. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

MUP 289 Individual Lessons: Baritone Horn (Second-year level)..................2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 271. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

MUP 290 Individual Lessons: Tuba (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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

MUP 292 Individual Lessons: Electric Bass (Second-year level)..................2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 271. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

MUP 294 Individual Lessons: Guitar (Second-year level)..................2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 271. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

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, use their preferred learning styles, study for tests, improve memory, read and study from textbooks, manage time effectively, use the library, and make visual study tools. 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 multidisciplinary 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 115 LPN Transition to OCNE..6 credits
Prerequisite: NRS 230 and NRS 232. 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 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. The course includes classroom, simulation and lab learning experiences including evaluation of certain clinical skills.

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 recognitional 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. May be offered online.

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.

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.

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; and BI 234. 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 sequience; Microbiology.

NRS 233 Pathophysiological Process 2..................................3 credits
Prerequsitie: 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.

NRS 280 Co-op Ed: Nursing...2-12 credits
Prerequisite: Admission in Nursing Program. This is a voluntary learning experience in a professional medical setting where students gain additional nursing skills under the guidance of working nursing professionals, explore career options, and integrate theory and practice. This course in not required for the Nursing Program AAS degree

PN 101 Practical Nursing 1 ....12 credits
Prerequisite: WR 115; HO 100; BI 233; PSY 201 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: nursing and the health care delivery system, complementary and alternative care; legal and ethical issues, including scope of practice; communication; nursing process, critical thinking, physical assessment; documentation, abbreviations, HIPAA; development across the life span; health promotion; cultural diversity; nutrition and therapeutic diets; medical asepsis and infection control; pharmacology and medication administration; and pain assessment. Skills taught during this course will include communication techniques, physical assessment, ambulatory care skills; focused assessments (Braden, falls risk, mini cognition and pain), nursing process, documentation, and oral, topical, drops, ointments, sublingual medication administration, dosage calculation. Clinical application of content and skills will take place in the nursing lab and in outpatient and ambulatory care settings. May be offered in a format with some online instruction.

PN 102 Practical Nursing 2 ....12 credits
Prerequisite: PN 101 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 103 Practical Nursing 3 .... 13 credits
Prerequisites: PN 102 Care of persons with cancer, other hematological, immune, mental health, and reproductive disorders; pediatric and obstetrical patients; end-of-life care. Trends in practical nursing; intravenous medications. Clinical applications in the simulation lab and in the acute-care and clinic settings. May be offered through Distance Learning.

PTA 280A Co-op Ed: First Clinical Internship .... 4-8 credits
Prerequisite: PTA 104, PTA 104L, PTA 133 and PTA 133L Second year PTA students apply PT interventions under PT/PTA supervision at a contracted clinical site. Students progress toward advanced beginner and intermediate 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 Internship .... 4-8 credits
Prerequisite: PTA 280A Second year PTA students apply PT interventions under PT/PTA supervision at a contracted clinical site. Students progress toward intermediate and advanced intermediate 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 Internship .... 4-8 credits
Prerequisite: PTA 280B Second year PTA students apply PT interventions under PT/PTA supervision at a contracted clinical site. Students progress toward advanced intermediate and 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
Nutrient functions, food sources and guidelines are discussed as well as 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 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. May be offered online.

FN 130 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 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 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 235 Managing Food and Nutrition Services .... 3 credits
Prerequisite: CA 160, CA 175, CG 203. 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.

FN 240 Introduction to Nutrition and Metabolism .... 4 credits
Prerequisites: CH 112 or CH 221 This course will cover similiar 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 245 Medical Nutrition Therapy folr Dietary Managers .... 3 credits
Prerequisite: FN 105 or FN 225This course focuses on Medical NutritionTherapy concepts within the scope of a dietary manager working within a skilled nursing facility. The content is designed to prepare students for their cooperative education experience, the dietary manager credentialing examination, and their professional careers

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.

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 .... 1-12 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 required. 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: Occupational Skills Training .... 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.

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 as a live interactive course.

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 as a live interactive course.

PHL 205_H Contemporary Moral Issues-Honors............4 credits
This honors class delves deeper into course topics and requires 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 see *lanecc.edu/honors* for 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. This course also meets Lane Degree requirements that are fullfilled by the same course number without the _H.

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.

PHL 221_H Critical Thinking-Honors............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 *lanecc.edu/honors* for more information. 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. This course also meets Lane Degree requirements that are fullfilled by the same course number without the _H.

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 as a live interactive course.

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 231 Buddhist Meditation Traditions: Principles and Practices............4 credits
This course examines a number of Buddhist meditation principles and practices, drawing on the historical Buddha, and content from the Zen, vipassana, metta, and vajrayana (Tibetan) Buddhist traditions. The course will stress conceptual understanding, and making use of meditation as a cognitive tool for improving mental and emotional intelligence.

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. May be offered online.

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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total credits.

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. May be offered online.

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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total 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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

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 crossover 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 Exercise and Movement Science

For information, contact the Health and PE Division, Bldg. 5/Rm. 205, 541.463.5545.

PE 181B Cardio Core Conditioning......1 credits
Designed to improve daily functioning, this class integrates rhythmic cardiovascular and resistance exercises with core conditioning techniques. Students develop deep muscles within the torso to improve stability, mobility, strength and endurance. Steps, hand weights and elastic bands are utilized to maximize exercise benefits. This class format is suitable for students of various fitness levels.

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 kickboxing aerobics.

PE 181K Cardio Kickboxing......1 credits
Classes include combinations and drills inspired by various forms of martial arts. Students apply basic fitness principles to enhance cardiorespiratory endurance while examining concepts to improve overall health, such as stress management and nutrition.

PE 181SB Body Sculpt......1 credits
Rhythmic class incorporates resistance and aerobic exercises to increase muscular endurance and cardiorespiratory fitness. Weights, resistance bands and other equipment are utilized to develop muscle firmness and definition. Fitness principles, stress management, and nutrition concepts are examined.

PE 181SS Step and Sculpt......1 credits
Step & Sculpt is designed to increase muscular 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 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, injury prevention and nutrition. Health, Wellness, and Fitness concepts will be addressed.

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.

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, injury prevention and nutrition. Health, Wellness and Fitness concepts will be addressed.

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 resistance training using a variety of exercise modalities. Develop and assess strength, muscular size, muscle definition, toning and improve general physical condition. Safe and proper technique, routines, programs, nutrition and stress management concepts will be addressed.

PE 183T Power Conditioning .... 1 credits
Prerequisites: Any of the sports classes ((PE191, PE192, PE193, PE195, PE196 or PE197) This progressive, cross-training approach is designed to improve strength, flexibility and core stability. Resistance training using dumbbells, bands, body weight and machines will be introduced. Develop and assess strength, muscle and improved mental wellbeing. Safe techniques, routines, nutrition and stress management concepts will be discussed.

PE 183U Strength Training for Women .... 1 credits
Emphasis on resistance training using a variety of exercise modalities. Develop and assess strength, muscular size, muscle definition, toning and improve general physical condition. Safe and proper technique, routines, programs, nutrition and stress management concepts will be addressed.

PE 183W Progressive Integrative Exercise .... 1 credits
Students perform personalized corrective exercise programs to improve fitness in both the injured and individuals with controlled diseases. Flexibility, strength, cardiovascular endurance, nutrition and stress management principles will be covered. 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 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
Instruction and practice in the fundamentals skills and techniques used for both straight and hook deliveries will be covered. Rules, scoring and etiquette will be addressed. This course is 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 grade of C-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 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 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 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. Learn how nutrition contributes to improved well being and stress reduction. Learn how movement, breathing and nutrition contribute to stress reduction.

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. Learn how nutrition contributes to improved well being and stress reduction. Learn how movement, breathing and nutrition contribute to stress reduction.

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, nutrition 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. Learn how nutrition contributes to improved well being and stress reduction. Learn how movement, breathing and nutrition contribute to stress reduction.

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. Learn how nutrition contributes to improved well being and stress reduction. Learn how movement, breathing and nutrition contribute to stress reduction.

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. Learn how nutrition contributes to improved well being and stress reduction. Learn how movement, breathing and nutrition contribute to stress reduction.

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 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. Individual skills and ball handling will be addressed. Team play may include 11 on 11 or mini-game play.

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 utilizred 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 similiar 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 .... 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 .... 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, development 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, positioning, physical agents, and aquatic therapy. May be offered online.

PTA 101L Introduction to Clincal 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 Cliinical 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 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 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 further professional development for entry into the workplace. May be offered online.

PTA 201 Physical Therapy and the Older Adult .... 2-24 credits
Prerequisite: admission into PTA Program, second year student. This course is designed to facilitate understanding of older adults and their needs and to promote concepts of successful aging based on the physical therapy interventions. Dementia, pharmacology, fall prevention, and the PTA role in the team approach to providing quality care for the older adult will be examined. May be offered in a format with some online instruction.

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. Course culminates with a public class presentation of service learning projects to the PTA Advisory Committee. May be offered online.

PTA 204 PT Interventions-Neurological Dysfunctions..........5 credits
Prerequisite: PTA 104, PTA 104L, PTA 133, and PTA 133L. 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: PTA 104, PTA 104L, PTA 133, and PTA 133L. 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: PTA 104, PTA 104L, PTA 133, and PTA 133L. 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 Disfunctions Lab..........2 credits
Prerequisite: PTA 104, PTA 104L, PTA 133, and PTA 133L. 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 Internship..........4-8 credits
Prerequisite: PTA 104, PTA 104L, PTA 133 and PTA 133L Second year PTA students apply PT interventions under PT/PTA supervision at a contracted clinical site. Students progress toward advanced beginner and intermediate 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 Internship..........4-8 credits
Prerequisite: PTA 280A Second year PTA students apply PT interventions under PT/PTA supervision at a contracted clinical site. Students progress toward intermediate and advanced intermediate 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 Internship..........4-8 credits
Prerequisite: PTA 280B Second year PTA students apply PT interventions under PT/PTA supervision at a contracted clinical site. Students progress toward advanced intermediate and 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.

ASTR 121 Astronomy of the Solar System..........4 credits
Prerequisite: MTH 052 ir higher. ASTR 121, 122 and 123, may be taken out of sequence. This sequence provides an in-depth and comprehensive introduction to the science of astronomy. These courses are designed to serve non-science majors, but also offer a good introduction for prospective science majors interested in Astrophysics or Space Science. These courses have a significant lab component. ASTR 121 focuses on naked-eye astronomy and the science of astronomy focused primarily on 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 higher. ASTR 122 focuses on the fundamental physic concepts underlying our understanding of stars. How we observe light from stars and 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.

ASTR 123 Cosmology and the Large-Scale Structure of the Universe..........4 credits
Prerequisite: MTH 052 or higher. 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 Bang, the geometry of space-time, the cosmic background radiation, Dark Matter and Dark Energy.

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'¬ís 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 190 Physics Investigation Laboratory..........2-3 credits
Prerequisites: ASTR 107 or ASTR 121 or ASTR 122 or ASTR 123 or GS 104 or PH 101 or PH 102 or PH 103 or PH 201 or PH 202 or PH 203 or PH 211 or PH 212 or PH 213 with a grade of C or better and MTH 095 or higher or instructor consent. A rich undergraduate research experience in which students learn to think as scientists, gather and manage data, and individually and collectively develop useful questions and conclusions. Goals include design, exploration and testing appropriate to science and engineering. This two credit option can be repeatead up to 6 credits.

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, fluid pressure and Bernouli's equation, 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 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. May be offered online.

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 liberties in United States, and the formation and implementation of U.S. economic and foreign policy. May be offered online.

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 required, but course can be repeated.

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 required, but course can be repeated.

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-Honors........4 credits
This honors class delves deeper into course topics and requires 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 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. This course also meets Lane Degree requirements that are fullfilled by the same course number without the _H.

SLD 280 Co-op Ed: ASLCC........1-2 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 required, but course can be repeated.

Psychology

For information, contact the Social Science Division, Center Bldg./Rm. 403, 541.463.5427.

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 workbook course materials. May be offered as a telecourse.

PSY 201 General Psychology........4 credits
Prerequisite: Sophomore standing recommended. Scientific principles of psychology and psychological research; an introduction to statistical methodology, developmental and structural aspects, neurobiology and neurochemistry, and brain anatomy; senses and perceptual processes; states of consciousness. Basic principles and theories of behavior. May be offered online.

PSY 202 General Psychology........4 credits
The study of behavior as it is influenced by learning, remembering, forgetting, higher brain functions, motivation and emotions. May be offered online.

PSY 203 General Psychology........4 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 212 Learning and Memory........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 215 Lifespan Developmental Psychology........4 credits
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 231 Human Sexual Behavior........4 credits
Prerequisite: PSY 201 or instructor consent. Explores the behavioral, psychological and biological components of human sexual behavior. Topics include cross-cultural comparisons, learned and developmental origins, biological systems, variations in sexual behavior, gender issues and sexual difficulties. Course emphasizes behavioral rather than health issues in human sexuality.

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.

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

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, use their preferred learning styles, study for tests, improve memory, read and study from

textbooks, manage time effectively, use the library, and make visual study tools. 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.

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. 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. May be offered online.

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 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 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 251 Pulmonary Diagnostics and Monitoring Lab...........1 credits
Co-requisite: RT 254 Emphasis is placed on beside 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 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 270 Clinical Competency Assessment.............................1 credits
Prerequisite: RT 280D (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 Neonatal Resuscitation Protocol, Advanced Cardiac Life Support, and Pediatric Advanced Life Support.

RT 280A Co-op Ed: Respiratory Care 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 280B Co-op Ed: Respiratory Care Clinical Practice 2 ....6 credits
Prerequisite: RT 280 A or 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 280C Co-op Ed: Respiratory Care Clinical Practice 3 ....8 credits
Prerequisite: RT 280B or 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 280D Co-op Ed:Respiratory Care Clinical Practice 4 ....8 credits
Prerequisites: RT 280C or 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 280R Co-op Ed: Respiratory Care ....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.

RT 280X Co-op Ed: Respiratory Care
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.

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 ....4 credits
Introduction to fundamental concepts in sociology, such as culture, social structure, organizations, socialization, deviance, and stratification, as well as theoretical traditions and research methodology. Development and application of the sociological imagination. May be offered as a telecourse or online.

SOC 205 Social Stratification and Social Systems ....4 credits
Explores patterns of social inequality, or stratification, using sociological research and theory. Focuses on race, class, and gender inequality. May be offered as a telecourse.

SOC 206 Institutions and Social Change ....4 credits
Sociological analysis of fundamental social institutions, such as family, education, the economy, and the state; connections among institutions, and the forces and dynamics of social change. May be offered as a telecourse or online.

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 multicultural 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 ....4 credits
Examines family, parenting, reproduction, intimate relationships, sexuality, and family disruptions in a social context. Utilizes sociological approach to develop insights into personal experiences and inform 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 Deli, 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 though 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 ....4 credits
Analyzes contemporary social problems, including topics such as social inequality, environmental degradation, impacts of

globalization, and criminalization. Examines how social conditions come to be labeled as "problems," the causes and consequences of those conditions, and how social activists and policymakers respond to social problems.

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

Spelling-See Study Skills

Student Leadership Development

For information, contact the Student Life and Leadership Department, Bldg. 1/Rm. 206, 541.463.5337.

SLD 103 Post-Racial America: Challenges & Opportunities .... 4 credits
This course is designed to examine the current state of race relations and discourse on race in America in a "Post Civil Rights Era" environment. The course will examine the societal issues facing African Americans, Latinos/Latinas, Native Americans and other underrepresented minority populations.

SLD 111 Chicano/Latino Leadership 1: Quien Soy? Quienes .... 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.

SLD 112 Chicano/Latino Leadership 2: Cultural Heroes .... 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.

SLD 113 Chicano/Latino Leadership 3: Affirmative & Resistance .... 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.

SLD 121 African American Leadership: History, Philosophy, & Practice .... 4 credits
African American Leadership: History, Philosophy, & Practice is a course designed to examine the history, philosophy, key leadership strategies and practices of African American leaders. This course focused on Leadership Theory, Foundations of AA Leadership and AA Leadership in Practice.

SLD 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.

SLD 280 Co-op Ed: ASLCC .... 1-2 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 required, but course can be repeated.

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.

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 113 Connections: Specific Study Skills .... 3 credits
Corequisite: WR 093. 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 (EL113 and the content-area course) are either linked with extensive instructor collaboration or team-taught. Students will optimize note taking, test preparation, memory, reading, time management, discussion, research, and critical thinking skills with a focus on specific content. For a description of this ALS class in Spanish, see *lanecc.edu/als/classesenspanol.htm.*

EL 113W Connections: Specific Study Skills .... 3 credits
Corequisite: WR 097. Students will develop and strengthen their critical reading, thinking, and writing skills. Together, EL113W and WR097 integrate these skills to prepare students for college-level writing. May be offered online.

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, use their preferred learning styles, study for tests, improve memory, read and study from textbooks,

manage time effectively, use the library, and make visual study tools. Coursework requires college-level reading skills. May be offered online.

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, use their preferred learning styles, study for tests, improve memory, read and study from textbooks, manage time effectively, use the library, and make visual study tools. Course work requires college-level reading skills.

EL 115R Effective Learning..3 credits
Co-requisite: RD087. 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, use their preferred learning styles, study for tests, improve memory, read and study from textbooks, manage time effectively, use the library, and make visual study tools. Coursework requires college-level reading skills.

EL 115W Effective Learning..3 credits
Corequisite: WR 097. Students will develop and strengthen their critical reading, thinking, and writing skills. Together, EL 113W and WR 097 integrate these skills to prepare students for college-level writing.

RD 087 Preparatory Academic Reading ....3 credits
Prerequisite: Placement test. Co-requisite: EL 115R. Students will learn active reading strategies such as finding main idea and supporting details to improve textbook comprehension. In addition, students will develop techniques for enlarging vocabulary and creating study tools. Reading selections from actual first-year textbooks are part of the course.

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 effectively utilize 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/or 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.

RD 121 Academic Literacy..4 credits
This course teaches critical thinking, reading, and writing. Topics include strategies for reading and analyzing academic prose, the influence of experience, attitude, and belief on thinking processes; understanding the rhetorical dimensions of language; and methods of academic research as inquiry.

Television-See Media Arts

Theatre Arts

For information, contact the Music, Dance and Theatre Arts Department, Bldg. 6/Rm. 204, 541.463.3108.

TA 121 Introduction to Costume Design...............................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 and physical skills. Actors receive coaching on contemporary approaches to performing Shakespeare.

TA 141 Acting 1 ....3 credits
Introduces the student to basic acting skills. Class exercises focus on increased self-awareness, observation skills, relaxation techniques, voice technique, 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 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 other improv techniques. This course develops creative energy and helps minimize inhibitions. It is beneficial for actors and professionals of all fields.

TA 145 Improvisational Theatre 2..3 credits
Previous improv experience required. Students study and practice contemporary improv techniques 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. 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, read, and write pieces for live theater. Final course project is a completed ten-minute play that is ready for a full production.

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 141 This course begins a three-term concentration on the problems of characterization. This course is recommended for those students transferring to schools requiring entrance auditions. Material varies from term to term and may include classical to contemporary theatrical literature.

TA 242 Intermediate Acting..3 credits
Prerequisite: TA 241. This course continues the concentration on the problems of characterization. Students learn to bring themselves to the role in an intimate way. A preparation for the third term in this series. Material varies from term to term and may include classical to contemporary to post-modern theatrical literature.

TA 243 Acting for the Camera..3 credits
Prerequisite: TA 242 This course continues the concentration on the problems of characterization,focusing on acting for the camera. Students undertake roles in independent films made by local film makers.

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.

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.

TA 272 Introduction to Theatre..4 credits
Students will analyze theatrical literature, history, and contemporary production practices. Emphasis is placed on the value of theatre arts to society and the individual.

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 College Reading and Learning Association's (CRLA) 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 achieve 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 achieve 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 achieve Master/Level III 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.

IDS 280S Co-op Ed: Sustainability Coordinator .... 3-12 credits
This internship course offers a work experience that integrates theory and practice in the field of sustainability. It provides opportunities to develop skills, explore career options and network with professionals and employers while earning academic credit toward the degree.

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. May be offered online.

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 science technician fields, examining personal and global water issues. The class will define water as a critical concern of society at all levels. Students will investigate water employment opportunities through various sources.

WATR 105 Water Conservation: Residential .... 4 credits
This course focuses on residential water conservation and efficiency strategies. The course covers program development, water use, waste water, auditing, efficiency measures, alternative sources, 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 & waste; alternative water sources; 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 communication and collaboration skills that develop effective community sustainability programs. Learn techniques to overcome sustainable behavior barriers. Practice community initiatives through direct people contact, 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 while developing job search tools and skills, including developing a meaningful resume. Students will learn and practice presenting themselves to employers in a competent and professional manner in preparation for a cooperative internship.

WATR 206B Co-op Ed: Water Conservation Seminar 2 .... 1 credits
Prerequisite: WATR 206A This course is a continuation of WATR 206A, further developing students,Äô understanding of industry expectations, introduces federal workers rights and regulations, and strengthens job search tools and skills. The emphasis is to provide skills that will help students find employment and be a successful employee 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 209 Urban Agriculture and Water .... 2 credits
Prerequisite: WATR 107 and WATR 208 This course extends knowledge introduced in WATR 208 & WATR 107 into the urban environment. Retrofitting for resilient food production in urban & suburban environments. Building of local infrastructure to support water stewardship in response for forecast climate changes. Integration of Outdoor Landscape with Agricultural Production.

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 with a focus on Low Impact Development strategies 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 work experience that integrates classroom theory with practical experience in the field of Water

Conservation. It provides opportunities to 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

WST 102 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, including developing a meaningful resume. Students will learn and practice presenting themselves to employers in a competent and professional manner in preparation for an 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
Prerequisite: ENVS 181 or ENVS 183 with grade of "C-" or better. 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
This capstone experience explores sustainable approaches to watersheds that will improve and maintain the integrity of water systems. Students combine watershed field skills and conceptual knowledge to produce a site proposal incorporating standard best management practices.

WST 280 Co-op Ed: Watershed Science Technician.........1-12 credits
This internship course offers work experience that integrates classroom work with practical experience in the field of Watershed Science. It provides opportunities to develop skills, explore career options and network with professionals and employers while earning academic credit toward the degree.

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.

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 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 and academic goals. Class activities will stress practical and personal application of course information. Successful completion of the first Life Transitions course is required.

CG 208 Career and Life Planning 2: WIT.................................3 credits
Prerequisites: CG140T. This course provides advanced career guidance to women who have completed Women In Transition. Students will assess their dependable strengths, motivational patterns, and advantages/challenges as they create a viable career plan. Particular focus is on increasing self-confidence, effective decision-making, thorough career research, and connecting with employers.

CG 210 Life Transitions 3 ....3 credits
Prerequisite: CG 207 or CG 208. This course is the third level of the Women in Transition program and is focused on the concept of "life as a relationship to everything." It is designed to assist WIT students in their capacity to identify the enduring components of healthy attachment and relational connections that actively contribute to their well-being and ability to successfully achieve their educational goals. Topics include: attachment theory; the effect of trauma on relational capacity; relationship mapping and the exploration of relational narratives; multicultural, gender and historical perspectives on relationships; looking beyond family and intimate partnerships in defining relationships; and creation of positive relational attachments at Lane Community College.

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).

PE 183U Strength Training for Women.................................1 credits
Emphasis on resistance training using a variety of exercise modalities. Develop and assess strength, muscular size, muscle definition, toning and improve general physical condition. Safe and proper technique, routines, programs, nutrition and stress management concepts will be addressed.

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 multicultural 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 (print 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.

WR 080 English Grammar and Sentence Writing................6 credits
Prerequisite: Placement by the LCC reading/writing test, instructor consent, or a passing grade in RD080 or RD087. 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 087 English Grammar and Paragraph Writing................6 credits
Prerequisite: Placement by the LCC reading/writing test, instructor consent, or a passing grade in RD080 or RD087. This course integrates English grammar, paragraph writing, and readings. Students will develop their ability to write standard English sentences that demonstrate a mastery of grammatical concepts while learning about and using the writing process. Students will also demonstrate control and understanding of the writing process: generate and organize ideas, write drafts, revise and edit paragraphs. In addition, students will practice paragraph structures, development of ideas in a paragraph, and sentence editing and revision. Course activities may be enhanced through conferences, workshops, and/or online modules. May be offered online.

WR 093 College Writing for ELL Students............................3 credits
Prerequisite: A passing grade in WR 089 or WR 090, or placement by the LCC reading/writing test, or recommendation of the instructor. Corequisite: EL 113. 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 097 Introduction to Essay Writing..................................3 credits
Prerequisites: WR080 or WR 087 or WR 089 or WR 090 or placement test. Corequisite: EL 113W. This course introduces students to essay writing and prepares students 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 learn to recognize and correct grammatical errors in their writing. Course activities may be enhanced through conferences, workshops, and/or online modules. May be offered online.

WR 105 Writing for Scholarships...2 credits
Prerequisite: WR 115 or placement test. "Writing for Scholarships" encourages students to develop their ideas and writing skills beyond the classroom microcosm. Students will learn how to present their self-inquiry in the form of effective scholarship essays. Students will include these essays in an application to Oregon Student Assistance Commission. The course will emphasize the following skills: Descriptive writing, organizational strategies, audience engagement, and revision. We will look at winning scholarship essays from former students so as to define what "works" and employ these working techniques in current assignments. 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. WR 115W 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 121_H Introduction to Academic Writing-Honors..........4 credits
Prerequisite: Appropriate scores on Lane's Writing Placement Test or a passing grade (C-or better) in WR 115. This honors class delves deeper into course topics and requires a high level of student motivation; the pace may be faster than non-honors courses. See *lanecc.edu/honors* for information. 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. This course also meets Lane Degree requirements that are fullfilled by the same course number without the _H.

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, analyzing, 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. May be offered online.

WR 122_H Composition: Argument, Style and Research-Honors..........4 credits
Prerequisite: A passing grade (C-or better) in WR 121 or a passing score on the English Department's Waiver exam. This honors class delves deeper into course topics and requires a high level of student motivation; the pace may be faster than non-honors courses. See *lanecc.edu/honors* for information. While continuing the concerns of WR 121-English Composition: Introduction to Academic Writing WR 122-Argument, Style, and Research¬ófocuses 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. This course also meets Lane Degree requirements that are fullfilled by the same course number without the _H.

WR 123 Composition: Research Writing..........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 narrative, backstory, pacing, and characterization by reading the work of other students and published authors, whose work will serve as models. The readings will include 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 242 is a course in writing poetry. The course will help students: 1) learn the elements of poetry; 2) read poems by well-known poets; 3) develop ability in poetic composition; 4) read and write poems effectively; 5) receive constructive criticism of their writing; 6) learn to be balanced and confident in their critical evaluations of their peers; and 7) gain a better understanding of themselves and others as writers.

WR 280 Co-op Ed: English/Writing..........3-12 credits
This internship course is for students with excellent writing skills who might want to 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

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 the Academic and Student Services section in this catalog.

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 the Tuition, Fees, Financial Aid, and Payment section in 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 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. A few of the current noncredit technical trainings available through CE are described in this catalog, Continuing 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 list of course offerings and registration information is included in the Continuing Education Class Schedule, mailed each quarter to area residents. The Continuing Education Class Schedule also is available on the main campus, at the Downtown Campus, at the Cottage Grove center, and at *lanecc.edu* prior to the beginning of each term.

Tuition and fees for noncredit classes are published in the Continuing 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 Campus or call 541.463.6100.

Continuing Education's Accreditations, Certificates and Affiliations

- Alcohol Servers Permit, certified by the Oregon Liquor Control Commission
- Community Health Worker Certification, approved by Oregon Health Authority
- Flaggers Permit, credential through Oregon Department of Transportation
- Licensed Massage Therapists, approved by Oregon Board of Massage Therapists
- Medical Scribe Certification, American College of Medical Scribe Specialist (ACMSS) Certified Medical Scribe Specialist (CMSS)
- Nursing Assistant 1 authorized testing center, Headmaster approved
- Nursing Assistant I and II Certification, approved training by Oregon State Board of Nursing
- Pharmacy Technician Certification, Pharmacy Technician Certification Board
- Phlebotomy Certification, American Society of Clinical Pathology
- Real Estate Broker and Property Management License, approved by the Oregon Real Estate Agency

Continuing Education Career Training

Community Health Worker Certification Training The Community Health Worker will play an increasing important role in helping Oregon's healthcare system. The Community Health Worker is at the forefront in advocating for, engaging and couching patients to improve long-term health behaviors and increase rates at which patients follow treatment protocols.

The Community Health Worker certification training will be a supplemental certification for incumbent healthcare workers in established jobs that are similar to, though differentiated from, Community Health Workers, such as Homecare Worker, Certified Nursing Assistants, Licensed Practical Nurse, Medical Assistant, Paramedic or Physical Therapy Assistants.

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.

Massage Therapy Prelicensure This training is designed to prepare students to sit for the Oregon State Board of Massage Therapists Licensing Exams and has been approved by the Oregon Board of Massage Therapists. The training 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, labs and clinical. Contact hours and program content are subject to change. For current information, visit *lanecc.edu/ce.*

Medical Scribe Lane is pleased to announce a fall 2015 offering of an exciting Medical Scribe Specialist program. This program will be trained using an outcomes based learning model that includes an academic curriculum of medical terminology, anatomy and physiology, disease processes, pharmacology, laboratory, electronic medical record simulation, medicolegal/HIPAA, CMS/JCAHO, medical coding/reimbursement, clinician workflow, in addition to real-time documentation at the point of care. Successful graduates will be qualified to sit for their American College of Medical Scribe Specialist (ACMSS) Certified Medical Scribe Specialist (CMSS) credential. Existing licensed/certified clinical providers may be eligible for an accelerated program. For more information, contact Kathy Calise at *calisek@lanecc.edu*.

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. 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*.

English as a Second Language/Inglés Como Segundo Idioma

The English as a Second Language (ESL) Department provides instruction for adult English language learners seeking to improve their oral and written communication 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 resident and international students from all over the world. All classes are culturally mixed, and all instruction is conducted exclusively in English. There is no minimum skill level to enroll in ESL classes. This program provides instruction at various levels with classes that focus on grammar, reading, writing, and oral communication skills. Daytime classes are offered at the Main Campus four or five days a week, while evening classes are offered at Downtown Campus two days a week.

Testing and Placement New resident students must make an appointment to take an English placement test. Placement tests are available at scheduled times in both the day and evening. After testing, assessment specialists provide course recommendations and students can enroll on the next available registration day.

New international students need to complete the international application online (processing fee required) and submit the following documents electronically: copy of passport, transcripts from most recent school attended and proof of financial support. Go to *lanecc.edu/international* for more information and to apply. All students will be tested for English proficiency upon arrival and class placement will be based on the results. Students will be placed in ESL courses or college level credit classes based on the outcome of the placement test. Students in the U.S. on other non-immigrant visas may enroll as part-time students in ESL classes on a space-available basis. International class fees will apply.

For more information, contact:

Main Campus
Monday-Friday, 8:30 am-5 pm
4000 E 30th Ave.
Building 11, Room 201
541.463.5253

Downtown Campus
Monday/Wednesday, 4-7 pm
101 W 10th Ave.
Room 203
541.463.6190

Volunteer ESL Tutors Enrolled students can be matched with volunteer tutors. Community members may contact the Volunteer Tutor Coordinator at 541.463.6184 to learn more about becoming a volunteer tutor.

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.

El programa de Inglés como Segundo Idioma ofrece cursos de inglés para adultos que desean mejorar su comunicación oral y escrita, la cual es muy importante para lograr metas personales, académicas, laborales, y comunitarias. Las clases han sido creadas con el propósito de facilitar la comunicación diaria, así como para ayudar a los estudiantes a crecer en el ámbito laboral y para facilitar la transición a otros programas académicos en cualquier colegio comunitario o universidad.

Este programa, sin valor curricular, admite a estudiantes de todo el mundo incluyendo personas que residen permanentemente en los Estados Unidos y personas con estadía temporal. Las clases son culturalmente diversas y la instrucción es exclusivamente en inglés. El programa ofrece instrucción de varios niveles con clases que se concentran en las áreas de gramática, lectura, escritura, y comunicación oral. Las clases de la mañana se ofrecen 4 o 5 días por semana en el Campus Principal, y las clases de la tarde se ofrecen dos días por semana en el Campus del Centro.

Exámenes y Colocación Los personas que desean tomar clases por primera vez, o que desean regresar a clases después de un tiempo de ausencia, deben hacer una cita para tomar un examen de colocación que les permitirá colocarse en su nivel de inglés más apropiado. 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 ingresar al programa de ESL.

Para más información, contacte cualquiera de las oficinas de ESL:

Campus Principal
Lunes-Viernes 8:30-5:00
4000 E 30th Ave.
Edificio 11, Salón 201
541.463.5253

Campus del Centro
Lunes/Miércoles 4:00-7:00
101 W 10th Ave
Salón 203
541.463.6190

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 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 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 the Academic and Student Services section in this catalog.

Registration, Costs and Payment Methods To learn about registration, costs and payment methods for Adult Basic and Secondary Education, consult the department website at *lanecc.edu/abse* 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 four test areas: social studies, science, language arts, 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

Supported Adult Basic Education

Supported Adult Basic Education (SABE): Specialized Math, Reading, Writing, and Current Events/Technology

The SABE 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 Campus. Contact the program for additional information.

Registration Students or referring agency should call 541.463.6180 or 543.463.6186, Monday through Friday, 8 a.m. to 5 p.m. for more information on the admission process.

Community Services

CENTER for Meeting and Learning

Now offering two event venue locations to serve campus, community and regional events of all types! CENTER at Main Campus offers 10+ breakout rooms and a versatile banquet/ballroom dividable into three separate rooms or used as one large event space for seating up to 600. CENTER at Downtown Campus offers a newly built LEED Platinum Certified event space with a banquet/ballroom dividable into three separate rooms or used as one large space for seating up to 300. Both locations have extensive Audio Visual equipment options and wireless connection throughout. The CENTER offers full service catering at either location with a focus on sustainable practices, menu customization, dietary accommodations, and use of local, seasonal ingredients harvested seasonally from our on-site Learning Garden. Culinary Arts and Hospitality Management students have the opportunity to work side by side with the CENTER's professional staff in a learning lab environment.

Experience more when booking at either CENTER for Meeting and Learning location as you will not only be hosting at one of Eugene's most sustainable event venues, but you will also be supporting student learning opportunities for our future Culinary Arts and Hospitality industry leaders. Call 541.463.3500 or visit *lanecc.edu/center* to schedule your events.

Lane Catering Experience culinary excellence when booking your events with Lane Catering as you will not only enjoy cuisine from one of Eugene's most sustainable caterers, but you also will be supporting student learning opportunities for our future Culinary Arts and Hospitality industry leaders. Lane Catering offers full catering services delivered anywhere in Eugene/Springfield and surrounding areas with a focus on sustainable practices, menu customization, and use of local, seasonal ingredients harvested seasonally from our on-site Learning Garden. Culinary Arts and Hospitality Management students have the opportunity to work side by side with Lane Catering's professional staff in a learning lab environment. We welcome and specialize in accommodating all dietary requirements as we make it a learning opportunity to teach our students. Call 541.463.3500 or visit *lanecc.edu/catering* to schedule your catering.

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.

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 Campus. Participants can view family counseling sessions that illustrate principles and skills for improving relationships with children and participate in exercises and discussion. An advanced noncredit class (CG 212) 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.

A credit class is also available. 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.

English As A Second Language See page 260.

KLCC-FM Radio *klcc.org*

KLCC 89.7 FM, NPR for Oregonians, is a listener-supported public radio station licensed to Lane Community College. KLCC provides NPR news, local and regional news, and a wide world of intelligent music to over 80,000 people in the Eugene/Springfield area and western and central Oregon each week. Musical genres include jazz, folk, blues, and world beat.

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 NPR.

Family Connections

Family Connections is a community-based child care resource. For more information, see the Academic and Student Services section in this catalog.

Library

The Library provides resources for students, faculty, staff, and community residents. For more information, see the Academic and Student Services section in this catalog.

Music, Dance and Theatre Arts

The department presents concerts and performances available to the community. For information, see the Academic and Student Services section in this catalog.

Specialized Support Services

Specialized Support Services (S3) provides vocational training and employment supports to adult students who experience intellectual and developmental disabilities and have intensive support needs. S3 offers individual and small group instruction and experiential learning opportunities that address social skill development, on-the-job training, and employability skill enhancement in integrated settings with competitive employment as a goal. Supported employment and retention services also are available.

Work experience opportunities are provided through inter-department agreements throughout the college that include recycling, waste management, custodial and housekeeping, confidential shredding and food services.

Contact 541.463.5101 or visit *lanecc.edu/sss* for more information

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 541.463.6262 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 20+ agencies throughout rural and urban Lane County, Companions provide visits and transportation to hundreds of clients annually. Companions must be age 55+, have a limited income, and serve clients 15-40 hours/week. They receive a tax-free hourly stipend of $2.65, some reimbursement for meals and mileage, 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 541.463.6260 or visit *lanecc.edu/scp.* (The Senior Companion Program does not link Companions with clients directly. Please contact Senior & Disabled Services at 541.682.3353 if you would like to receive the services of a Senior Companion.)

Small Business Development Center

The Small Business Development Center (Lane 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 economic development in Lane County. The Lane SBDC is also a member of the Association of Small Business Development Centers. Thanks to grant funds and support from the college, advising is available at no-cost to the participant. Application and deposit are required for some programs.

The Lane SBDC is located at the LCC Downtown Campus, 101 West 10th Avenue, Ste. 304, Eugene. Business hours are 9 am to 5 pm, Monday-Friday. Phone number is 541.463.6200. Website is *LaneSBDC.com.*

Business/Entrepreneurial Services

- **Personalized and confidential free business advising** Experienced advisors focus on essential business skills, including startup planning, marketing, professional networking and critical decision making. (Advising is available by appointment only.)
- **Entrepreneurial classes, workshops, and small business management programs** Business professionals teach and develop practical skills, in class and workshop settings, with opportunities to network with peers and use the information learned immediately.
- **Resource library, housed in the Lane SBDC** Our business library offers a vast array of books and other resources, with helpful information for building business knowledge and skills. Lane SBDC also offers help with accessing a repository for resources throughout our city, county, and state.

Business Classes and Workshops

Business Start-up and Early Stages

The SBDC offers a variety of classes and workshops for the early stages of business; from start-up, to marketing, recordkeeping, taxes, and more. The center partners with local experts and other service providers to offer topics of interest to business owners.

First Steps in Business

Starting a business takes creativity, drive, energy, money, and lots of hard work; but can have huge rewards. Find out what components make up a successful business, in this three-hour workshop. Participants have the opportunity to discuss ideas and rate entrepreneurial skills. For those who decide to continue, the Business Basics Workshop expands the planning and development process.

Business Basics Workshops

Business Basics is for those who would like to launch or fine-tune their business. Get the tools you need to create a sound foundation with these convenient two-hour workshops.

- Organizing Your Business
- Financial Information Critical to Success
- Know Your Market
- Marketing Effectively and Affordably
- Marketing Through Media

QuickBooks® Software for Business—Concepts

Learn how to use QuickBooks® software to better manage your business. Our certified QuickBooks® ProAdvisor® will answer your questions and provide an overview of all basic functions. Get the skills you need to create a company file and then record transactions. You will easily add customers and vendors; create invoices and generate receipts; process deposits; document and pay bills; record transactions; and reconcile bank accounts. Understand how to manage a chart of accounts and prepare financial reports. More advanced topics will be covered, including: issuing credits and refunds, purchase orders, customizing forms and reports, payroll functions, general liability reports, job costing and taxes. The class uses QuickBooks® Premier, but is applicable to other versions.

Business Management Programs

The small business management programs are designed to help business owners increase profitability and reach goals, through improved business management. Small Business Management is our signature program. Other specialty programs have been developed to reach specific groups.

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. The 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, meeting twice a month, for nine months, with personalized coaching sessions once a month. The individual 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 module delivers results. Learn to jump-start your business through marketing. Create solid marketing ideas and a plan of action that will improve sales and grow your business.
- **SBM Financial Foundation Module 2** Lead your company to a successful financial future. Build knowledge and gain necessary skills to examine and understand business financials.
- **SBM Operations Foundation Module 3** Focus on core operations to create a successful enterprise. Develop a short-term plan to manage employee workflow and also learn to create future growth models for long-term planning. Explore the legalities of operating a business.

Small Business Management Year Two: Systems

Focus on growing your business through understanding, creating, and implementing systems within your business. With solid systems and processes in place, owners can choose to work, but don't have to. The year-two cohort meets for a series of 10 classes over a 10-month period. Class topics include:

- Strategic Planning and Systems Thinking
- Project Management and Process Improvement
- Leadership, Performance Evaluations, and Development
- Financial Statement Strategies and Ratios
- CRM Systems and Solutions

Small Business Management Year Three: Advanced Concepts

Year three is designed for business owners who have completed years one and two of the SBM program. Business owners work on mastering earlier concepts, while using new material to fine-tune operations. Upon completion of year three, qualified business owners will receive a certificate of recognition. The year-three cohort meets for a series of 10 classes over a 10-month period. Class topics include:

- Workplace Profiles
- Facilitation Skills
- Sales Management
- Board of Directors
- Sustainability
- Job Costing
- Budgeting Processes
- Risk Management
- Exit Strategies

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 session, get additional one-on-one business coaching, plus attend the annual Alumni Only Business Roundtable meetings. This is the best way for SBM graduates to keep their skills fresh, their contacts growing, and their business on the right path.

Specialty Small Business Management Programs

SRG Virtual Incubator (Start, Run, and Grow Your Business)

Learn to plan and start a new business or grow an existing one, at your own speed! This free nine-month small business management program, designed for startup or established enterprises, will help you move forward with your commercial ideas. Advance your business as you create and review a business plan, strategically improve marketing efforts, and develop and fine-tune financial data. This interactive online program is designed for any business, whether start-up or established. It can be started at any time and is self-paced. Confidential face-to-face or electronic business advising is a component of the program. This program is offered by the Lane SBDC in conjunction with Palo Alto Software.

New Product Development (NPD) Program

Turn your ideas into cash. Start, grow or rescue your business in any economy! New products (goods and services) and market development are the secret to growing a profitable and sustainable business. Join other entrepreneurs and learn proven strategies to develop and protect new products and markets. This Specialty Small Business Management program offers 10 classes, over nine months. It also includes 20 hours of personalized one-on-one coaching, by the instructor. Join other future and existing business owners to learn, share and network.

Leadership and Management Workshops

Toastmasters®—Advanced Communications and Leadership System

Become a skilled spokesperson by joining our Toastmasters®—Advanced Communications and Leadership (ACL) group designed to help develop your speaking and leadership skills, in a supportive environment. With an open enrollment policy, entry is possible any time during the year. The system is based on the proven Toastmaster® business communications curriculum, with the addition of a leadership track, coaching, and mentoring.

Employer Training Services (ETS)

Employee training and professional development are the most important investments your business will make. ETS assists businesses, organizations, and employers with customized employee training. With over 30 years of experience developing Lane County business, Lane Community College has an excellent reputation in the community and provides the best value you can find in a training provider.

ETS works closely with your organization's staff to assess your company's specific needs. Training focuses on your business' unique philosophy, culture, and values. Services are cost effective, innovative, led by expert instructors, and use quality curriculum with immediate results. Scheduling is flexible. Training can be held at your site or ours. Choose our convenient state-of-the-art Downtown Campus or the 30th Avenue Main Campus, right off I-5. You dream it–we deliver!

A Sampling of the Training Available:

- Basic/Advanced Job Skills and Certifications
- Project, Process, and Time Management
- IT/Computer Training and Certification
- Customer Service and Leadership
- Safety, Compliance, and Regulatory

ETS is located at LCC's Downtown Campus, 101 West 10th Avenue, Ste. 304, Eugene. Contact Employer Training Services at 541.463.6200 or visit the ETS website at *lanecc.edu/ets*

Human Resources

Knowledge of the basics of human resources (HR) can improve on-the-job effectiveness, protect your business from needless and costly litigation, keep your organization more competitive in today's economy, and advance your career. The SHRM-CP or SHRM-SCP credentials make you a recognized expert in the HR field. This material is designed for entry-level HR professionals, small business owners, managers responsible for the HR functions in their companies, as well as people looking for a possible career change. Human resource management training to the Lane County area is provided through a partnership with the Society of Human Resource Management, Lane SBDC, and LCC Employer Training Services (ETS).

- **SHRM-CP and SHRM-SCP Test Preparation Course**

  The SHRM Learning System delivers the most effective SHRM-CP and SHRM-SCP certification preparation. Learning modules and study tools teach you everything you need to prepare for your SHRM-CP/SHRM-SCP certification exam.
- **SHRM Essentials of HR Management**

  Developed by leading HR experts and legal counsel, the SHRM Essentials covers a wide range of introductory HR topics in a condensed, straightforward format. Up-to-date, easy-to-understand content ensures that you master HR concepts and apply them to everyday situations and issues.

Leadership and Management

Successful Supervision

In seven lively and interactive sessions, this course will cover key supervisory skills. Participants will leave every session with tangible and practical skills that they can immediately apply at work. Topics include: Self-Management—professional behavior, communication and emotional intelligence; Staff Management—giving feedback and evaluations, running a meeting, conflict management, managing diversity and HR/legal issues; and Project Management—diagraming and supervision, process mapping, process improvement and working in teams. Participants will have the opportunity to meet with the instructor for one-on-one coaching.

Workforce Development

The Workforce Development Department focuses on career development, job readiness, skill enhancement, short-term training, job search instruction, employment, and special grant-funded projects. Located on the Lane Community College main campus in Building 19, the Workforce Development Department can be reached at 541.463.5223 or at *lanecc.edu/wdd.*

WorkSource Lane

The Workforce Development Department is an affiliate site of WorkSource Lane, a collaborative partnership with the Department of Human Services, Lane Community College, Lane Workforce Partnership, and the Oregon Employment Department. As an affiliate site, we provide the opportunity for individuals to register in the WorkSource system and learn how to utilize its online resources.

Career Center

Individuals who visit the Career Center in Building 19, Room 266 have access to a variety of resources, which may include the following:

- Access to computers and the internet
- Assessment of skills, interests, and work values
- Career exploration and development
- Development of an individualized Career Pathway
- Labor market information and job openings
- Skill upgrading and basic skill tutorials
- Information about training programs, including short-term training options
- Job search instruction
- Resume and cover letter development
- Online job search and applications
- Workshops covering career development and job search topics

National Career Readiness Certificate (NCRC)

The NCRC is a nationally recognized certification that measures basic skills needed for the workplace and is used by employers nationwide as a recruitment hiring tool. Earning the NCRC helps you demonstrate that you have the skills employers are looking for. Testing and access to study materials are available at no charge through the Workforce Development Department. Visit the Career Center or call 541.463.5223 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, re-elcted May 2013, term expires June 30, 2017
Zone 1–Western part of college district

Susie Johnston, retired, Eugene, elected May 2005, re-elected May 2009, re-elected May 2015, term expires June 30, 2019
Zone 2 - Northern part of college district

Gary LeClair, physician, Springfield, elected May 2009, re-elected May 2013, term expires June 30, 2017
Zone 3–Marcola and Springfield part of college district

Matt Keating, Political Consultant, Eugene, elected May 2013, term expires June 30, 2017
Zone 4–Eastern part of college district

Philip Carrasco, bilingual assessor, Eugene, elected May 2015, term expires June 30, 2019
Zone 5 - Eastern part of college district

Rosie Pryor, retired marketing and strategy officer, elected May 2011, re-elected May 2015, term expires June 30, 2019
At-Large–Position 6

Tony McCown, education consultant, Eugene, elected May 2007, re-elected May 2011, re-elected May 2015, term exipres June 30, 2019
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; Ph.D. Oregon State Univ.; M.Ed. Oregon State Univ.; B.S., L.L.B. Univ. of Edinburgh
- **Dawn DeWolf,** Interim Vice President, Academic and Student Affairs; M.ED. Oregon State Univ.; B.S. Eastern Montana College
- **Kerry Levett,** Executive Dean, Student Affairs. Ph.D. Arizona State Univ.; M.A. Univ. of Colorado; B.A. Westminster College
- **Mary Jeanne Kuhar,** Interim Executive Dean, Career Technical Education; M.D. Univ. of Pittsburgh School of Medicine; B.S. West Virginia Wesleyan College
- **Maurice Hamington,** Executive Dean, Academic Affairs and School of Arts and Sciences; Ph.D. Univ. of Oregon; Ph.D. Univ. of Southern California; M.A. Mount St. Mary's College; M.B.A. Univ. of Southern California; B.A. Loyola Marymount Univ.
- **Brian Kelly,** Vice President of College Services. M.B.A. Marylhurst Univ.; B.A. Southern Illinois Univ.
- **Dennis Carr,** Chief Human Resource Officer; M.S.I.R. Univ. of Oregon; B.S. Hiram College
- **Bill Schuetz,** Chief Information Officer; Ph.D. Claremont Graduate Univ.; M.S. Claremont Graduate School; B.S. Univ. of Washington

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.

- **Angela Bowen,** Coos Bay
- **Jerome Colonna,** Bend
- **Samuel Henry,** Portland
- **Charles Martinez Jr,** Eugene
- **Miranda Summer,** Portland
- **Anthony Veliz,** Woodburn

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:

State Department of Education administration includes:

- **Jim Middleton,** Commissioner, Department of Community Colleges and Workforce Development
- **Rob Saxton,** State Superintendent of Public Instruction

Lane Community College Budget Committee

The Budget Committee analyzes the administration's annual budget proposal. The 2014-2015 Budget Committee includes the Board of Education and the following members:

- **Phillip Carrasco,** term expires 2016, Bilingual Assessor, Eugene
- **Kevin Cronin,** term expires 2017, Community Organizer, Springfield
- **Jeffrey Farm,** term expires 2017, retired Parks and Recreation Manager, Florence
- **Jennifer Harris,** term expires 2015, Chief Financial officer, Springfield
- **Twila Jacobsen,** term expires 2017, Area Coordinator, Dexter
- **Chris Matson,** term expires 2016, Marketing and Political Consultant, Eugene
- **Carmen X. Urbina,** term expires 2016, school district family and community coordinator, Eugene

Advisory Committees

More than 700 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 technical programs, as well as most noncredit programs, have advisory committees. The college also has advisory committees for programs and services such as English as a Second Language and Small Business Development.

The Career 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 Cooperative Education Division.

Lane Community College Foundation

The Lane Community College Foundation raises and invests funds for scholarships, programs and capital needs.

Program and Capital 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 35,000 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, visit *lanecc.edu/foundation*.

Staff

For fall term 2014, Lane employed 1,109 contracted faculty and staff and part-time credit faculty. A list of contracted and part-time instructional staff follows.

Full-Time Instructional Staff

Acad Learning Skills/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

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

Gaudia, Amy B.S. Buffalo State Clg (Suny); 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; Elem Education Teaching Cert; Teachng Engl Speakr Othr Lang

Lamoreaux, Alice A. B.A. Univ. of Oregon; M.S. Univ. of Oregon

Niles, Aliscia M. B.A. Sch For International Trng; M.A. Univ. of Oregon; Teachng Engl Speakr Othr Lang

O'Brien, James S. B.S. Univ. of Oregon

Pfaff, Julie A. B.S. Marquette Univ.; M.Ed. Univ. of Oregon

Schaefer, Karen L. B.A. Seattle Pacific Univ.; Ed.M. Oregon State Univ.

Young, James K. B.A. Rice Univ.

Warner, A. Louise L. B.A. Yale Univ.; M.A.T. Western Oregon Univ.; J.D. Boston Univ.

Advanced Technology Division

O'Connor, Patrick Dean; B.A. Univ. of California, Irvine; M.A. Univ. of Idaho; Ph.D. Univ. of Oregon

Baker, Alan A.S. Lane Community Col.; B.A. NW Christian Univ.

Bergen, Dean E. ASE Cert Master; Cert Glasurit and Diamont; Cert I.C.A.R. Instructor; Cert John Bean Steering/Suspen; 3M Dupont Certificate; Cert Chart Frame Equipment; Auto Ref/Coll - Shop Mgr

Bridges, Jon H. B.A. St Marys Col. Ca; USAF Flight Engineer C5/C130; FAA Private Pilot Single Land

Caffey, Stephen P. A.A.S. Lane Community Col.

Dale, Terry R. A.S. Spartan School Aeronautics; B.S. San Jose State Univ.

Keen, Leonard R. Journeyman; OR Carpenter Apprenticeship

Information reflects Human Resource records as of April 2015

Laskey, Allen L. A.S. Lane Community Col.; AWS Cert Welding Educator; AWS Cert Welding Instructor; AWS Certified Welder; Cert Prod and Inventory Mgmt; ASME Certified Welder

Mathers, Kelly D. ASE Cert Master Auto Tech; ASE Cert Master

O'Herron, John B.A. Lindenwood Univ.; AWS Cert Welding Educatior; AWS Cert. Welder; Cert Commercial Driver-Underwater Construction

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, JS 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.; 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

Gallagher, Neal B.A. Albertus Magnus Col.; FAA InspectionAuthorization; FAA Airframe and Powerplant licenses; FAA Certified Flight Instructor with Instrument and Multi-Engine privileges

Kaetterhenry, Jeremy P. B.S. Col. of the Ozarks; FAA Cert. A&P/IA; CFII; MEI

Lancaster, Paul B.A. Wheaton Col.; M.A. George Fox Col.; FAA Certified Flight Instructor; FAA CFI-Instrument, MEI, Airline Transport Pilot, B-737 Type Rating

Business

Oatman, David B. Dean; B.A. Culver-Stockton Col.; M.Ed. Northern Illinois Univ.

Boozer, 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

Gillett, Jill B.S. Univ. of Oregon; M.Ed. Oregon State Univ.; Licensed C.P.A.

Johnson, LuAnne B.S. Southern Oregon Univ.; M.A. Pacific Univ.

Child and Family Education

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

Oatman, David B. Dean; B.A. Culver-Stockton Col.; M.Ed. Northern Illinois Univ.

Bailey, Jim L. B.S. Oregon State Univ.; M.S. Brigham Young Univ. Utah; Ph.D. Oregon Health Sci Univ.

Bird, Brian B.S. Portland State Univ.; M.A. Univ. of Oregon

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.

Walters, Kathleen B.S. California State Univ.; M.Ed. Bowling Green State Univ.; M.S.N. Walden Univ.

Wilkins, Paul C. M.S. Oregon State Univ.

Cooperative Education

King, Al Dean; B.S. Indiana Univ. Bloomington; M.S. Indiana Univ. Bloomington

Clemons, Marvin L. B.S. Univ. Of Wisconsin Marshfld Wd; M.S. Univ. of Oregon; Sec Principal/Superintendent

Fike, Charles E. B.A. Northwest Christian Univ.

Kelsch, Jamie L. A.A.S. Lane Community Col.; A.G.S. Lane Community Col.; B.S. Linfield Col.

Meenaghan, Gerald T. B.A. Univ. of Oregon; M.S. Kansas St Univ. Manhattan

Oldham, Garry A. B.S. Univ. of Oregon; 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.

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

Barber, Michele R. A.A. Truckee Meadows Community Col.; B.A. Univ. of Nevada, Reno; M.A. Univ. of Nevada, Reno

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

Perez-Jefferis, Consuela E. B.A. Univ. of Oregon; M.S.W. Portland State Univ.

Salter, Christina L. B.A. New Clg - Univ. South Florida; M.S. Univ. of Oregon; Cert Licensed Prof Counselor; National Certified Counselor

Shipp, Susan H. B.A. Univ. of Colorado, Boulder; M.A., Univ. of Colorado, Denver

Siegfried, Jill B.A. Wittenberg Univ.; M.S. Oregon State Univ.

Smyth, Douglas A. B.A. Depaul Univ.; M.Div. Mc Cormick 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 Management

Aherin, Lisa S. B.S. New Mexico St Univ. Univ. Park; M.A. Coll Santa Fe; Ph.D. Univ. of Idaho

Crosthwaite, Christopher Cert Exec Pastry Chef, ACF; Cert Culinary Educator, ACF; Cert Executive Chef, ACF

McCully, Joe B.S. Univ. of Denver; M.S. Florida International Univ; Cert Hospitality Educator, AHM

Wanstall, Clive B. Dipl. Thanet Technical Clg; Cert Executive Chef, ACF; Cert Basic Cookery London Inst; Cert Cookery London Inst

Information reflects Human Resource records as of April 2015

English as a Second Language

Bakshi, Indira M. B.S. Purdue Univ. West Lafayette; M.A. Univ. of Texas - Austin

Henninger-Willey, Tracy L. B.A. Northwstrn 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.

Shields, Colleen M. B.A. Boston Univ.; M.A. Univ. Mass Boston

Todd Le Douarec, Annick M. B.A. Univ. of Oregon; M.A. Univ. of Oregon; M.B.A. Univ. of Phoenix

Health and PE

Bates, Rodger D. Dean; 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

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

Weissfeld, Lynne R. B.S. Univ. of Oregon; M.S. Univ. of Oregon

Health Professions

Barnes, Sara A.A.S. Lane Community Col.; M.N. Walden 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.; Advanced Life Support Instruct; CPR Certified; Oregon EMT Paramedic; NAEMT Prehospital Trauma LS In

Brown, Linda E. A.A.S Lane Community Col; B.S.N. Oregon Health Science Univ.; M.N. Univ. of Phoenix

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 Hygenist

Driscoll, Norma L. A.S. Lane Community Col.; B.S. Linfield Col.; R.R.T.; R.C.P.

Greer, Leslie D. A.A.S. Lane Community Col.; B.S. Southern Oregon Univ.; E.F.O.D.A.; Certified Dental Assistant; E.F.D.A.

Hagan, Sharon S. B.S. Idaho State Univ.; M.S. Westrn Kentucky Univ.; Registered Dental Hygenist

Jessop, John A.A.S Lane Community Col; B.S.N. Oregon Health Science Univ.

Johnson, Mary A.A.S. Jefferson State Community Col; M.N. Walden Univ.

Killen, Janet L. A.S. Grossmont Cmty Col.; A.A.S. Saddleback Col.; B.S.N. Oregon Health Sci Univ.; M.S.N. Liberty Univ.

Kirkpatrick, Kecia A.A.S Lane Community Col.; M.S. Walden Univ.

McCready, Douglas C. A.S. Lewis & Clark Col.; M.N. Univ. of Utah

McDonald, Shari A. A.S. San Diego City Col.; B.S.N. Oregon Health Sci Univ.; M.S.N. Walden Univ-Minneapolis; Registered Nurse

Miller, Denise K. B.S.N. Pacific Lutheran Univ.; M.A.T. Evergreen State Col.

Miner, Jonathon C. A.A.S. Oregon Health Sci Univ.; B.S. Univ. of Oregon; Emerg Resp Instr Trainer A.R.C; Paramedic Nat'l Registry EMT; AH Adv Cardiac LS Instruct; P.A.L.S. Cert for AHA; Oregon EMT Paramedic; Outdoor Emerg Care Tech Instr; Wilderness EMT Certification; Advanced Life Support Instruct

Naylor, Elizabeth H. B.A. Univ. Colorado Boulder; M.S. Univ. Wisc Stout/ Menomonie; Registered Dietician

Nearing, Fran B.S.N. Oregon Health Science Univ.; M.S. Indiana State Univ.

Pittman, Martha E. A.A.S. Excelsior Col.; C.M.A.; Registered Nurse

Powell, Tamberly M. M.S. Oregon State Univ.

Roders, 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. Northrn Illinois Univ.; M.S. Troy State Univ. Montgmry

Welch, Janet S. B.S.N. Univ. Minnesota Minneapolis; M.N. Univ. Minnesota Minneapolis; Registered Nurse

Institute for Sustainable Practices

Ebbage, Roger A. B.A. San Francisco State Univ.; M.A. San Jose State Univ.

Language, Literature, and Communication

Carkin, Susan J. Dean; B.A. Southrn Illinois Univ. Carbndle; B.A. Southrn Illinois Univ. Carbndle; M.A. Univ. of Oregon; M.A. Utah State Univ.; Ph.D. Northrn Arizona Univ.

Almquist, Karin B.A. Univ. of Oregon; M.A. Univ. of Oregon; Ph.D. Univ. of Oregon

Bartley, Aryn E. B.A. Michigan State Univ.; M.A. Michigan State Univ.; Ph.D. Michigan State Univ.

Beasley, Amy B.A. Gettysburg Col.; M.A. Washington State Univ

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. Wisc Madison; M.A. 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

Krumrey-Fulks, Karen S. B.A. Southrn 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 M. M.A. Illinois State Univ.; Ph.D. Illinois State Univ.

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 Teachng 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. Northeastern Univ.; Ph.D. Univ. of Oregon

Szabady, Gina B.A. Univ. of Wyoming; M.A. Univ. of Hawaii; Ph.D. Univ. of Arizona

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 Community 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

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

Macnaughtan, Donald T. B.A. Univ. of Auckland; M.A. Univ. of Auckland; M.L.S. Victoria Univ. of Wellington

Mathematics

Hledik, Kathryn L. Dean; B.A. Oregon State Univ.; M.A. Univ. of Oregon

Green, Dale E. B.A. Univ. of Oregon; M.A. Oregon State Univ.

Hill, Benjamin L. B.A. Univ. North Dakota Grand Forks; M.S. Univ. of Oregon; Ph.D. Univ. of Oregon

Holton, Kristina L. M.S. Oregon State Univ.

Hsiao, Berri B.S. Univ. of Oregon; M.S. Montana State Univ. Billings; M.S. Univ. of Oregon

Kirkpatrick, Vicky R. B.S. Univ. of Oregon; M.S. Oregon State Univ.

Knoch, Jessica R. B.S. Randolph-Macon Womans Col.; M.A. Univ. of Cincinnati; M.A. Univ. of Virginia

Kovcholovsky, 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

Moore, Philip E. B.A. Harvard Univ.; M.S. Univ. 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. Northwstrn Univ.

Smith, Gayle L. B.S. Univ. Illinois Chicago; M.S. Eastern Washington Univ.

White, Karen L. B.A. Colorado Col.; M.S. Univ. of Oregon

Music, Dance, and Theatre Arts

Bertucci, Ronald K. B.A. Univ. of Oregon; M.M. Univ. of Oregon

Haimbach, Brian P. B.A. Florida State Univ.; M.A. Univ. Nevada Las Vegas; Ph.D. Univ. Georgia Athens

Krueger, Paul A. B.M.E. Univ. Nebraska Lincoln; M.M. Univ. of Oregon

McManus, Edward C. B.M. Univ. of Oregon; M.M.Ed. Univ. of Oregon

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

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

Andrews, Christine M. B.S. Univ. Washington; Ph.D. Univ. Pennsylvania Undrgrd Adm

Bunson, Paul E. B.S.E.E. Univ. Pennsylvania Undrgrd Adm; M.S. Univ. of Oregon; Ph.D. Univ. of Oregon

Gilbert, Dennis D. B.S. Calif. St Univ. Fresno; M.S. Univ. of Oregon; Ph.D. Univ. of Oregon

Holmes, Susan E. B.S. Oregon State Univ.; M.L.A. Univ. of Oregon

Kiser, Stacey L. B.S. Oregon State Univ.; M.S. Univ. of Oregon

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. Southrn Utah Univ.; M.S. Northrn 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 Community Col.; B.S. Suny Coll Envrnmntl Sci Frstry; Ph.D. Univ. of Miami

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 Employment Training

Lindly, James L. Dean; B.S. Univ. of Oregon; B.S. Univ. of Oregon; M.B.A. Univ. of Oregon; Cisco Certified Design Assoc; Charterd Prpty Casualty Undwtr

Smith, Gary E. B.A. Franklin Univ.; M.B.A. Franklin Univ.; C.B.; E.C.C.S.

Social Science

Frei, Jennifer Dean; B.A. Univ. of Calif. Davis; M.A. Calif. State Univ.; Ph.D. Univ. of Calif. Davis

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

Borrowdale, Jeffrey B.A. Calif. St Univ. Sacramento; M.A.C.Phl. Univ. Calif. Santa Barbara

Broderick, Sheila N. B.A. Univ. of Oregon; M.A. Univ. of Oregon

Burrows, Kendra S. B.S. Carnegie Mellon Univ.; M.S. Univ. of Utah

Burrows, William H. B.S. Southern Oregon Univ.; M.S. Southern Oregon Univ.

DelNero, John E. B.A. Calif. St Univ. Northridge; M.A. Univ. of Oregon; M.S. Univ. of Oregon

Information reflects Human Resource records as of April 2015

Escobar, Joe G. B.A. Calif. St Univ. Fullerton; M.A. Calif. St Univ. Fullerton

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

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.

Florendo, James B.S. Univ. of Oregon; M.F.A. Univ. of Oregon

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

Di Marco, Cara E. B.A. Univ. of Oregon; M.S. Univ. of Oregon; Ph.D. Univ. of Oregon

Information reflects Human Resource records as of April 2015

Part-Time Instructional Staff

Academic Learning Skills/Tutoring

Burley, Hali B.A. San Francisco State Univ.; M.A. Oregon Stare Univ.; Graduate Cert. TESOL, Oregon State Univ.

Groves, John B.A. Univ. of Vermont; M.F.A. 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.

Kirwin, Maria J. A.A. Clackamas Community Col.; B.S. Portland State Univ.; M.Ed. Portland State Univ.; M.Ed. Portland State Univ.

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.

McKenzie, Judith C. B.A. Evergreen State Col.; M.A. Goddard Col.

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

Perkins, Megan A.A. Lane Community Col.; B.S. Univ. of Oregon; M.Ed. Oregon State Univ. Corvallis

Schweigert, Cynthia J. B.A. Univ. of Oregon; M.A. Univ. of Oregon

Shelly, Rachel M.A. Pacific Univ.

Stone, Aziza (Lucia) B.F.A. New York Univ.; M.A. Univ. of Colorado; M.F.A. Univ. of Oregon

Summers, Leroy M.Ed. Oregon State Univ.

Wight, Sherrill C. B.S. Brigham Young Univ. Utah; M.A. Univ. of Utah

Adult Basic and Secondary Education

Arias, Luis B.A. Univ. of Oregon; M.Ed. Univ. of Oregon

Arias, Rafael B.A. Univ. of Oregon; M.A. Univ. of Oregon

Hays, Gary D. B.S. Univ. of Oregon; M.S. Univ. of Oregon

Kelly, Judith B.A. Univ. of Oregon; M.A. Univ. of Massachusetts

Levine, Keren O. A.A. Lane Community Col.; B.A. Univ. of Oregon; B.F.A. Univ. of Oregon; M.Ed. Oregon State Univ.; M.Ed. Western Oregon 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

Nissila, Phyllis M. B.A. George Fox Univ.; M.A. Calif. St Univ. Dominguez Hills

Shelly, Rachel R. M.A. Pacific Univ.

Walker, Ann E. B.A. San Francisco State Univ.; M.A. Pacific Univ.

Advanced Technology Division

Babson, James N. B.A. Cornell Univ.

Baker, Alan A.S. Lane Community Col.; B.A. NW Christian Univ.

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.

Jordan, Ken A.S. Lane Community Col.

Kruse, David A. B.S. Yale Univ.; B.M. Juilliard School; M.M. Juilliard School

Rea, Paul B.A. Univ. of Oregon

Revell, Robert D. Journeyman Cert Millwright

Steinberg, Shalimar

Arts Division

Ali, Katherine L. B.F.A. Calif. Col. of Art

Berner, Christopher A. B.F.A. Kansas City Art Institute

Burton, Thomas J. A.A.O.T. Lane Community Col.

Campbell, George R. A.A. Lane Community Col.; B.S. Univ. of Oregon

Caprario-Ulrich, Kathleen M. Dipl. Newark Sch Fine & Indust Art

De Vine, Robert B.F.A. St Johns Univ.

DeVore, Carla E. B.F.A. Univ. Minnesota Duluth; M.A. Univ. of Oregon

Halvorsen, Jan A. B.F.A. Univ. of Oregon

Lennox, Richard T. B.F.A. Ohio Univ. Athens; B.S.Ed. Ohio Univ. Athens; 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 J. A.A. Lane Community Col.; B.A. Univ. of Oregon

Morrill, Suzanne D. B.F.A. Univ. of Oregon; M.F.A. Univ. of Oregon

Osterkamp, Ellen A.

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. Puget Sound; M.F.A. Kent State Univ. Kent

Seloover, Robin E. B.F.A. Univ. of Oregon; M.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

Aviation Academy

Daniel, Nicholas A.A.S. Lane Community Col.; FAA Com Pilot Sgl Engine Land Inst; FAA Ground Instructor Instrum; FAA Flight Instructor, CFII; FAA Ground Instructor Advanced

Ericson, Elliott A.A.S. Lane Community Col.; FAA Com Pilot Sng/Multi engine land, Instrument, Airplane, CFI, CFII, AGI, IGI

Killam, Justin B. A.S. Lane Community Col.; FAA Com Pilot Sgl Eng Lnd Inst; FAA Ground Instructor Advanced; FAA MEL (Multi-Engine Land); FAA MEI (Multiengine Instruct); FAA Ground Instructor Instrum; FAA Flight Instructor, CFII

Lemaire, Jill Cert. ATP Flight School, Sacramento CA

Parrish, Walter S. A.S. Lane Community Col.; A.S. Lane Community Col.; B.A. Northwest Christian Univ.; FAA MEI (Multiengine Instruct); FAA MEL (Multi-Engine Land); FAA Com Pilot Sgl Eng Lnd Inst; FAA Ground Instructor Instrum; FAA Ground Instructor Advanced; FAA Flight Instructor, CFII

Roney, Michael S. A.A.S. Lane Community Col.; FAA Flight Instructor, CFII; FAA Ground Instructor Instrum; FAA Ground Instructor Advanced; FAA Com Pilot Sgl Eng Lnd Inst

Wheeler, Doug A.A.S. Lane Community Col.; FAA Com Pilot Sng engine land, instrument, airplane, CFI, CFII, AGI, IGI

Wisdom, Jacob I. A.S. Lane Community Col.; FAA Ground Instructor Advanced; FAA Com Pilot Sgl Eng Lnd Inst; FAA Flight Instructor, CFII; FAA Ground Instructor Instrum

Business

Boyle, Patricia A. B.S. Cal Poly - San Luis Obispo; M.B.A. Oregon State Univ.

Chase, James A.A.S. Lane Community Col.; B.S. Northwest Christian Univ.; M.A. Northwest Christian Univ.

Darling, Bruce L. B.A. Coll Wooster; M.S.T. Cleveland State Univ.; M.B.A. Cleveland State Univ.

Gazo, Henry A.S. Lane Community Col.; B.A. Cuny Queens Col.

Hovet, Timothy D. B.A. Univ. Montana; M.B.A. Univ. of Oregon

LePelley, Eilene R. B.A. Idaho State Univ.

McGlynn, Kaaren L. B.S. Portland State Univ.; M.B.A. Portland State Univ.; M.S. E-Commerce National Univ

Paschall, Annie C. B.A. Duke Univ.; M.S. Univ. Missouri Columbia; Certified Public Accountant

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Rice, Rhonda L. B.A. Calif. St Univ. - Chico; M.B.A. Northwest Christian Univ.

Wallace, Tulsi E. B.L.A. Univ. of Oregon; M.B.A. George Fox Univ.

Child and Family Education

Carnes, Rachael A. B.A. Reed Col.

Computer Information Technology

Baughman, Andrea S. A.A. Lane Community Col.; B.A. George Fox Univ.

Bricher, Gary P. B.S. Univ. of Oregon; B.S. Univ. of Oregon; M.S. Univ. of Oregon; Cisco Certified Network Assoc

Gray, Michael K. B.A. Univ. of Oregon; M.A. Univ. of Oregon; Secondary Teaching Certificate

Konar, Thaddeus A.A. Cuyahoga C C Eastern; B.S. Cleveland State Univ.; M.A. Univ. of Phoenix

Maleki, Mohammad B.S. Univ. of Oregon; M.S. Univ. of Oregon

Osak, Linda S. B.S. Univ. Calif. Riverside

Rizk, Ziad A. B.A. San Diego State Univ.

Ross, Gerald J. B.A. Suny Buffalo; M.A. Univ. of Oregon; Teacher Corps Graduate

Cooperative Education

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; Learning Hndicpd Teaching Cert; Elem Education Teaching Cert; Severely Disab 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

Pfeiffer, Elizabeth B.A. Southern Illinois Univ.; M.A. Indiana Univ.

Cottage Grove Center

Gilroy, Mary M. A.A. Ventura Community Col.; B.A. Humboldt State Univ.; M.A. Oakland Univ.

Counseling

Jones, Laura M. B.S. Univ. of Oregon; M.S. Univ. of Oregon; Ph.D. Univ. of Oregon

Mc Kenzie, Bree M. B.A. Univ. Calif. Santa Cruz; M.S. Oregon State Univ.

Willoughby-Roberts, Dawna R. B.A. Univ. of Oregon; M.S. Univ. of Oregon

Culinary Arts and Hospitality Management

Dombrosky, Adrienne L. B.A. Univ. of Oregon

Ellis, Keith

Lohr, Peter Journeyman Cert Hotel/Catering

English as a Second Language

Ball, Shannon B.A. Univ. of Oregon; M.A. Univ. of Oregon

Burley, Hali M. M.A. Oregon State Univ.; Teachng Engl Speakr Othr Lang

Cazares ,Jenee B.A. Central Washington Univ.; M.A. Central Washington Univ.

Claypool, Leah A. B.A. Univ. of Oregon; M.A. Portland State Univ.

Daudt, Diane B.A. Linfield Col.; B.S. Western Oregon Univ.; M.A. Univ. of Phoenix

Elms, Hillary B.S. Univ. of Oregon; M.A. Concordia Univ.

Gates, Jennifer B.A. Western Oregon Univ.; M.A. Univ. of Oregon

Gessert, Kate R. B.A. Wellesley Col.; M.S. Bank Street Clg of Ed-New York

Griffin, Gary B.A. Indiana Univ.; MA, Univ. of Kentucky; J.D. Univ. of Kentucky

Guerrero, Maria B.A. Univ. of Oregon; M.A. Univ. of Oregon

Haynes, Pamela G. B.A. Univ. of Oregon; M.A. Portland State Univ.; Elem Education Teaching Cert

Herzberg Hachimoto, Katie A.A.O.T. Lane Community Col.; B.A. Portland State Univ.; M.A. Pacific Univ.

Higgins, Cybele M. B.A. Univ. Calif. Santa Cruz; M.A. Portland State Univ.

Izumi, Glenda B.A. California State Univ.; M.A. Alliant Univ.; Ph.D. Fielding Graduate Univ.

King, Lisa A. B.A. Guilford Col.; M.A. Sch For International Trng

Kremers, Luda V. B.Ed. Odesssa State Linguistic Univ; Ph.D. Foreign Col.s; Ph.D. Odessa State Linquistic Univ

McClelland, Sean B.A. Univ. of Oregon; M.A. Univ. of Oregon

Schenderlin, David B.A. Univ. of California, Davis; M.Div. Fuller Theological Seminary

Staples, Matthew B.A. Univ. or Colorado; M.S. Univ. of Oregon

Weinstein, Michael J. A.A.O.T. Lane Community Col.; B.A. Univ. of Oregon; M.Ed. Univ. of Oregon

Whisler, Jacqui A.S. Northwest Christian Univ.; B.S. Univ. of Oregon; M.A. Univ. of Texas

Wood, Nancy B.A. Univ. of Minnesota; 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, 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.

Mitchell, James A. M.S. Brigham Young Univ. Utah

Purtell, Elizabeth B.A. Linfield Col.; M.Ed. Univ. of Oregon

Health & PE

Austin, Susan R. B.A. Bowdoin Col.; M.S.W. Smith Clg/Grad Sch-Social Work

Barton, Anna

Blunt, Josh B.A. Cal Poly; M.A. Valdosta State Univ.

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.

Davis, Tina M. B.S. Oregon State Univ.; M.Ed. Oregon State Univ.

Farrington, Marianne

Farwell, Christie M.

Gibeau, Samantha J. A.A. Portland State Univ.; B.S. Western Oregon Univ.; M.Ed. Pacific Univ.

Grumbley, Kevin L. B.S. Western Oregon Univ.

Hayes, Sean W. B.A. Michigan State Univ.

Kaczenski, Louis H. B.A. Univ. of Oregon; M.A.T. Oregon State Univ.

Miner, Jennifer B.A. Univ. of Oregon; M.S. Univ. of Oregon

Oberstaller, Peggy E. M.S. Oregon State Univ.; First Aid Instructor Cert; AH CPR Instructor

Olmos, Kristen C. B.S. Calif. St Univ. San Bernardino; M.P.H. Loma Linda Univ.; Registered Dietician

Reidy, Vernasue E.

Robbins, Lawrence W. B.A. Univ. of Oregon; M.Ed. Univ. of Oregon; M.Ed. Univ. of Oregon

Seeley, Kathleen M. B.S. Univ. of Oregon; ACE Cert Group Fitness Instr

Strickland, Robert G. B.A. Suny Buffalo

Wilken, Lyndell K. B.S. Univ. Illinois Urbana; M.S. Univ. Illinois Urbana

Health Professions

Cassidy, Suzanne C.M.A.

Collins, Kelly D. B.S. Univ. Missouri Columbia; J.D. Univ. of Oregon

Dodge, Vicki L. A.A. Fresno City Col.; B.S. Northrn Arizona Univ.

Gilbert-Morgan, Tove M.S. Oregon State Univ.

Hamlin Rupp, Piper L. B.S. Linfield Col.; Cert Computer Science

Heppel, Chris

Hill, Richard W.

Johns, Tammy A.A.S. Lane Community Col.; B.S. Oregon Institute of Technology; Registered Dental Hygienist; EPDH; Certified Dental Assistant; EFDA

Jones, Jill M. B.S.D.H. Oregon Health Sci Univ.; M.S. Univ. Iowa

Kelsay, Patricia K. B.S. Oregon Health Sci Univ.; M.A. Pacific Univ.

Knight, Stephen G. A.A.S. Lane Community Col.; B.S. Univ. of Oregon

Kosmatka, David B.A. Univ. North Dakota; M.A. Univ. of Oregon

Information reflects Human Resource records as of April 2015

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 Unv

McFerran, Teresa M. B.S. Quinnipiac Univ.; B.S. Rutgers/State Univ-New Jersey; M.S. Rutgers/State Univ-New Jersey; Registered Dietician

Nowicki, Carol B.A. San Diego State Univ.; M.A. San Francisco State Univ.

Peterson, Kym M. Certified Dental Assistant

Rathakette, Noy B.S. Mahidol Univ. - Thailand; M.S. Univ. of London - U.K.; Ph.D. Univ. of Oregon

Smalley, Donna Certified Dental Assistant; EFDA; EFODA

Smith, Jan Certified Dental Assistant; EFDA; EFODA

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

Institute for Sustainable Practices

Sims, Michael D. B.A. Univ. Montana; B.B.A. Texas A&M Univ-Clg Station; M.S. Univ. of Oregon

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.

Aydelott, Elizabeth B.A. Emory Univ.; M.A. Indiana Univ. Bloomington; Ph.D. Indiana Univ. Bloomington

Bockoven, David S. B.A. Univ. Washington; M.A. Univ. of Oregon; Ph.D. Univ. of Oregon

Brasted-Maki, Donald M. B.A. St Olaf Col.; B.S. Univ. Minnesota Minneapolis; Ph.D. Temple Univ.

Budz, Devon T. B.A. Univ. of Oregon; M.A. Univ. of Oregon

Casimir, Ulrick C. B.A. North Car State Univ. Raleigh; M.F.A. Univ. North Carolina Greensboro; M.A. Univ. of Oregon; Ph.D. Univ. of Oregon

Caston, Merry C. B.A. Univ. 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

Cordova, Angela J. B.S. Oregon State Univ.; M.S. Oregon State Univ.

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. New Clg - Univ. South Florida; M.A. Univ. of Oregon

Ghiselin, Katherine B.A. Bethany Col. Wv; Ph.D. Univ. of Oregon

Gill, James A. B.A. Southrn Illinois Univ. Carbndle; M.F.A. Southrn Illinois Univ. Carbndle

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

Hermach, Deborah A. B.S. Northwest Christian Univ.; M.S. Univ. of Oregon

Henry, Dan

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 Hl; Ph.D. Univ. of Oregon

Jensen, Sandra M. B.A. Univ. Washington; M.A. Calif. St Univ. Fullerton; Bilingual Spanish/English

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.

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

McLauchlin, Robert A. B.A. Univ. Oklahoma; M.A. Univ. of Oregon

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.

Mortensen, Camilla H. B.A. New Clg - Univ. South Florida; M.A. Univ. Calif. Los Angeles; Ph.D. Univ. of Oregon

Paz, Edana H. B.A. Univ. of Oregon; B.S. Unknown Oklahoma Col.; M.A. Univ. of Oregon

Rosenow, Cecilia

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

Shaner, Timothy W. B.A. Ft Lewis Col.; M.A. Antioch Univ-Yellow Springs; Ph.D. Suny Buffalo

Shull, Kathleen R. B.A. Univ. of Oregon; M.A. Univ. of Oregon; Ph.D. 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

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

Tillman, Rosemarie

Untz, Lynn M. B.A. New School/Eugene Lang Col.; M.F.A. 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 G. B.S. Calif. St Univ. Bakersfield; M.S. Univ. Calif. Berkeley

Bahen, Gordon B.A. Brigham Young Univ. Utah; M.A. Univ. Montana; Secondary Teaching Certificate

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

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. M.S. Univ. Ukraine Kyiv Polytech Ins

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.

Dixon, Harley T. B.S. Southern Oregon Univ.; M.A. Univ. of Oregon

Gettys, Thomas P. B.A. Calif. St Univ. - Chico; M.S. Calif. St Univ. - Chico

Gladfelter, Stephen G. B.A. Oberlin Col.; M.S. Univ. of Oregon; M.S. Rutgers/State Univ-Camden

Information reflects Human Resource records as of April 2015

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

Holton, Kristina L. M.S. Oregon State Univ.

Hsiao, Berri B.S. Univ. of Oregon; M.S. Montana State Univ. Billings; M.S. Univ. of Oregon

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.

Myers, Steven L. B.S. Univ. of Oregon; M.S. Univ. of Oregon

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Information reflects Human Resource records as of April 2015

Index

A

About Lane ... 4
Academic Advising ... 20, 52-53
Academic Calendar ... 2
Academic Learning Skills ... 20
Academic Probation ... 55
Academic Programs ... 68-145
Academic Requirements Review Committee ... 55
Academic Standards ... 55
Academic Progress Standards and Alert System ... 59
Accounting Program ... 68-69
Accounting Courses ... 176
Accreditation ... 4
Acting (See Theatre Arts)
Administration ... 266
Administrative office Professional ... 69-72
Administrative Support Courses ... 176-177
Admission ... 10
Adult Basic Education/GED Program ... 261
Adult Development and Aging ... 121-122
Adult Skill Development ... 261
Advising ... 5, 20
Advisory Committees ... 267
Affirmative Action Statement ... inside back cover
Agricultural Equipment/Mechanics (See Diesel)
Air Conditioning (See Automotive, Diesel)
American Indian Experience ... 172
Animal Sciences, pre-vet option ... 149
Antaomy/Physiology/Microbiology Courses ... 177
Anthropology Courses ... 177
Anthropology Transfer ... 149-151
Apprenticeship Courses ... 177-182
Architecture (See Drafting and Engineering)
Areas of Interest, Transfer ... 171-174
Art History Courses ... 182
Art, Studio Courses ... 183-185
Art Transfer ... 150-151
Asian Pacific Islander Student Union ... 26
Ask Lane ... 5
ASLCC (Associated Students of Lane Community Col.) ... 26
Assessment and Testing ... 28
Associate of Applied Science Degree ... 49-51
Associate of Arts Oregon Transfer Degree ... 33-37
Associate of General Studies ... 48-49
Associate of Science Degree ... 41-42
Associate of Science Oregon Transfer: Business ... 38-39
Associate of Science Oregon Transfer: Computer Science ... 39-41
Associate of Science Degree - Direct Transfer OSU ... 45-48
Associate of Science Degree - Direct Transfer UofO ... 42-45
Astronomy (See Physics)
Attendance ... 55
Audio (See Media Arts)
Audit ... 60
Auto Collision Program ... 72
Automotive Courses ... 185-186
Automotive Collision and Refinishing Courses ... 185
Automotive Technology Program ... 72-74
Aviation Academy ... 8
Aviation Maintenance Courses ... 186
Aviation Maintenance Technician Program ... 75-76
Awards ... 4

B

Baking and Pastry ... 91-92
Basic Health Care ... 116
Basic Manufacturing/Machining Technician ... 128
Biochemistry Transfer ... 151
Biology Courses ... 186-188
Biology Transfer ... 151-152
Black Student Union ... 26
Board of Education, Lane ... 266
Board of Education, Oregon ... 267
Bookstore ... 28
Botany (See Biology)
Broadcasting(See Media Arts)
Budget Committee, Lane ... 267
Building Controls Technician Option ... 105
Bus Pass ... 8
Business and Accounting Transfer ... 152-153, 168
Business and Workforce Development ... 263-265
Business Assistant Program ... 76-77
Business Courses ... 188-189

C

CAD, CADD (See Drafting and Engineering Technician)
CAM (See Manufacturing)
CNC (See Manufacturing)
Calendar, Academic ... 2
Campus Map ... 9
Career and Employment Services ... 20
Career Development Courses ... 189
Career Technical Certificate ... 51-52
Career Technical Course Prefixes ... 50
Career Technical Programs ... 54-55, 68-146
Catalog ... 5
Center for Accessible Resources ... 20-21
Center for Meeting and Learning ... 261
Centro Multi-Cultural ... 26-27
Certificates ... 51
Certified Medical Assisting (See Medical office Assistant)
Chemical Dependency (See Human Services)
Chemistry Courses ... 189
Child Development (See Early Childhood Education)
Child and Family Education Department ... 21
Child Care ... 21
Civil Engineering Transfer ... 153-154
Class Schedule ... 5, 55
Clubs and Organizations ... 26-27
College District ... 16-17
College Level Examination Program ... 22
College Preparation (See Study Skills)
College Success Courses ... 189-190
Communications Courses ... 190
Community Center for Family Counseling ... 261-262
Community Health Worker Certificate ... 122
Community Health Worker Certification ... 259
Community Services ... 261-262
Como Empezar en Lane ... 6
Complaint Procedure ... 61
Computer Game Programming in C++ ... 85
Computer Hardware Repair (See Electronics)
Computer Information Science Transfer ... 154
Computer Information Systems ... 77-79
Computer Information Systems - Health Informatics ... 79-81
Computer Information Systems - Health Informatics Transfer ... 169-170
Computer Labs ... 21
Computer Network Monitoring and Management ... 82
Computer Network Operations ... 81-83
Computer Network Security ... 82-83
Computer Programming Program ... 83-84
Computer Simulation and Game Development ... 84-85
Computer Training (noncredit) ... 259
Computers: Introduction/Information Systems/Computer Science Courses ... 191-194
Computers: Keyboarding Courses ... 194
Computers: Software Courses ... 194-195
Construction Courses ... 195
Construction Technology Program ... 85-87
Construction Trades ... 87-89
Continuing Education Training Programs ... 259
Cooperative Education ... 12-13, 56
  (Also See specific programs and course descriptions)
Cooperative Education, International ... 14
Cooperative Education/Internships Courses ... 195-196
Core College Connection ... 261
Core Values ... 280
Cottage Grove Campus ... 8
Counseling and Advising ... 5, 20
Course Descriptions ... 176-257
Course Numbers ... 56
Credit-by-Assessment ... 22
Credit-by-Examination ... 22
Credit for Prior Learning ... 22
Credit Programs ... 68-145

Credits ... 32, 55-56
Credit Student Outcomes ... 32-33
Criminal Justice Courses ... 196-197
Criminal Justice Program ... 122-123
Criminal Justice Transfer ... 170
Culinary Arts and Foodservice Management Program ... 89-92
Culinary Arts Courses ... 197
Curriculum for High School Students ... 13-14
Customer Service Certificate ... 72

D

Dance Transfer ... 155
Dance Courses ... 197-199
Dance Productions ... 25
Database Specialist ... 79
Deferred Billing Terms Agreement ... 17-18
Definitions ... 55-57
Degree and Certificate Overview ... 31-52
Denali ... 27
Dental Assisting Courses ... 199-200
Dental Assisting Program ... 92-93
Dental Hygiene Courses ... 200-201
Dental Hygiene Program ... 93-95
Dental Hygiene Transfer ... 168-169
Determination of Residency ... 16-17
Diesel and Heavy Equipment ... 201-202
Diesel Technology Program ... 95-97
Differential Pricing Program ... 16
Direct Transfer ... 42-48
Disability Resources ... 20-21
Disciplinary Action ... 64-65
Disclosure Statement ... 57
Distance Learning ... 14
Downtown Campus ... 8
Drafting Courses ... 202-203
Drafting Program ... 97-98
Drama (See Theatre Arts)
Dropping a Class ... 57
Drug and Alcohol Statement ... 61-62

E

Early Childhood Education Courses ... 203-204
Early Childhood Education Program ... 98-101
Early Childhood Teacher Aide 1 ... 101
Earth and Environmental Science ... 204
Economics Courses ... 204-205
Economics Transfer ... 155-156
Education Courses ... 205
Electrician Apprenticeship Technologies ... 101-103
Electronic Technology Program ... 103
Electronics Courses ... 205-206
Elementary Education Transfer ... 156-157
Emergency Medical/Paramedic Courses ... 206-207
Emergency Medical Technician ... 137
Emergency Medical Technology (See Paramedicine)
Employer Training Services ... 264
Energy Management Courses ... 207-209
Energy Management Technician Program ... 103-105
Engineering (See Drafting, Electronics, Engineering Transfer)
Engineering Transfer ... 209
Engineering Transfer Courses ... 209
English as a Second Language ... 260
English as a Second Language Courses (See Study Skills and College Preparation; also noncredit classes)
English Courses (See Literature, Writing)
English Transfer ... 157
Enrollment ... 4
Enrollment and Student Financial Services ... 5, 22, 56
Environmental Engineering Transfer ... 157-158
Equal Opportunity ... inside back cover
Español ... 6, 260
Ethnic Studies Transfer ... 158-159
Ethnic Studies Courses ... 209-211
Exercise and Movement Science ... 105-109
Exercise and Movement Science Courses ... 211-212
Exercise and Sport Science Transfer ... 172
Expenses ... 16

F

Fabrication/Welding Courses ... 212-213
Fabrication/Welding Technology Program ... 109-112
Facilities ... 8
Faculty ... 268-275
FAFSA ... 17
Family Connections ... 21
Family Studies (See Human Relations)
Fees and Expenses ... 16
Fee Refunds ... 19
Film (See Literature, Media Studies, and Political Science)
Financial Aid ... 22, 56
Fitness Education Center ... 25
Fitness Specialist Level 1 ... 109-110
Fitness Specialist Level 2 ... 106-108
Flight Courses ... 213-214
Flight Technology Program ... 112-113
Flight Technology Transfer ... 169
Florence Campus ... 8
Food Service Management ... 89-92
Foodservices ... 23
Foreign Languages (See Language Studies)
Foundation, Lane ... 267
French (See Language Studies)
Full-time Student ... 56
Funding ... 4

G

Gender and Sexuality Alliance ... 26
General Educational Development (GED) Test ... 261
General Science Transfer ... 159-160
Geographic Information Systems ... 113-114
Geography Courses ... 214-215
Geography Transfer ... 160
Geology (See Earth and Environmental Science)
Governance ... 266-267
Grade Changes ... 59
Grade Point Average ... 59
Grades ... 57, 59
Grading Policies ... 59-60
Grade Notations ... 59
Graduation ... 31, 56
Graphic Design Courses ... 215-216
Graphic Design Program ... 114-115
Group Exercise Instructor Certificate ... 109
Guidance and Curriculum ... 100
Guided Studies Program ... 20

H

Half-Time Student ... 56
Health Education Transfer ... 172
Health and First Aid Courses ... 216
Health Clinic ... 23
Health Informatics Transfer ... 169-170
Health Information Technology Specialist ... 80-81
Health Occupations Courses ... 216-217
Health Records Technology ... 115-117
Health Records Courses ... 217-218
High School Connections ... 13-14
History Courses ... 218-219
History Transfer ... 160-161
Honor Lists ... 56
Honor Society ... 27
Honors Courses ... 219-220
Honors Program ... 14
Horticulture Transfer ... 161-162
Hospitality Management Courses ... 220-221
Hospitality Management Program ... 117-120
Housing ... 24
How to Get Started ... 5
Human Development Classes ... 22
Human Physiology ... 162
Human Relations Courses ... 49, 221
Human Services Courses ... 221-223
Human Services Programs ... 120-122
Human Services: Criminal Justice ... 122-123
Human Services: Juvenile Corrections ... 123-124
Humanities Courses ... 223
Hybrid Courses ... 14, 57

I

Immunizations ... 11, 23
Incomplete ... 60
In-District Students ... 16
Industrial Mechanics and Maintenance Technology ... 124-126
Infant and Toddler ... 100-101
Inglés Como Segundo Idioma ... 260

Instructional Staff 268-275
Intercollegiate Athletics 25
International Cooperative Education 14
International Learning Opportunities 14
International Student Admission 10
International Student Program 10, 24
International Students 10, 24, 260
Internet (See Business and Computers: Introduction)
Internships/Work Experience (See Cooperative Education)
Intoxicants, Use of 27-28, 61-62

J

Job Search Assistance 20
Journalism Courses 223
Juvenile Corrections Program 123-124

K

KLCC-FM Radio 262

L

"L" Number 57
Lane Board of Education 266
Lane Budget Committee 267
Lane Foundation 267
Lane Transit District 8
LaneOnline 14
Language Studies Courses 223-225
Late Fees 18
Learning Communities 14-15
Legal Assistant Courses 225-226
Legal office Skills 70-71
Legal Services, Student 24
Library 24
Literature Courses 226-229
Live Interactive Courses 14
Locations and Maps 8-9

M

Machine Shop, Machine Tools (See Manufacturing)
Management (See Business/ Management and Culinary)
Manufacturing Courses 229
Manufacturing Technology Program 126-128
Manufacturing Technology: Computer Numerical Control (CNC) Technician Option 127
Map, Lane Campus 8
Massage Therapy Pre-licensure 259
Mathematics Courses 229-233
MEChA 26
Mechanical Engineering Transfer 162-163
Mechanics (See Automotive, Aviation, Diesel)
Media Arts Courses 233-235
Medical Coding 116-117
Medical Office Assistant Program 128-129
Medical Office Assisting Courses 235
Medical Scribe 259
Meeting, Convention, and Special Events Manager 119-120
Microbiology (See Anatomy/Physiology/ Microbiology)
Mobile Application Development 84
Money Matters 16-19
Multicultural Center 26-27
Multimedia Design Program 129-132
Music Courses 235-238
Music, Dance and Theatre Arts 25
Music Lessons Courses 238-239
Music Transfer 163-164
myLane 57

N

National Career Readiness 265
Native American Student Association 27
New Student Information 11
Noncredit Programs 259
Nursing Courses 239-241
Nursing Assistant 259
Nursing Program 132-135
Nutrition Courses 241

O

Occupational Skills Courses 241
Occupational Skills Program 135-136
Off-Campus Centers 8
Office Assistant (See Administrative Support)
Office Software Specialist 71
Online Courses 14
Oregon Board of Education 267
Oregon Transfer Module 52
Out-of-District Students 16-17
Out-of-State Students 17
Outcomes Assessment 32
Outreach Centers 8
Overview of Academic Programs 12-15

P

Paramedic (See Emergency Medical/ Paramedic)
Paramedicine 136-137
Parent Education (See Early Childhood Education)
Parking 8
Pass/No-Pass 60
Paying for Classes 17-19
Payments, Tuition and Fees 16-19
Peace Studies Transfer 173
Phi Theta Kappa Honor Society 27
Philosophy and Religion Courses 242
Phlebotomy 259
Phone Numbers 7
Photo ID 25
Photography Courses 242-243
Physical Education Courses 243-246
Physical Exams & Immunizations 11
Physical Therapist Assistant 137-139
Physical Therapist Courses 246-247
Physics Courses 247-248
Placement Testing 28
Policies 60-66
Political Science Courses 248-249
Political Science Transfer 164
Practical Nursing 133
Practical Nursing Bridge 134-135
Pre-Journalism 173
Pre-Professional Health 165
President's Letter 3
Probation, Academic 55
Procedures and Policies 55-66
Psychology Courses 249
Psychology Transfer Plan 165
Public Safety 66

R

Radio (See Media Arts)
Reading (See Study Skills)
Records, Student, Release of 58
Recreational and Club Sports Program 25
Refunds 11, 18-19
Registration 11
Release of Records 58
Religion (See Philosophy and Religion)
Renewable Energy Technician Option 104-105
Residency, Determination of 10, 16-17
Respiratory Care Courses 249-251
Respiratory Care Program 139-141
Retail Management 141-142
Robotics (See Electronics, Industrial Mechanics)

S

Sales and Marketing (See Business)
Schedule Changes 11, 57
School of Arts and Sciences 148
School of Professional and Technical Careers 167-170
Security and Safety 66
Semiconductor Manufacturing (See Electronics)
Senior Companion Program 262
Service Learning 15
Shielded Metal Arc Welder 112
Skills Testing 28
Small Business Development Center and Employee Training 263-265
Small Business Management 263-264
Small Business Ownership 71-72
Social Security 57
Sociology Courses 251-252
Spanish (See Language Studies)
Special Admission Programs 11
Specialized Support Services 262
Speech (See Communications)
Speech and Communication Studies 173
Spelling (See Writing)

Sports and Fitness 25
Steps to Enroll in Credit Classes 11
Student Code of Conduct...................62-65
Student Complaint Procedure 60-65
Student Employment Service 20
Student Government...............................26
Student Help Desk 27
Student Leadership
    Development Courses.......................252
Student Legal Services............................24
Student Life and Leadership
    Development 26-27
Student Magazine....................................27
Student Newspaper.................................27
Student Outcomes Assessment 32
Student Policies and Complaint
    Procedures.....................................60-65
Student Publications 27
Student Records 58
Student Rights and
    Responsibilities 62-65
Student Snack Shack 27
Studio Art (See Art, Studio)
Study Skills and College Preparation
    Courses 252-253
Substance Abuse Prevention
    Program 27-28
Substance Abuse Statement...............61-62
Successful Aging Institute.....................262
Supervised Field Experience
    (See Cooperative Education)
Supported Adult Basic Education..........261
Sustainability 28
Sustainability Coordinator............. 142-143

T

Telecourses 14
Telephone Numbers 7
Television (See Media Arts)
Testing office 28
Theater Transfer 165-166
Theatre Arts Courses......................253-254
Theatre Productions 25
Titan Court...24
Titan Store 28
Torch 27
Transcripts 58
Transfer Credits................................. 11, 55
Transfer Hotline..54
Transfer Majors...................................53-54
Transfer Guides.............................. 147-174
Transiciones 30
Transitions..30
Transportation, Bus 8
TRIO Program 28
Tuition 16
Tuition, Fees, Financial Aid
    and Payment.................................. 16-19
Tuition Payments 17
Tuition Refunds 11, 18
Tutoring Courses 254
Tutoring Services.....................................29

V

VA Educational Benefits.....................29-30
Veterans' Center.......................................30
Veterans' Services 29-30
Video Production Courses (See
    Media Arts)
Vocabulary (See Writing)

W

Water Conservation Courses 254-255
Water Conservation Technician....... 143-144
Watershed Science Courses 255
Watershed Science Technician 144-145
Web (See Business and Computers:
    Introduction)
Web Design 131-132
Welcome Letter 3
Welding (See Fabrication and Welding)
Welding Processes........................... 111-112
Wire Drive Welder 112
Withdrawing from Classes, School 57
Women in Transition 30
Women in Transition Courses 255-256
Women's Center 30
Women's Program 30
Women's Studies Transfer 173-174
Women's Studies Courses 256
Workforce Development 265
WorkSource Lane...................................265
Writing Courses 256-257

Z

Zoology (See Biology)

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 Lane's 2014 self-study for the Northwest Commission on Colleges and Universities, the following four core themes were identified as individually manifesting essential elements of Lane's Mission and collectively encompassing the Mission:

Academic Transfer, Career Technical and Workforce Development, Foundational Skills Development, and Lifelong Learning.

New Core Themes are being developed by Lane's Institutional Effectiveness Committee and will be used to guide the college during its upcoming cycle of institutional self-study and assessment of Mission accomplishment.

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

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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 Terrie Minner, Interim Associate Dean for Accessibility and Support, 541.463.3010. Inquiries regarding Section 504 may be directed to Dennis Carr, Chief Human Resource Officer and Section 504 Coordinator, Building 3, Room 114, 541.463.5585.

"I started interning at Koho Bistro through the culinary program at Lane, and I was hired right after I graduated. Now as a sous chef, I couldn't be happier."

– Jake Reed, Chef
2013 Lane Graduate

Koho
bistro

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"Lane creyó en mí y me inspiró a creer en mí mismo. Ahora mi sueño es llegar a ser la agente de bienes y raices líder en conceptos universales para diseño de casas y servir a la comunidad."

– Teodora Wences
Bienes Raices
2006 Graduada
de Lane

Lane Community College℠

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