# Lane 

 Community College ${ }^{\text {" }}$
## 2009-2010 GATALOG

ACHIEVING DREAMS

There are dreamers and there are those who achieve dreams.

## Vision

## Transforming lives through learning

## Mission

Lane is a learning-centered community college that provides affordable, quality, lifelong educational opportunities that include:

- Professional technical and lower division college transfer programs,
- Employee skill upgrading, business development and career enhancement,
- Foundational academic, language and life skills development,
- Lifelong personal development and enrichment, and
- Cultural and community services.


## Core Values

## Learning

- Work together to create a learning- centered environment.
- Recognize and respect the unique needs and potential of each learner.
- Foster a culture of achievement in caring community.


## Innovation

- Support creativity, experimentation and institutional transformation.
- Respond to environmental, technological and demographic changes.
- Anticipate and respond to internal and external challenges in a timely manner.
- Act courageously, deliberately and systematically in relation to change.


## Collaboration and Partnership

- Promote meaningful participation in governance.
- Encourage and expand partnerships with organizations and groups in our community.


## Integrity

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


## Diversity

- Welcome, value and promote diversity among staff, students and our community.
- Cultivate a respectful, inclusive and accessible working and learning environment.
- Work effectively in different cultural contexts to serve the educational and linguistic needs of a diverse community.
- Develop capacity to understand issues of difference, power and privilege.


## Accessibility

- Strategically grow learning opportunities.
- Minimize financial, geographical, environmental, social, linguistic, and cultural barriers to learning.


## Sustainability

- Integrate practices that support and improve the health of systems that sustain life.
- Provide 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.
- Equip and encourage 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.


## Strategic Directions

## Transforming Students' Lives

- Foster the personal, professional and intellectual growth of learners by providing exemplary and innovative teaching and learning experiences and student support services.
- Commit to a culture of assessment of programs, services and learning.
- Position Lane as a vital community partner by empowering a learning workforce in a changing economy.


## Transforming the College Organization

- Achieve and sustain fiscal stability.
- Build organizational capacity and systems to support student success and effective operations.
- Promote professional growth and provide increased development opportunities for staff both within and outside the college.


## Transforming the Learning 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, religions, sexual orientations, and abilities.
- Create, enhance and maintain inviting and welcoming facilities that are safe, accessible, functional, well-equipped, aesthetically appealing, and environmentally sound.

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 Executive Director for Human Resources, Lane Community College, 4000 East 30th Avenue, Eugene, Oregon $97405-0640,463-5585$. Inquiries regarding Title IX may be directed to the Women's Program Director, Building 1, Room 202, 463-5264. Inquiries regarding Section 504 may be directed to Nancy Hart, Disability Resources Director, Building 1, Room 218, 463-3010 or Dennis Carr, Human Resources Director and Section 504 Coordinator, Building 3, Room 114, 463-5585.
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This information is available in alternate formats upon request by contacting Disability Resources: (541) 463-5150 (voice), (541) 463-3079 (TTY), or email: disabilityresources@lanecc.edu

This catalog is published for informational purposes and every effort is made to insure accuracy at the time of printing. However, the provisions in this catalog are not to be regarded as an irrevocable contract between the student and the college. Lane Community College reserves the right to change any provision or requirement at any time. Students are advised to study the class schedule and to work closely with a counselor or advisor.

This catalog was prepared with assistance from: Angela Miller, editor; Mary Brau, coordinator of student outcomes assessment and curriculum development; Melanie Brown, curriculum specialist; Bruce Nichols, typesetter; John Bauguess, photographer. Cover design by Funk/Levis and Associates.

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## Academic Calendar 2009-2010

Summer Term 2009 (session 201010)
Advance Registration begins
Registration begins
New credit student registration begins
Summer term books available
Summer term classes begin
Independence Day observed, college closed
First four-week session
First six-week session
Eight-week session
Twelve-week session
Second four-week session
Second six-week session
Third four-week session
Labor Day, college closed
Fall Term 2009 (session 201020)
Advance Registration begins
Registration begins
New credit student registration begins
Fall term books available
Inservice, college closed
Fall term classes begin
Last day to receive a tuition refund
Veterans' Day, college closed
Last day for schedule changes
Thanksgiving weekend, college closed
Finals week
Fall term ends
Winter break

May 5, 7 a.m. June 1, 7 a.m. June 2, 7 a.m. June 16
June 22
July 3
June 22-July 18 June 22-August 1 June 22-August 15 June 22-Sept 12 July 20-August 15 August 3-Sept 12 August 17-Sept 12 September 7

May 19, 7 a.m.
September 10, 7 a.m.
September 11, 7 a.m.
September 14
September 22
September 29 (Tuesday)
October 4, midnight
November 11
November 20
November 26-29
December 7-12
December 12
Dec 13-Jan 3

## Winter Term 2010 (session 201030)

Advance Registration begins
Registration begins
New credit student registration begins
Winter term books available
New Year's Day, college closed
Winter term classes begin
Last day to receive a tuition refund
Martin Luther King Day, college closed
Presidents' Day, college closed
Last day for schedule changes
Finals week
Winter term ends
Spring break

October 20, 7 a.m.
November 30, 7 a.m.
December 1, 7 a.m.
December 28
January 1
January 4
January 10, midnight
January 18
February 15
February 27
March 15-20
March 20
March 21-28

Spring Term 2010 (session 201040)
Advance Registration begins
Registration begins
New credit student registration begins
Spring term books available
Spring term classes begin
Last day to receive a tuition refund
Inservice, college closed
Last day for schedule changes
Memorial Day, college closed
Finals week
Spring term ends
Graduation

June 2009

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July 2009
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262728293031

January 2010
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16171819202122
23242526272829
3031

| February 2010 |  |  |  |  |  |  |
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August 2009

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## September 2009

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November 2009
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December 2009
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May 2010
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## Taking a class at Lane is easy!

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

January 26, 7 a.m.
March 1, 7 a.m.
March 2, 7 a.m.
March 23
March 29
April 4, midnight
TBA
May 21
May 31
June 7-12
June 12
June 12

## Welcome to Lane Community College

Usted puede lograr sus sueños en Lane Community College.
Si su sueño es un título universitario, Lane ofrece una amplia variedad de créditos transferibles. La colegiatura cuesta menos en Lane y usted estará bien preparado cuando se transfiera. Por cierto, 84 por ciento de nuestros graduados dicen que Lane los preparó "bien" o "muy bien" para la universidad. La asociación de grados que tenemos con la Universidad del Estado de Oregon y con la Universidad de Oregon hace que la transferencia sea especialmente sencilla de tramitar.
Si su sueño es una gran carrera, se puede capacitar en Lane. Ofrecemos grados técnicos de dos años, certificados de un año, y programas cortos en más de 40 ocupaciones. Usted entrará al campo laboral con habilidades competitivas. Más del 84 por ciento de nuestros graduados en carreras y programas técnicos obtienen empleo en su área de estudio.
Si usted busca educación continua, o necesita aprender inglés como segundo idioma, u obtener su GED, Lane es para usted. Si usted es un empleador le podemos ayudar a entrenar a su personal. ¿Quiere empezar su propio negocio? Nosotros le podemos ayudar.
Lane tiene planteles en Eugene, Cottage Grove y Florence, y nos puede encontrar en el Internet en lanecc.edu. Ofrecemos becas y ayuda financiera estudiantil, así como una variedad de servicios que le ayudarán a enfocarse en el aprendizaje.

Nuestro profesorado y personal están dedicados a su éxito. Muchos de nuestros instructores tienen doctorados así como experiencia de trabajo en el mundo real. Usted recibirá apoyo y atención personal incalculable.
Usted puede lograr sus sueños en Lane Community College. Bienvenido.

Sinceramente,

Mary Spilde, Presidente

You can achieve your dreams at Lane Community College.
If your dream is a college degree, Lane offers a comprehensive range of transfer credits. Tuition is lower at Lane and you'll be well prepared when you transfer. In fact, 84 percent of our graduates say Lane prepared them "well" or "very well" for university. Our degree partnerships with Oregon State University and the University of Oregon make transferring especially easy.


If your dream is a great career, you can train at Lane. We offer two-year degrees, one-year certificates, and fast-track programs in more than 40 occupations. You'll enter the workforce with competitive skills. More than 84 percent of our career and technical graduates get jobs in their fields.
If you seek continuing education or lifelong learning, or need to learn English as a second language, or get your GED, Lane is for you. If you're an employer, we can help you train your workforce. Want to start your own business? We can help.
Lane has locations in Eugene, Cottage Grove and Florence, and we're online at lanecc.edu. We offer scholarships and financial aid, and a variety of services to help you focus on learning.
Our faculty and staff are dedicated to your success. Many of our instructors have doctorates as well as real-world work experience. You'll get invaluable personal attention and support.
You can achieve your dreams at Lane Community College. Welcome.

Sincerely,

Mary Spilde, President

## About Lane Community College

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

Lane serves a population of approximately 336,000 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 a number of locations throughout the district, including Florence, Cottage Grove, downtown Eugene, and the Eugene Airport.

## Enrollment

During the 2007-08 academic year, 34,364 students enrolled in Lane Community College classes. The average age for all students was 32 years.

## Accreditation, Certificates and Affiliations

Lane is accredited by the Northwest Commission on Colleges and Universities, $8060165^{\text {th }}$ 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 for review.
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 and certified under Part 147 of the Federal Aviation Regulations of the Federal Aviation Administration
- Culinary Arts, accredited by the American Culinary Federation Education Foundation Accrediting Commission, a specialized accrediting commission recognized by the Council for Higher Education Accreditation
- Dental Assisting, accredited by American Dental Association's Commission on Dental Accreditation, a specialized accrediting board recognized by the U.S. Department of Education
- 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
- DieselTechnology, evaluated and accredited by the Association of Equipment Distributors Foundation
- Emergency Medical Technology-Paramedic, approved by the Department of Human Services and Trauma Systems, Oregon, meeting requirements of OAR 333-265-0010(2)
- Energy Management, awarded Institute for Sustainable Power Quality accreditation credential from the Interstate Renewable Energy Council, International Standard \#01021 for accreditation and certification of renewable energy training programs and instructors
- Exercise and Movement Science endorsed by the American College of Sports Medicine
- Flight Technology certification courses, approved by the Federal Aviation Administration
- Hospitality Management, candidate for accreditation by the Commission on Accreditation of Hospitality Management Programs
- 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 Curriculum 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, evaluated and approved through 2012 by the Oregon State Board of Nursing
- Respiratory Care, accredited by the Commission on Accreditation of Allied Health Education Programs, a specialized accrediting board recognized by the Council for Higher Education Accreditation, in collaboration with the committee on Accreditation for Respiratory Care


## 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 a Vanguard College. Through the League, Lane exchanges innovative ideas and practices with some of the best community colleges in the United States.

## Funding

Lane Community College is funded by local property taxes, state revenues, and tuition and fees. The 2008-09 General Fund budgeted resources are $\$ 76,071,438$ of which approximately 57 percent came from intergovernmental, 37 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 will be used to update instructional facilities, equipment and technology at Lane. Work is expected to begin summer ' 09 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.


## Who Can Attend Lane

In general, anyone 18 years or older may enroll in Lane Community College credit classes. A high school diploma is not required. Noncredit classes are generally open to persons 16 years or older.
The college is dedicated to helping each student accomplish his or her immediate educational goals.

## What Lane Has To Offer

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

## Credit Classes and Programs

Some of the courses offered at the college are for "credit." Credit courses are designed to be transferable to other colleges or to be part of a career and technical degree program. Information about credit program offerings begins on page 69.

## Noncredit Community Education Classes

Noncredit courses are not transferable to Lane's career and technical degree programs or to other colleges. Information about these offerings begins on page 245.

## 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.

Catalog This catalog is produced annually in the spring and is available at no charge at college centers. It also is available through the mail for a small charge. To order a catalog, call Lane's Bookstore at (541) 463-5256 or use the order form in the Aspire Magazine. The catalog also can be found on Lane's Web site, lanecc.edu.

Lane's catalog is published for informational purposes and every effort is made to insure accuracy at the time of printing. However, the provisions in this catalog are not to be regarded as an irrevocable contract between the student and the college. Lane Community College reserves the right to change any provision or requirement at any time. Students are advised to study the web class schedule and to work closely with a counselor or advisor. Students also are encouraged to see a counselor or advisor to have an evaluation done early in their programs of study to obtain the most accurate information on their program requirements.
Class schedule The quarterly class schedule is available on the web at lanecc.edu about one week before Advance Registration begins. Advance Registration usually begins the fourth week of the preceding term except fall term, which occurs the preceding spring term.

The Aspire Magazine which contains noncredit offerings and an abbreviated list of credit offerings is mailed to homes in the college district approximately one week before registration begins each term. Centers at Cottage Grove and Florence also mail schedules specific to those centers.
Counseling Building 1, Room 103, (541) 463-3200
The Counseling department assists students in planning and meeting their educational goals. The center provides academic advising, and career and retention counseling. To receive assistance, drop by the center or make an appointment by calling (541) 463-3200.
For information about the center and other counseling services, see page 27-28.

Counseling services also are available at these off-campus centers: Lane Community College at Cottage Grove, (541) 942-4202; and Lane Community College at Florence, (541) 997-8444.

Enrollment and Student Financial Services Building 1, First
Floor (Lobby), lanecc.edules/
(541) 463-3100, (877) 520-5391, or TTY (541) 463-4722

Enrollment and Student Financial Services admits credit students, provides registration and billing assistance to all students, and responds to all questions and issues regarding financial aid. Hours are Monday, Tuesday, and Thursday, 9 a.m.5 p.m.; Wednesday, 10 a.m.- 5 p.m.; Friday, 9 a.m. 2 p.m.
Web Information about the college, such as the catalog, class schedule, and ExpressLane, can be found on the Internet at lanecc.edu.

## Other Good Starting Places:

College centers and maps, pages 8-9.
Disability Resources, page 28.
English as a Second Language, page 247.
Inglés como Segundo Idioma, page 247.
International Student Program, page 30.
Multicultural Center (Centro Multicultural), page 30-31.
Native American Program, page 31.
TRIO Learning Center, page 34-35.
Veterans' Office, page 36.
Women's Center, page 37.

## Catch the ExpressLane

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

## Como Empezar en Lane

## Quien puede asistir a Lane

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

## Que les Ofrece Lane

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

## Programas y Clases de Valor Curricular

Algunos de los cursos que el college ofrece son de "crédito" (valor curricular). Los cursos de crédito curricular están diseñados para transferirlos a otros colleges/universidades o para que formen parte de un programa técnico/profesional. La información sobre clases de crédito curricular empiezan en la página 69.

## 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 245.

## Buenos Puntos de Partida

Lane ofrece una variedad de opciones educativas las cuales están diseñadas para cumplir con los deseos académicos de las personas durante las diferentes etapas de su vida y educación. A continuación presentamos unos buenos puntos de partida.
Catálogo Este catálogo se produce anualmente durante la primavera y lo puede adquirir gratis en los centros del college. También se puede ordenar, a bajo costo, por correo. Para ordenar un catálogo, llame a la Librería de Lane al (541) 463-5256 o puede usar la hoja de pedido que se encuentra en la revista de Aspire Magazine. El catálogo se encuentran en el portal de Lane en el Internet, lanecc.edu. El catálogo de Lane es publicado para fines informativos y se hacen todos los esfuerzos para asegurar exactitud a la hora de imprimirlo. Sin embargo, lo presentado en este catálogo no debe ser considerado como un contrato irrevocable entre el estudiante y el college. Lane Community College reserva el derecho de cambiar, en cualquier momento, cualquier parte de lo presentado o de los requisitos. Se les aconseja a los estudiantes revisar la lista de clases y asesorarse detalladamente con un consejero o asesor. También se les recomienda a los estudiantes obtener una evaluación formal de sus expedientes académicos, al iniciar sus programas de estudios, para así obtener la información más precisa sobre los requisitos que necesitan para sus programas.

Lista de Clases El horario de clases trimestrales está a su disposición en el Internet, en lanecc.edu aproximadamente una semana antes de que se inicie la Matriculación Previa (Advance Registration, en inglés). La Matriculación Previa usualmente inicia la tercera semana del trimestre anterior excepto el trimestre de otoño, el cual se lleva a cabo durante el trimestre de primavera anterior.
La revista impresa con el horario de clases trimestrales también es enviado por correo a los hogares dentro del distrito escolar aproximadamente una semana antes de que se inicie cada trimestre. Los centros en Cottage Grove y Florence también envían por correo horarios de clases específicos a esos centros.
Centro de Consejería y Asesoría Edificio 1, Salón 103, (541) 463-3200

El Centro de Consejería y Asesoría ayuda a los estudiantes a planear y alcanzar sus metas educativas. El centro proporciona asesoría académica, y consejería vocacional. Para recibir ayuda, vaya al centro o haga una cita al llamar al (541) 463-3200.

Para información sobre el Centro y otros servicios de consejería, ver páginas 27-28.

Servicios de consejería también se ofrecen el los siguientes centros fuera del plantel:
Downtown Center, (541) 463-5940
Lane Community College en Cottage Grove, (541) 942-4202
Lane Community College en Florence, (541)997-8444
Admisión/Enrollment and Student Financial Services Edificio
1, Primer piso, (541) 463-3100, (877) 520-5391, or TTY (541)
463-4722
lanecc.edu/es/
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, martes y jueves, 9 a.m.-5 p.m.; miércoles, 10 a.m. -5 p.m.; viernes, 9 a.m. -2 p.m.

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

## Otros Buenos Puntos de Partida

Centros del college, página 8-9.
Recursos para Discapacitados, página 28.
Inglés como Segundo Idioma, página 247.
Programa para Estudiantes Internacionales, página 30.
Centro Multicultural, página 31.
Programa Nativo Americano, página 31.
Centro de Aprendizaje TRIO, página 34-35.
Oficina de Veteranos, página 36.
Centro para la Mujer, página 37.
Main college phone: (541) 463-3000Credit Instructional Departments
Academic Learning Skills. ..... 463-5439
Advanced Technology ..... 463-5380
Arts Division ..... 463-5409
Business Department ..... 463-5221
Computer Information Technology ..... 463-5826
Cooperative Education ..... 463-5203
Flight Technology ..... 463-4195
Health and Physical Education ..... 463-5545
Health Professions ..... 463-5617
Human Development (Counseling Department) ..... 463-3200
Language, Literature and Communication ..... 463-5419
Mathematics ..... 463-5392
Music, Dance and Theatre Arts ..... 463-5209
Science ..... 463-5446
Social Science ..... 463-5427
AdministratorsPresident463-5200
Vice President, College Operations. ..... 463-5311
Vice President, Instruction \& Student Services ..... 463-5302
Assoc. Vice President, Instruction ..... 463-5306
Admissions/Enrollment and Student Financial Services ..... 463-3100
Adult Basic and Secondary Education (ABSE) ..... 463-5214
Downtown Center ..... 463-5945
ABSE Volunteer Tutor Program ..... 463-5919
Affirmative Action. ..... 463-5801
Associated Students of Lane
Community College (ASLCC) ..... 463-5365
Athletics ..... 463-5599
Bookstore. ..... 463-5256
Bookstore Annex (Downtown Center) ..... 463-5942
Business Development Center ..... 463-5255
Career and Employment Services ..... 463-5167
Child and Family Education ..... 463-5519
Continuing Education. ..... 463-5252
Cooperative Education ..... 463-5203
Cottage Grove Center* ..... 942-4202
Counseling (Main Campus) ..... 463-3200
Counseling* (Downtown Center) ..... 463-5940
Denali (Student Publication) ..... 463-5897
Dental Hygiene Clinic. ..... 463-5206
Disability Resources ..... 463-5150
Dislocated Worker Program ..... 463-5223
Distance Learning ..... 463-5893
Downtown Center ..... 463-5252

| Emergency Calls (on campus) | 463-5555 |
| :---: | :---: |
| Emergency Medical (on campus). | 463-5555 |
| Employment Services | 463-5167 |
| English as a Second Language. | 463-5253 |
| Enrollment and Student Financial Services .. | 463-3100 |
| Financial Aid. | 463-5205 |
| Fitness Education Center* | 463-3987 |
| Florence Center ....................................... 1-541-997-84 | 463-4800 |
| Foundation | 463-5226 |
| GED, Classes | 463-5214 |
| GED, Testing | 463-5324 |
| Health Clinic | 463-5665 |
| High School Connections | 463-5521 |
| International Students Counselor. | 463-3200 |
| KLCC (Radio Station) | 463-6000 |
| Lane Child and Family Education | 463-5519 |
| Lane Family Connections......................... 463-3954/1 | -222-3290 |
| Library* | 463-5220 |
| Medical Emergencies (on campus) | 463-5555 |
| Multicultural Center | 463-5276 |
| Music, Dance and Theatre Arts Ticket Office. | 463-5202 |
| Public Safety* |  |
| (emergency calls). | 463-5555 |
| General Public Safety Information. | 463-5558 |
| Recreational/Club Sports | 463-5293 |
| Registrar, Director of Enrollment and Student Financial 463-5690 | vices |
| Student Life and Leadership Development. | 463-5336 |
| Student Child Care Office | 463-5519 |
| Student Financial Services |  |
| Student Loan Payments (Perkins). | 463-3012 |
| Tuition and Other Payments. | 463-3100 |
| Student Legal Services | 463-5365 |
| Student Records | 463-5690 |
| Student Resource Center. | 463-5342 |
| Student Services Downtown Center | 463-5940 |
| Substance Abuse Prevention | 463-5178 |
| TTY (Disability Resources). | 463-3079 |
| TTY (Personnel) | 463-3999 |
| Torch (Student Newspaper). | 463-5881 |
| Tours (Main Campus). | 463-5678 |
| Transcript Information Line | 463-5736 |
| Transitions to Success | 463-5837 |
| TRIO Learning Center.. | 463-3131 |
| Veterans' Office. | 463-5663 |
| Women's Center. | 463-5353 |
| Work Study. | 463-5039 |
| Workforce Development.. | 463-5223 |

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## Locations and Maps

## Facilities

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

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

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

Siltcoos Station, located south of Florence on Siltcoos Lake, is a facility for educational and recreational use.
The Wildish Building provides office space, classrooms and a community conference room.

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

The college also offers classes via television and the Internet.

## Bus Pass and Bus Transportation

Credit students taking classes on main campus and ESL students at main campus and DTC will be assessed a $\$ 22$ per term transportation fee* which will cover the cost of a Lane

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

## Parking

## Main Campus

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

More information about motor vehicle regulations applicable to Lane is available by calling (541) 463-5558 or on Lane's website at lanecc.edu/cops/mureg.htm.

## Downtown Center

Parking, 7 a.m. to 6 p.m., Monday through Saturday:

- Lane's Downtown Center students may purchase parking coupons at the Downtown Center for 10 cents for each coupon, cash only. Refer to the quarterly class schedule for current parking program information.
- Validation coupons are accepted by attendants in the Overpark at 10th and Oak and Parcade at 8th and Willamette.
- Parking is free on Saturday and Sunday in the Overpark and Parcade, and for the first hour of parking Monday through Friday, and after 6 p.m. Validation coupons have no cash value.
- Downtown metered lots charge an hourly rate.

Maps to Lane Community College Outreach Centers


## Lane Community College Main Campus

4000 East 30th Avenue • Eugene, Oregon 97405 - (541) 463-3000
Map revised 01/2009



Student Services
Business
Administration
Health Professions
Physical Education
Performing Arts Campus Services
Welding
Auto/Diesel

KEY
(B) Bicycle Parking

E Elevator

- Wheelchair Ramp
(1) Electric Door-number
designates floor
E. Parking with Handicapped Permit


## Number Building

10
11
12
12
15
15

## 16

17

18 Drafting/Graphic Design
18 Health Clinic +
19 Workforce Training

## Aviation

Art/ESL/GED
Manufacturing/Auto Body/RV
Electronics Annexes
Electronics
Science/Math
Forum


Number Building
20 Workforce Training Annex
24 Lane Family Connections and Child Development Center Office
25 Infant/Toddler Center
26 Preschool
ASLCC Child Care Co-op

## 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 who do not have a high school diploma, a GED certificate, completed home schooling at the secondary level, or have satisfactorily completed six credits that apply toward an eligible program at Lane. Must take and pass an Ability to Benefit test. For more information, contact Testing Services (541) 463-5324.

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

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

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

- have maintained a permanent residency within the college district for at least 90 continuous days prior to the first day of the term.
*In-District includes Lane County, the Monroe Elementary District, and the Harrisburg Union High School District.

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

- have maintained a permanent residency within the state for at least 90 continuous days prior to the first day of the term.
Students who are In-District, In-State or permanent residents of Washington, Idaho, Nevada, or California pay In-State tuition at Lane.
Please be aware that being designated as an Oregon resident at Lane Community College does not guarantee the same status with any other two-year or four-year institutions, both within and outside the state of Oregon. It is vital that you review the residency requirements at all institutions to understand their in-state residency requirements


## Admissions

The admissions process at Lane is very easy. Simply complete the Admissions Process on-line at lanecc.edu, click on "Help for Students" and "Admission.".

## International Student Admissions

Building 11, Room 243, (541) 463-3404
International students are welcome at Lane. Certain criteria must be met for acceptance. For admission to credit level classes the following documents are required: official records of all upper secondary school work, including a certificate of diploma, and any additional education above that level; acceptable scores on the TOEFL ( 475 PBT, 153 CBT, 53 iBT ) or an IELTS score of 5.5 or STEP Eiken pre-first grade; and proof of financial responsibility. Adequate funds must be available, and immigration authorities rarely give work permits. For admission to the International English as a Second Language program most of the same documents are required, but a TOEFL score and school records are not required. Upon completion of Lane's ESL program you can be admitted to credit level classes without a TOEFL score, but past school records would still be required.

International Student Admission Application deadlines vary each year. Deadline months are August for fall term, November for winter term and February for spring term. No new international students are accepted for summer term. For more specific information contact the International Admissions Advisor at (541) 463-3404, Lane Community College, 4000 East 30th Avenue, Eugene, Oregon 97405-0640, or email at InternationalAdvisor@lanecc.edu. The international application is now an online process and includes an application processing fee. Go to lanecc.edu to apply. Click on "Help for Students" and "Admission", but be sure to choose "International Admissions". If you are unable to apply online, paper applications can be downloaded from the Lane website at
lanecc.edu/stuser/internat.htm.
The International Student Program offers special services and activities that assist international students in succeeding at the college. See page 30 . See page 247 for information about Lane's International English as a Second Language program.

## 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. Transcripts and other transfer documents are accepted for evaluation from students admitted to Lane and currently enrolled in their first term or who have previously completed college credit courses at Lane.

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

## Programs with Special Admission Procedures

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

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

The programs listed below are limited enrollment requiring that the program be listed as the major or requiring a special application for acceptance listing as the major. Contact the sponsoring department for information:
Apprenticeship Trades. .463-5843
Automotive Technology .......................................................463-5380
Culinary Arts and Food Service Management......................463-5378
Hospitality Management......................................................463-5378
Early Childhood Education ...................................................463-5617
Employment SkillsTraining...................................................463-5078
Energy Management: Renewable Energy Technician ...........463-5446
Energy Management Technician...........................................463-5446
Fitness Specialist or Fitness Technician ................................463-5545
Flight Technology ..................................................................463-4195
Graphic Design (the second year)........................................463-5409
Occupational Skills................................................................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

## Advance Registration

Students who attended any credit class during the prior academic year may participate in Advanced Registration. Students attend an Advance Registration Advising Session with an assigned counselor or advisor for assistance in selecting courses and planning a schedule. Advising sessions are offered each term, and a schedule of sessions is available in Counseling.

Advance Registration students must pay current term balance in full by midnight two business days prior to first day of continuing student registration for subsequent term. Failure to do so will result in cancellation of advance registration.

## Schedule Changes

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

Some classes require the instructor's consent to enroll. ExpressLane will inform students of this requirement when attempting registration.
Increasing the number of credits for a variable credit class can be processed using ExpressLane through the last week of regular classes, prior to the beginning of finals week. Additional tuition and applicable fees will be charged to the student's account, and payment policies will apply.

## Refunds

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


## Steps to Enroll in Credit Classes

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

## Step 1: Have an e-mail address

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

If you would like help in arranging for a free email address, contact the Help Desk by stopping by the SHeD in WXD IECD, \&

## Step 2: Apply for Admission/Readmission

First time credit student? Apply for admissions.
From lanecc.edu, click on Help for Students in the upper lefthand column and click on Admission in the "New Students" column.

Already taken credit classes at Lane? Apply for readmission if it has been more than four terms since you attended.
From lanecc.edu, click on Help for Students in the upper lefthand column and click on Apply for Readmission in the "Former Students" column. If you are returning to Lane on a non-immigrant visa, select the Reapply Online link.
Studying in the United States as an international student or on a non-immigrant visa?

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

Under 18 and want to take credit classes?
From lanecc.edu, click on Help for Students in the upper lefthand column and click on Under 18 Years Old Admission in the "New Students" column.

Want to earn credit at Lane while attending high school?
From lanecc.edu, click on High School Connections in the upper left-hand corner to find out how to sign up for College Now, RTEC, Expanded Options and other High School Partnership classes.

## Step 3: Apply for Financial Aid

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

## Step 4: Schedule Your Placement Testing

From lanecc.edu, click on Help for Students in the upper lefthand column and click on Placement Testing in the "New Students" column.

## Step 5: Meet with your counselor or advisor

Identify your program counselor/advisor. Go to lanecc.edu, and in the Student Announcements box, click on Steps to Enroll in Credit Classes.

To review the programs currently offered at Lane, go to lanecc.edu and click on Catalog.

## Step 6: Schedule a New Student Info Session

During this session, you will receive essential information for a successful start at Lane, including:

- how many classes to take each term
- valuable resources for students at Lane
- how to use ExpressLane

Once you have completed your placement testing and met with a counselor or advisor, go to lanecc.edu, click on Help for Students in the upper left-hand column and click on Advising/Counseling in the "New Students" column. Then click Steps to Enroll in Credit Classes in the left-hand column and select Schedule a New Student Information Session (NSIS).

## Step 7: Register for Classes

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

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

If you have any questions about the programs offered at Lane Community College, contact the Counseling Department: email coundept@lanecc.edu, call (541) 463-3200, or come by the Counseling and Advising center at the 30th Avenue campus, in Building 1, Room 103. For the web version of the above steps go to: lanecc.edu/stuser/exprnso/20.htm


## Pasos para matricularse en clases con valor curricular

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

## Paso 1: Tener una dirección electrónica

Todos los estudiantes nuevos deberán presentar una dirección electrónica cuando se matriculan al college al usar el proceso electrónico de matriculación. A los estudiantes que previamente han sido admitidos se les pide que presenten una dirección electrónica por medio de su cuenta Expresslane. Los estudiantes que toman cursos por medio del Internet también deben tener una dirección electrónica válida para participar en el curso. Si le gustaría obtener ayuda para conseguir una dirección electrónica gratuita, comuníquese con el Help Desk al visitar el SHeD en el Library o llame al 541-463-3333 (ext. 3333 en campus).

## Paso 2: Solicitar matriculación/ readmisión

¿Estudiante de nuevo ingreso para clases con valor curricular? Solicite matriculación.
De lanecc.edu, seleccione Help for Students/Ayuda para estudiantes en la columna superior izquierda y luego seleccione Admission/Matriculación en la columna "New
Students/Estudiantes nuevos".
¿Ya ha tomado clases con valor curricular en Lane? Solicite readmisión si han pasado más de cuatro trimestres desde su último curso.

De lanecc.edu, seleccione Help for Students/Ayuda para estudiantes en la columna superior izquierda y luego seleccione Apply for Readmission/Solicitar Readmisión en la columna de "Former Students/Estudiantes anteriores". Si está regresando a Lane con una visa no-inmigrante, seleccione Reapply Online/Readmisión por la red.
¿Está estudiando en los Estados Unidos como estudiante internacional o con una visa de no-inmigrante?
De lanecc.edu, seleccione Help for Students/Ayuda para estudiantes en la columna superior izquierda y seleccione International Students/Estudiantes internacionales en la columna "New Students/Estudiantes nuevos".
¿Eres menor de 18 años y quieres tomar clase con valor curricular?
De lanecc.edu, selecciona Help for Students/Ayuda para Estudiantes en la columna superior izquierda y selecciona Under 18 Years/Menor de 18 años en la columna "New
Students/Estudiantes nuevos".
¿Quieres obtener crédito curricular en Lane mientras cursas la preparatoria?
De lanecc.edu, selecciona "High School Connections/Conexión con preparatorias" en la esquina superior izquierda para informarte cómo puedes matricularte para College Now, RTEC, Expanded Options y otras clases en colaboración con las preparatorias.

## Paso 3: Solicite ayuda financiera

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

## Paso 4: Haga cita para su examen de ubicación

De lanecc.edu, seleccione Help for Students/Ayuda para estudiantes en la columna superior izquierda y seleccione Placement Testing/Examen de ubicación en la columna "New Students/Estudiantes nuevos".

## Paso 5: Reúnase con su consejero o asesor

Identifique al consejero de su programa /asesor académico. Vaya a lanecc.edu, y en el cuadro de Student Announcements/Avisos para estudiantes, seleccione Steps to Enroll in Credit Classes/ Pasos para matricularse en clases con valor curricular.
Para ver los programas que se ofrecen actualmente en Lane, vaya a lanecc.edu y seleccione Catalog/Catálogo.

Paso 6: Haga cita para una sesión de orientación para estudiantes de nuevo ingreso
Durante esta sesión, recibirá información esencial para un comienzo exitoso en Lane, que incluye:

- cuántas clases va a tomar cada trimestre
- recursos valiosos para estudiantes en Lane
- cómo usar ExpressLane

Una vez que haya completado su examen de ubicación y se haya reunido con un consejero o asesor, vaya a lanecc.edu, seleccione Help for Students/Ayuda para estudiantes en la columna superior izquierda y seleccione
Advising/Counseling/Asesoría/Consejería en la columna "New Students/Estudiantes nuevos". Luego seleccione Steps to Enroll in Credit Classes/Pasos para Matricularse en Clases con Valor Curricular en la columna superior izquierda y seleccione Schedule a New Student Information Session (NSIS)/ Cita de orientación de nuevo ingreso.

## Paso 7: Inscríbase a clases

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

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

De lanecc.edu, seleccione Help for Students/Ayuda para estudiantes en la columna superior izquierda y lea las instrucciones para inscribirse a clases en la columna de "New Students/Estudiantes nuevos".
Examine la fecha límite para el reembolso y el proceso de pagos.
De lanecc.edu, seleccione Help for Students/Ayuda para estudiantes en la columna superior izquierda y seleccione Paying for Classes/Pago por clases en la columna de "New Students/Estudiantes nuevos".
Si tiene cualquier pregunta sobre los programas ofrecidos en Lane Community College, comuníquese con el Departamento de Consejería:
Por correo electrónico: coundept@lanecc.edu, Ilame al (541) 463-3200, o visite el Centro de Consejería y Asesoría en el edificio 1, salón 103 del plantel de la Avenida 30.
Para la versión en red de los pasos anteriores, vaya a:
lanecc.edu/stuser/exprnso/20.htm

## Overview of Academic Programs

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

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

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

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

## Career and Technical Programs

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

## Accounting (AAS)

Accounting Clerk (CPC)
Bookkeeper (CPC)
Payroll Clerk (CPC)
Administrative Assistant (AAS)
Legal Office Skills (less than 1-yr cert)
Office Software Specialist (CPC)
Small Business Ownership (CPC)
Auto Body and Fender Technology (AAS, 2-yr cert) Auto Collision Option (AAS)
Auto Paint Option (AAS)
Automotive Technology (AAS and 2-yr cert)
Aviation Maintenance Technician (AAS, 2-yr cert)
Business Assistant (1-yr cert)
Computer Network Operations (AAS) Network Security (CPC)
Computer Programming (AAS)
Geographic Information Science (CPC)
Web Programming (CPC)
Computer Simulation and Game Development (AAS)
Computer Game Programing in $\mathrm{C}++$ (less than $1-\mathrm{yr}$ cert)
Computer Specialist (1-yr cert)
Computer User Support (AAS)
Construction Technology (AAS, 1-yr cert)
Culinary Arts and Food Service Management (AAS)
Baking and Pastry (CPC)
Food Preparation and Production (CPC)
Dental Assisting (1-yr cert)
Dental Hygiene (AAS)
Diesel Technology (AAS, 2-yr cert) Lift Truck/Material Handling Equipment Technician Option (AAS)

Drafting (AAS, 1-yr cert)
Early Childhood Education (AAS and 1-yr cert)
Electrician Apprenticeship Technologies (AAS, cert)
Limited Electrician Apprenticeship Technologies (cert)
Electronic Technology (AAS)
Emergency Medical Technician (1-yr cert)
Emergency Medical Technology - Paramedic (AAS)
Employment Skills Training (less than 1-yr cert)
Energy Management Technician (AAS)
Renewable Energy Technician Option (AAS)
Resource Conservation Option (AAS)
Exercise and Movement Science (AAS)
Fitness Technician (1-yr cert)
Fitness Technology (2yr cert)
Fabrication/Welding Technology (AAS, 1-yr cert)
Welding Processes (1-yr cert)
Flight Technology (AAS)
Graphic Design (AAS, 2-yr cert)
Health Records Technology (1-yr cert)
Medical Coding (CPC)
Medical Transcriptionist (CPC)
Hospitality Management (AAS) Food Service Management (1-yr cert) Restaurant Ownership (CPC)
Human Services (AAS)
Adult Development and Aging (CPC)
Human Services: Criminal Justice (AAS)
Human Services: Juvenile Corrections (1-yr cert)
Legal Assistant and Paralegal Studies (AAS, 1-yr cert)
(Collaboration with Umpqua Community College)
Manufacturing Technology (AAS, 2-yr cert) Computer Numerical Control Technician Option (AAS)
Massage Therapy (Certificate of Completion)
Medical Office Assistant (1-yr cert)
Multimedia Design (AAS, 1-yr cert)
Nursing (AAS)
Occupational Skills Training (1-yr cert)
Physical Therapist Assistant (AAS) - pending accreditation candidacy
Professional Truck Driver (CPC)
Respiratory Care (AAS)
Retail Management (AAS, 1-yr cert)
Retail Management (CPC)
Speech-Language Pathology Assistant (AAS, 1-yr cert) (collaboration with Chemeketa Community College)
Water Conservation Technician (AAS)

## College Transfer Classes and Degrees

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

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

## Associate of Arts Oregon Transfer Degree (AAOT)

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


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

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


## Associate of Science

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

Associate of General Studies

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


## Direct transfer

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


## Curriculum for High School Students

Lane's High School Connections programs help high school students make the transition from high school to college. These programs provide an opportunity for students to simultaneously earn both college and high school credits. College Now enables high school students to earn college credits for articulated classes taken at their high schools. The Regional Technical Education Consortium (RTEC) provides career and technical classes for dual credit.
College Now classes are taught in the high school during regular school hours by high school instructors approved by Lane. These classes are similar to those offered in Lane programs, including course content, textbook and length of course. Courses are taught in many subject areas including English, French, Spanish, art, social science, math, business, culinary, early childhood education, graphic design, technical drafting, fabrication/welding, and others. College Now credits are free for 2009-10 academic year.
RTEC provides rigorous and relevant career and technical training according to industry standards. These classes fill the gaps where high schools can no longer offer these courses. RTEC also provides accelerated career technical courses for high schools that need advanced opportunities for their students. Courses are taught at Lane, at the high schools or on line in areas such as apprenticeship, automotive technology, aviation science, drafting, health occupations and computer programming.

Additionally, the High School Connections office works with local school districts who want to sponsor high school students in academic transfer classes through the Expanded Options Program or independently. At times, school districts contract for a college level career technical class to be provided at the high school site.
For more information about High School Connections programs, visit the website at lanecc.edu/hsconnections or call (541)
463-5521.

## Cooperative Education

Cooperative education (Co-op) offers career/technical and college transfer credit for practical work experience related to a student's educational and career goals. Co-op education provides a student with an opportunity to apply theory learned in the classroom to work experience in a career field. The objective of co-op is to provide an on-the-job learning experience in a business or organization which adds meaning and direction to the student's total education. Cooperative education is available in all academic departments. In addition, the Cooperative Education Division offers programs such as the Occupational Skills Certificate where students work with staff to create an individualized course of study to meet a specialized career path.

## 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 represents a three-way working 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 Coop 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 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 and seminar time
3. complete agreement form
4. register for classes

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 can be earned
at Lane. Credit is assigned on the basis of one credit for 36 hours of work experience. Entry into co-op is by coordinator consent. Certain career and technical programs require co-op credits. Unless prior approval is received from the Cooperative Education Division chair, students must enroll for a minimum of three credits. Co-op is offered all terms, and students may earn up to 12 credits in one term. Cooperative education credits may not be audited or taken pass/no pass. Co-op credits may not be earned for past work experience (see Student Records for Credit by Assessment).

The Cooperative Education Division administers co-op courses. To learn about cooperative education, 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.

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|  | Health Occupations Chuck Fike |
| :---: | :---: |
|  | Health Records .......................................................Marti Pittman |
|  | History ..................................................................John del Nero |
|  | Hospitality Management............................................Joe McCully |
|  | Human Services .....................................................Garry OIdham |
|  | International Work Experience.................................Don Terwilliger |
|  | Journalism..........................................................Dorothy Wearne |
|  | Landscape ..................................................................Chuck Fike |
|  | Legal Assistant ........................................................Jamie Kelsch |
|  | Manufacturing Technology ......................................Marv Clemons |
|  | Mathematics ..............................................................Larry Scott |
|  | Medical Office Assistant............................................Marti Pittman |
|  | Multimedia............................................................Teresa Hughes |
|  | Music ...................................................................Teresa Hughes |
|  | Nursing...........................................................Jeanne Harcleroad |
|  | Occupational Skills........................................................Chuck Fike |
|  | Performing Arts .....................................................Teresa Hughes |
|  | Physical Education.................................................SueThompson |
|  | Physical Therapist Assistant........................................Beth Thorpe |
|  | Physics .....................................................................Larry Scott |
|  | Political Science ......................................................Steve Candee |
|  | Pre-Law $\qquad$ Steve Candee |
|  | Programming ..............................................................Larry Scott |
|  | Psychology ...........................................................Beverly Farfan |
|  | Real Estate $\qquad$ Jamie Kelsch |
|  | Recreation.......................................Sue Thompson, Lyndell Wilken |
|  | RehabilitationTherapies..........................................Shannon Gaul |
|  | Retail Management ..................................................Jamie Kelsch |
|  | Respiratory Therapy ................................................Norma Driscoll |
|  | Sales and Marketing................................................Jamie Kelsch |
|  | Science ......................................................................Larry Scott |
|  | Service Learning ....................................................Beverly Farfan |
|  | Simulation and Game Development.............................Larry Scott |
|  | Sociology..............................................................Beverly Farfan |
|  | Spanish................................................................Tamara Pinkas |
|  | Speech ..................................................................Tamara Pinkas |
|  | Teacher Education Preparation...............................Merrill Watrous |
|  | Water Conservation Technician .....................................Larry Scott |
|  | Welding ...............................................................Marv Clemons |
|  | Wellness. Sue Thompson |

## Distance Learning

Distance learning refers to instruction that is delivered through technology to students at a distance from their instructor. Most courses offered through distance learning meet Associate of Arts Oregon Transfer (AAOT) degree requirements. The AAOT degree can now be earned through distance learning courses. An annual schedule of course offerings is available from the Distance Learning Department and online at lanecc.edu/distance/annual.htm.
Online Courses Online courses are complete courses that include lectures, notes and assignments which are available to students through their office or home computers. Interaction with the instructor and other students is provided through the use of discussion forums and email. All coursework is delivered online via the Internet. Some online courses have on campus labs or exams, or require viewing video programs. Some online courses have a $\$ 40$ fee.
Telecourses Telecourses are college credit courses developed by educators and media specialists for television viewing. They include weekly video telelessons, use of the internet, required written and reading assignments, and periodic examinations. Course instructors are available for assistance by phone, in person or via e-mail. Students can view telecourses at home on
cable TV, in the Lane Library, and at LCC at Cottage Grove and Florence. Some courses can be downloaded, streamed, or rented on DVD or VHS. Exams are taken on campus.
All telecourses have a $\mathbf{\$ 2 5}$ fee.
Between 14 and 17 telecourses are offered fall, winter and spring terms and approximately 6-8 courses summer term. Telecourses are available in a wide variety of subject areas such as history, career planning, medical terminology, science, psychology, and sociology.

Live Interactive Courses Lane offers live interactive courses as a mode of distance learning course delivery. Students enroll in these courses and participate either by viewing the class on local cable channels in their homes, or attending on campus or at a an off campus location.
IP Videoconferencing Services Videoconferencing services are available for both receiving and originating. Lane can accommodate between 1 and 40 participants. The college's codec equipment is compatible with most standards.
Teleconferencing The college serves as a receive site for national satellite videoconferences. Both C and KU Band satellites can be accessed. This service is available to respond to requests from on- and off-campus businesses, agencies and community groups.

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

For more information about telecourses, online, live interactive courses, teleconferencing, or IP videoconferencing, call Distance Learning, (541) 463-5893.

## Human Development Classes

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

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

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

## International Learning Opportunities

## International Cooperative Education

The International Cooperative Education program, in partnership with IE3 Global Internships, provides international work opportunities where students earn graded 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 international skills that are invaluable in today's global society. For more information, look at http://ie3global.ous.edu or contact Don Terwilliger, Cooperative Education Division, Building 19/ Room 231B, (541) 463-5883.

## Courses with International Focus

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

ANTH 103 Cultural Anthropology
ANTH 211 Selected Topics in Ethnology: Folk Religions

ANTH 227 Prehistory of Mexico
ANTH 228 Cultures of Mexico
ANTH 229 Chicano Studies
ART 207, 208, 209 History of Asian Art
ART 217 Islamic Art
D 251 Looking at Dance
ECON 204 Introduction to International Economics
ENG 107, 108, 109 Survey of World Literature

ENG 213 Survey of Asian Literature
ENG 215 Latino/a Literature
ENVS 182 Atmospheric Environment and Population
FR 101, 102, 103, 150, 151 First Year French
FR 111, 112, 113, 211, 212, 213 Conversational French
FR 201, 202, 203 Second Year French
GEOG 103 Cultural Geography
GEOG 201 World Regional Geography
GEOG 214 Mexico and Central America

GEOG 216 Geography Pacific Asia

HE 255 Global Health HST 104, 105, 106 World History HST 195 History of Vietnam War HST 261 Latin American History MUS 108 Music in World Culture PS 205 International Relations
PS 211 Peace and Conflict Studies: Global

REL 201 Religions of India
REL 202 Religions of China and Japan
REL 203 Religions of the Middle East
REL 243 Nature, Religion and Ecology
SOC 216 Global Social Movements
SPAN 101, 102, 103 First Year Spanish
SPAN 201, 202, 203 Second Year Spanish
SPAN 211, 212, 213
Conversational Spanish, Intermediate

SP 115 Introduction to Intercultural Communication

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

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

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

For more information on how to sign up for a learning community at Lane, go to our website: lanecc.edu/lc or call Anne McGrail, Learning Communities Coordinator, at (541) 463-3317.

## 2009-2010 Learning Communities

Lane's First Year Experience: Fast Lane to Success

## CG 100 College Success

EL 115 Effective Learning with either Writing 115 or Writing 121.
WR 115 Introduction to College Writing
WR 121 English Composition: Exposition and Introduction to Argument
Bio Bonds: Building Blocks for Your Body (offered each term)
CH 112 Chemistry for Health Occupations
BI 112 Cell Biology for Health Occupations

| Ecotrails: | Stewardship and the Sacred Landscape |
| :--- | :---: |
| BI 103G | General Biology: Global Eccology |
| WR 122 | English Composition: Style and Argument |
| Food For Thought (fall, spring)  <br> MTH 025 Basic Math Applications <br> CA 170 Cooking Theories and Skill Development (fall) <br> and/or  <br> WR 115 Introduction to College Writing (spring) <br> CA 186 Restaurant and Kitchen Lab 2 <br> Native Circles  <br> CG 101 Native Circles: It's Your Life |  |

Women in Tansition: First Year Experience (offered each term)
CG 140T Career and Life Planning
CG 220 Life Transitions
Recommended but not required:
BT030 Computer ABCs for Women in Transitions
CG100T College Success: WIT
CG207 Life Transitions 2
EL115T Effective Learning: Women in Transition
MTH010A Whole Numbers, Fractions and Decimals
MTH020 Math Renewal
PE183U Strength Training for Women
WR 115T Introduction to College Writing:Transitions
WR 121T Composition:Transitions

## From Brain to Brawn

PE 100 Fitness Education
HE 275 Lifetime Health and Fitness
Movement, Image, Text
WR 122 Composition: Style and Argument
Art 231 Intermediate Drawing
D 172 Dancing the Fluid Body
Show Me the Money (winter)
WR 105 Writing for Scholarships
CG 105 Money for College
Fat Cats \& Underdogs: Work, Class, and the American Dream
ENG 257 American Working Class in Fiction and Non-Fiction
WR 123 Composition: Research

## Petal, Pen, Peck and Paw: Investigations of Place

WR 123 Composition: Research
Bl 103G General Biology-Field Biology

## Reconnecting with Nature:

Science, Spirituality and Political Activism
REL 243 Nature, Religion and Ecology
PS 297 Environmental Politics
BI 103G General Biology-Global Ecology
See the online class schedules or Aspire Magazine for additional learning community offerings. Get connected at Lane!

## Service Learning

Serve meals at community dinners, write a newsletter for a nonprofit agency, teach poetry with at-risk youth or harvest food in organic gardens-all of these activities are examples of service learning, an innovative approach to learning that encourages students to make connections between college and community and between self and other.
Service learning at Lane is community-based learning that combines classroom instruction with community service to encourage student success and civic awareness. Classes provide structured time for students to reflect on service and learning experiences through a mix of writing, reading, speaking, listening, and creating in small and large groups. Based on a reciprocal relationship in which the service reinforces the learning and the learning strengthens the service, service learning provides students with opportunities to use newly acquired skills and knowledge in real-life situations. Faculty in different subject areas incorporate service learning activities as part of the course requirements. Individual service-learning internships also are available. For more information, call Service learning Coordinator, Beverly Farfan, (541) 463-5395, or farfanb@lanecc.edu.

| COOP 280SL | Cooperative Education: Service Learning <br> Instructor: Beverly Farfan |
| :--- | :--- |
| HE 255 | Global Health <br> Instructor: Susie Cousar |
| HS 201 | Introduction to Human Services <br> Instructors: Garry OIdham and Toni Fudge |
| HS 228 | HIV/AIDS and Other Infectious Diseases <br> Instructor: Toni Fudge |
| HRTM 290 | Hospitality Leadership <br> Instructor: Joe McCully |
| SP 115 | Introduction to Intercultural Communication <br> Instructor: Karen Krumrey |
| SP 219 | Small Group Communication <br> Instructor: Karen Krumrey |
| SOC 108A | Selected Topics: Women's Bodies <br> Instructor: Patsy Raney |
| SOC 207 | Women and Work <br> Instructor: Patsy Raney <br> Introduction to Sustainability |
| SUST 101 | Instructor: Tammie Stark |
| WATR 101 | Introduction to Water Resources <br> Instructor: Tammie Stark |
| WR 227 | Technical Writing <br> Instructor: Amy Beasley |

English as a second Language: Service Learning (Adult Basic and Secondary Education Program)

## Tuition, Fees, Financial Aid and Payment

Noncredit Community Education Classes
Noncredit Community Education students pay the following charges:Tuition + feeslisted next to each class
Resource fee $\$ 3$ per term
Credit Classes
Credit students pay the following charges:
Tuition ..... see below
Class fees

$\qquad$
listed next to each class
Technology fee

$\qquad$
$\$ 3$ per credit
s..
see below

## Tuition

Residents of Oregon ......................................... $\$ 78$ per credit hour
Non-residents of Oregon............................... $\$ 210$ per credit hour
International students:
Fall winter and spring terms...................................................................... 210 per credit hour
Summer term hour
Other Fees
ASLCC Student Activity Fee*
Credit students taking main campus classes ..... $\$ 46.25$
Student Health \$8; OSPIRG \$3; Co-op \$8.62; ASLCC Operations \$7.44;Recreational Sports $\$ 8$; International Student Program $\$ 1$; BSU $\$$.50; Women'sProgram \$1;Torch \$1.75; Student Clubs and Organizations \$1; OSA \$2.44; CDCSubsidy (Child Dev) \$1, Long House \$3, Student Production Assoc. (SPA) \$. 50
*This fee is subject to change pending ASLCC elections.
Credit by Examination and Credit by Assessment
Examination/assessment fee $\$ 51.50$ per credit hour
First Time Credit Enrollment Fee ..... \$30
Transportation Fee (nonrefundable)
Credit students on main campus ..... \$22 per term
All noncredit classes and credit classesnot held on the main campus
$\qquad$ $\$ 5$ per term

For more information, see the Locations and Transportation section in this schedule. Fee is subject to annual increases.
International credit students also payInternational student fee$\$ 10$ per credit hour
Photo ID
Photo ID .....  $\$ 5$
A LCC photo ID is not required to attend Lane. It is available to all currentlyregistered students as an alternate form of photo identification. A card may bepurchased through Enrollment and Student Financial Services, Building 1.
Transcript Fee
Transcript ..... \$5
Transcript Rush Fee** .....  $\$ 5$
Transcripts are now available on ExpressLane at lanecc.edu. Fees for transcripts ordered on ExpressLane will need to be paid with VISA orMasterCard.
** Transcripts that are purchased from Enrollment and Student FinancialServices or for transcript requests that indicate that they need rush service willbe charged the Transcript Rush Fee.

## Average Total Costs

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

Tuition........................................................................................\$2,808
Books........................................................................................ $\$ 1,200$
Special and Miscellaneous Fees (varies by program) ................ \$174
Student Activity Fees .............................................................. $\$ 138.75$
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. Current information will appear in each quarterly class schedule.

## Differential Pricing Program

Beginning with the 2003-04 academic year, Lane's Board of Education approved a differential pricing program for some career and technical programs including Auto Body and Fender, Automotive Technology, Culinary Arts, Electronics, Manufacturing Technologies, Dental Hygiene, Dental Assistant, EMT/Paramedic, Medical Office Assistant, Health Records Technology, Nursing, and Respiratory Care.

## Determination of Residency

## Residents of Oregon

In-District* A student at least 18 years of age or a high school graduate who has maintained a permanent residency within the college district for no less than 90 continuous days prior to the first day of the term is classified as In-District. Residency requirements must be met prior to the date that a term begins.
To change residency to In-District or In-State, the student must initiate the change by printing out a residency form available in the forms section at lanecc.edu/es/forms.html. Students must hand the form directly to an Enrollment and Student Financial Services advisor at Enrollment and Student Financial Services, main campus.

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

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

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

## Out-of-State and International

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

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

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

- A veteran and or veteran's dependants who have established permanent residence inside the college district within 90 days prior to the first day of the term and within one year of veterans discharge from active duty will be considered indistrict.
- A DD214 (military discharge papers) for the veteran or a DD93 (record of emergency data listing dependants of veteran) may be required in order to qualify for residency status.
- A released Oregon State prisoner is considered In-District regardless of residency prior to sentencing if a state agency is the sponsor.
- A legal dependent or spouse of a person who has moved into the college district and established a residence is considered In-District.

Residency Student residency is determined from information provided by each applicant to the college. Residency does not change without some kind of student interaction. If a student wants to change residency, the student must initiate the change by visiting Enrollment and Student Financial Services, Building 1. The college may require additional documentation to clarify residency status. Only applicants who can provide sufficient documentation that the 90 -day residence requirement clearly has been met will be classified In-district or $\operatorname{In}$-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 instate residency requirements.

Noncredit Continuing Education Classes have no residency requirement.

## Financial Aid

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

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

## Who is Eligible for Financial Aid?

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

- Be a U.S. citizen or eligible non-citizen with a valid Social Security number
- Be at least 18 years old. If under 18 , a student must have a high school diploma, a GED certificate, or have completed secondary school in a home school setting prior to the term the student wishes to receive aid
- Enroll as a credit student in an eligible degree or certificate program
- Not be in default on a student loan or owe an overpayment or repayment to a financial aid program
- Maintain satisfactory academic progress (SAP)
- Meet additional eligibility requirements if the student has ever been convicted of sale or possession of illegal drugs while receiving federal student aid
- Be academically ready for study at the college level. Students with a high school diploma, a GED certificate, or have completed secondary school in a home school setting automatically meet this requirement. If the student does not and is over age 18, a student must satisfy the Ability To Benefit requirements
- Complete Lane's reading test and qualify to take Reading 080 or higher
- Be registered with Selective Service if the student is male and born on or after January 1, 1960


## Applying for Financial Aid

Applicants should complete a Free Application for Federal Student Aid (FAFSA) as soon as possible after January 1 regardless of when they plan to start college. A new FAFSA must be submitted for each academic year. The awarding process may take several months. Applying for financial aid is free and applicants should never pay someone to apply.
Enrollment and Student Financial Services provides assistance with completing the application process. Financial Aid also conducts workshops at area high schools and community centers each December and January.
The following programs are applied for by filing a FAFSA:

- Federal Pell Grant
- Academic Competitiveness Grant
- Oregon Opportunity Grant
- Federal Supplemental Educational Opportunity Grant*
- Federal Work Study*
- Federal Perkins Loan*
- Federal Direct Stafford Loan - Subsidized
- Federal Direct Stafford Loan - Unsubsidized
- Federal Parent PLUS Loan
* Funds are limited and awarded on a first-come, first-served basis.

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

FAFSA on the Web Applicants can apply electronically at fafsa.ed.gov, following the online instructions. It is recommended that applicants complete a FAFSA on the Web Worksheet prior to filing the application. Worksheets are available online or at Enrollment and Student Financial Services.
Paper FAFSA Applicants may download a PDF FAFSA at federalstudentaid.ed.gov. The completed paper application must be mailed for processing to the address printed on the FAFSA application. If internet access is unavailable, applicants may request a paper FAFSA by contacting the Federal Student Aid Information Center at (800) 4-FED-AID.

## Scholarship and Private Donor Funds FAFSA on the Web

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

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

## Receiving Aid

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

EFC and Financial Need EFC is a measure of a student and his/her family's financial strength. The EFC is determined by the federal processor using the information provided on the FAFSA application. Aid for most federal programs is awarded based on financial need. Financial need is the difference between the cost of attendance and the EFC.
Enrollment Level The amount of funding varies with the number of credits a student takes. Students may enroll full time $(12+$ credits $)$, three-quarter time ( $9-11$ credits), half time (6-8 credits) or less than half time ( $1-5$ credits). Most financial aid programs require at least half-time enrollment.

## Satisfactory Academic Progress (SAP)

Students receiving financial aid must maintain SAP to remain eligible to receive financial aid. Regulations require students to complete their program with at least a 2.0 cumulative GPA and within the 150\% Maximum Credit Limit.

## SAP Standards

- Good Standing: Complete $66.66 \%$ of credits with a term GPA of 2.0 or higher
- Probation: Complete between 50-66.65\% of credits
- Probation: Earn a term GPA between 1.7-1.99
- FA Suspension: Complete less than $50 \%$ of credits
- FA Suspension: Earn a term GPA less than 1.7
- FA Suspension: Complete two consecutive terms in Probation


## What SAP Status Means

- Good Standing - A student is eligible to receive grants, workstudy and loans.
- Probation - A student is eligible to receive grants, workstudy and loans while on probation. However, the probationary term must be completed in Good Standing to avoid FA Suspension in the subsequent term.
- FA Suspension - A student is not eligible to receive grants, workstudy or loans until the FA Suspension status is resolved. Some scholarships and other resources may also be unavailable.
GPA and Completion Rate Each term after grades post, financial aid will check both the completion rate and GPA for the term. The number of credits needed for completion will depend upon the enrollment level at the time financial aid disburses. Tables are available at lanecc.edu/finaid/sap to help determine the completion rate for the term.

Completed VS Not Completed Credits Completed credits result from grades of A, B, C, D and P. Credits not completed include I, * (withdrawal), F, NP, NC, and U.

Pass Grades and GPA Requirement If the term GPA is 0.00
solely because of a P grade, the GPA is considered equivalent to a 2.00 for SAP purposes only.

## Withdrawal, Audits, Incompletes, No Pass and No Credit

grades Withdrawing from a class, auditing a class, receiving an I, NC or NP grade will not affect the GPA. However, it will affect the completion rate.

Resolving FA Suspension To resolve a FA Suspension status, a student must submit an Appeal to Reinstate.
$\mathbf{1 5 0 \%}$ Maximum Credit Limit The maximum number of credits a student may attempt cannot exceed $150 \%$ of the credits required to complete their program. Attempted credits include all earned, unearned (I, *, F, NP, Y, and NC), repeated and transfer credits. All attempted credits count toward this limit. Financial aid may exclude some credits attempted before a student changed programs. However, a student is limited to pursuing two programs at Lane.
Developmental Credit Limit A student may be eligible to receive financial aid for up to 30 semester or 45 quarter credits of developmental coursework during their lifetime. This includes coursework taken at all colleges.
Developmental courses currently offered at Lane include all courses numbered 001-099 (unless required for the current program); and ENG 116. ESL courses are not considered developmental. Some older developmental courses may not adhere to the current numbering system.
For a complete description of Lane's SAP policy, visit lanecc.edu/finaid/sap

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

## Paying for Classes

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

You may pay your college bill in the following ways:

## By Web

Payments can be made on the web by check or savings account, VISA or MasterCard. Log on to lanecc.edu and access ExpressLane. Once in ExpressLane, click on Enrollment and Student Financial Services, then click on Student Account Menu and click on Statement and Payment History. Contact Enrollment and Student Financial Services at (541) 463-3100 if you have questions about payments on the web.

## By Mail

Send your payment to Lane Community College, P.O. Box 7100, Eugene, OR 97401-0025. You can pay by check or money order payable to Lane Community College. Include your student ID number ('L' student ID number).

## Drop Box

Deposit payments in secure drop boxes at Enrollment and Student Financial Services, main campus, Lobby in Building 1.

## With a Sponsoring Agent

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

## With Financial Aid (credit students only)

Assistance from financial aid is intended to help pay your educational expenses; however, if you do not receive the aid you expect, you still owe the college for charges to your CreditLine 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 CreditLine 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 Creditline, Refunds and Financial Aid in this catalog.

If you have questions about your bill, contact Enrollment and Student Financial Services at (541) 463-3100.

## CreditLine - Your College Charge Account

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. This account is called CreditLine and each student has one. The college assesses charges according to the terms and conditions described on your CreditLine Plan and Account Agreement. A full description of the Creditline Agreement is available at lanecc.edu, click on "Help for Students" and "Paying for Classes" and also is available for review at lanecc.edu/cops/cappf.htm. You are responsible for paying your account in full, even if you are sponsored, expect to receive Financial Aid, think that a family member will pay, or never attend the class.

## Payments On Account Using ExpressLane at Ianecc.edu

Students will be able to make payments on outstanding balances using ExpressLane. Students with a level of credit 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 ExpressLane to arrange to have a paper bill mailed. Non-credit level students will be mailed paper statements unless they opt not to receive them. ExpressLane will accept partial or full payments using credit cards or checks. 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, the
refund will be applied to the outstanding debt. Lane uses a third party pay system called Third Party Payment Authorization to allow you to assign access to a third party to make payments on your account. You may review the complete instructions on setting this up at lanecc.edu by clicking "Students," "Paying for Classes" and "Third Party Authorization." All transactions are handled through a highly secure payment system.

## General Account Information

To find out how much you owe, access ExpressLane at lanecc.edu, click on "Enrollment and Student Financial Services", then "Student Accounts Menu."

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

## Finance Charges

- The college will assess a finance charge 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 ExpressLane. The college will block you from registering or making any schedule changes if we receive returned mail. At the end of each term, any account with an invalid address and a balance forward will be moved to a collection status.

The college applies payments and credits to the term in which the original charge occurred.
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.

The college may change the terms of the CreditLine Plan and Account Agreement at any time. Notice will be made in advance, as required by law.

## Consequences of Not Paying

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

- Require immediate payment in full
- Purge advance registration for future term
- Block enrollment for any future terms
- Decline to provide official transcripts
- Turn accounts over to a collections status for non-payment after four months*
- Garnish Oregon State Tax Return
* Students will receive a final notice for accounts that are overdue before the college assigns them to a collection status and reports them to a credit bureau. The collection agency will add additional collection fees, court and attorney costs to account.

Past Due Accounts Assigned to a Collections Status After
Four Months Accounts will be turned over to a collections status for non-payment after four months. Students will receive a final pink billing statement for accounts that are overdue before the college assigns them to a collection status and reports them to a credit bureau.
Past Due Accounts Must be Paid at the Assigned Collection Agency Students are not able to make payments to Lane for past-due accounts that have been assigned to a collection agency. Students wishing to pay off outstanding debts to Lane will be referred to the collection agency responsible for their account and will need to make payment in full to that agency.
Students who have paid their accounts in full with the collection agency will not be able to register 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 ExpressLane 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 ExpressLane 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 CreditLine account.

Interpreting the table below, the class duration is the number of weeks the class is scheduled to meet. "Refund Deadline" means through midnight 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 <br> start of classes | Drop Sunday <br> week 1 by midnight |
| :--- | :--- | :--- |
| Classes 4 weeks of <br> longer | ALL of the tuition will be <br> refunded. | ALL of the tuition will be <br> refunded. |
| Classes 2 to 3 weeks | ALL of the tuition will be <br> refunded. | NO tuition will be <br> refunded. |
| Workshops \& classes, | ALL of the tuition will be be <br> refunded if dropped <br> three working days or <br> more before the <br> workshop begins. | NO tuition will be <br> refunded. |
| Wess |  |  |

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

## Class Fees

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

## 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 CreditLine account with VISA/ MasterCard, a refund will be issued to the student by check.
- The college applies all other refunds as a credit to your CreditLine account. Refund checks are mailed 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 green Request for Exception to Refund Policy form available at http://lanecc.edu/es/forms.html and attach medical/ emergency documentation of the circumstances. Petitions received after the eighth week of the term and/or without documentation will be denied.
Contact Enrollment and Student Financial Services, (541) 463-3100, 4000 E. 30th Avenue, Eugene OR 97405, for petitions about credit classes.
The deadline for submitting petitions requesting an exception to the refund policy is $5 \mathrm{p} . \mathrm{m}$. 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 ExpressLane to drop classes by the refund deadline. Even if your petition is approved, you may still owe fees and finance charges.
For information about exceptions to the refund policy, call
Enrollment and Student Financial Services at (541) 463-3100.
Contact the following departments for refund petitions about


## Community Education classes.

- Business Development Center, 1445 Willamette, Suite 1, Eugene OR 97401-4087
- Continuing Education and Educational Outreach, 1059 Willamette St., Eugene OR 97401-3113
- Workforce Development, 4000 East 30th Ave., Eugene OR 97405-0640
If a student does not plan to attend a class, official withdrawal from that class is the student's responsibility.


## Academic and Student Services

## Academic Advising

Building 1, Room 103, (541) 463-3200

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 Department offers students several academic advising services. They help students:

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

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

Students can make an appointment with a counselor or academic advisor at the reception desk in the Counseling Department, by calling (541) 463-3200, or directly contacting the counselor or academic advisor. Also, students may come in without an appointment during scheduled drop-in hours. Schedules for the term are posted on each office door.

Counselors and academic advisors have in-depth knowledge of academic departments' procedures and resources. New students meet with a department counselor or academic advisor during the program orientation/advisory session. These sessions orient students to their academic programs and provide help with course planning. Students are encouraged to meet with a counselor or academic advisor on a regular basis throughout their stay at Lane.
Representatives from four-year schools in the state make regular visits to Lane Community College. Students considering
transfer should meet with these representatives. Schedules of these visits are available in Counseling.
Advance Registration Students who attended any credit class during the prior academic year may participate in Advance Registration. The student attends an Advance Registration Advising Session with his or her assigned counselor or academic advisor for assistance in planning for the next term or the next four terms. Advising sessions are offered for fall, winter, spring, and summer terms.

## Academic Learning Skills

Center Building, Second Floor, (541) 463-5439

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

## Academic Learning Skills includes:

- Credit courses to develop skills These courses are helpful to students who have been out of school for a long time, lack confidence in their skills, or need to improve skills which are developed but not refined. Students who are at college for the first time, who want to improve on previous school performance, or whose goals are to achieve high grades and strong knowledge are provided the instructional coursework to assure their success at Lane.
- Support for students who have specific learning disabilities Multi-sensory approaches to learning are included in many skill-building courses. Students strengthen their basic skills through step-by-step instruction. Computer classes include basic keyboarding and word processing, writing and study skills in a more individualized, self-paced approach to develop computer skills. Staff provide individual assistance to students with learning disabilities in using accommodations, selecting appropriate courses, and assisting as liaisons between the student and other programs or services.
Credit Courses Academic Learning Skills offers a number of courses for college credit. For more information about courses, see the Study Skills and College Preparation heading in the course description section of this catalog. Other specialized courses may be found under the following headings in the course descriptions: Mathematics; Computers: Introduction/ Information Systems/Computer Science; Computers: Keyboarding; Women in Transition; and Writing.
Guided Studies Program Guided Studies is designed for students whose placement test scores indicate the need to strengthen academic skills before entering college-level courses. Guided Studies students are required to take appropriate preparatory courses and are restricted from other college-level courses their first term. Students meet with the Guided Studies counselors to plan an appropriate program.


## Assessment and Testing

Building 1, Room 116, (541) 463-5324
For current information about Testing Service office hours, fees and other details, please visit lanecc.edu/testing.
Lane Community College offers a wide range of tests to students who want help in understanding themselves and making wise career decisions. The college uses tests as one of several counseling/advising tools, not merely as a record of performance. Testing Services tries to provide all students an opportunity to discuss their test results with a counselor/advisor who will assist them in exploring the meaning and implications of their test results.

Any current Lane student may use Testing Services, and in many cases people who expect to become Lane students may use it. Students who wish to take vocational interest surveys and personality inventories need to see a counselor to determine if a test is desirable and to get a referral. However, students do not need a referral to take GED tests, screening exams conducted for various departments, or the placement tests for new students in reading, writing and math. FAA tests require authorizations in most cases.
Occasionally, in the process of doing research, the college may also require tests of various students or groups of applicants.
Placement tests Placement tests also are available at the Cottage Grove and Florence centers, and many local high schools. Vocational interest surveys are available through counselors at Cottage Grove and Florence.
Many kinds of tests and assessments are available:

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


## Credit for Prior Learning

Generally, there is no need to take a class when a student has already learned the material, no matter where or how. Four alternative ways of earning credit are listed below:
Credit-by-Examination Credit-by-Examination (CBE) gives students the opportunity to demonstrate they have mastered material covered in a Lane course. In some cases, they take written examinations covering the content of a course. In other cases, they give performances or demonstrations of their skills in certain areas. If they are successful, Lane will award them college credit. Students must have completed at least 12 credits of nonCBE 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.

## Bookstore

Main Campus, Center Building, Third Floor, (541) 463-5256 Downtown Center Campus, Main Floor, lanecc.edu/bookstore/
The college Bookstore is located on the mezzanine of the Center Building with access stairs located across from the Library on the second floor of the Center Building and an elevator on the northeast end of the Center Building. Students may purchase materials needed for class work, including textbooks, reference books, general books, art supplies, computer hardware and software, and a variety of school supplies. The Bookstore also carries a line of specialty and gift items. Textbooks for outreach centers are available at main campus.
Student Book BuyBack is a service offered during final exam week. Students may receive up to 50 percent of the amount paid for textbooks that meet the following conditions. The book is:

- needed for the next term.
- in good, saleable condition.
- clean (some highlighting is permissible).

The main campus Bookstore is open Monday through Thursday, 8 a.m. -5 p.m. and Friday, 9 a.m. $-4: 30$ p.m. The Bookstore offers extended hours the first week of fall, winter and spring terms and during Book BuyBack. Summer term hours vary and will be posted.

## Career and Employment Services

Building 1, Room 102, (541) 463-5167, lanecc.edu/ces
Lane's Career and Employment Services (CES) offers comprehensive, career-related assistance to students and community members. Individuals can receive help with scholorship research, researching career options, career planning, reentering the job market, or changing career direction. CES provides free employment referral to part-time, temporary and permanent positions on campus or with local and nationwide organizations.
Career Information CES offers free career assessments. A career resource library contains an extensive range of information on careers, industries, labor market trends, and job search skills, as well as colleges and programs of study. The most popular source of information is Oregon's Career Information System (CIS), which provides occupational descriptions for 400 careers, including current salary ranges, job outlook, job descriptions, training, and programs of study. Other career materials include career websites, magazines, books and college catalogs.

Scholarship Information CES houses scholarship resources and information, including scholarship applications and scholarship books, as well as access to Internet sites and searches. Scholarship workshops are offered throughout the year, including the annual January scholarship workshop, and a credit class is offered winter term. CES Advisors and Student Service Associates (SSA's) are available to assist you in your research for cash for college lanecc.edu/ces/scholorships.

Career Advising Advisors are available by either drop-in or individual appointment for students and community members who would like help with career planning, career exploration and career changes.

Assessment As part of the career counseling process, students often find career-related inventories helpful to clarify their goals. These assessments explore career interests, skills, values, and personal style. Some inventories require counselor referral and interpretation. Fees are charged for some assessment tests. Referrals to Career Counselors are available to Lane students.

Off-Campus Student Employment Lane provides a free employment referral service for students, alumni and community members. Jobs are listed online at lanecc.edu/ces then click the "Lane Job Connection" link.
Career Fair CES hosts a Career Fair in April of each year. This event brings 50+ employers to campus and allows students and community members the opportunity to meet and talk about employment within their company.
Job Search Assistance Resources are provided in job search skills: writing a resume, interviewing, job search strategies, and Internet/Web resources. Computers with relevant software are available for students to gather information, gain job search skills, and produce job search-related documents.

On-Campus Student Employment (Learn and Earn program) Currently enrolled students may find employment as student workers in college departments. Eligible students can work up to 15 hours per week. Jobs pay $\$ 8.50$ per hour. Jobs are posted on Lane Job Connection, lanecc.edu/ces.

Student Service Associates Student Service Associates (SSA's) are peer mentors selected from the student body and trained to assist the Counseling department and Career and Employment Services (CES) in helping new and continuing students with enrollment and registration processes and campus resources. SSA's assist students, alumni, and community members in CES linking them with career development and information, scholarship resources, and job search strategies. In addition, SSA's conduct campus and department tours, assist with campus wide events such as our annual Career Fair, Scholarship Workshop, Lane Preview Night, Early Orientation, and other outreach activities. Interested students should inquire at lanecc.edu/ces/ssa.htm in early April for application and hiring process for the upcoming academic year.

Federal Work Study Eligibility is determined through your financial aid award. Jobs are posted on Lane Job Connection, lanecc.edu/ces. For more information, contact the financial aid office.

Career-Related Classes Information about career planning, scholarships, and job search skills workshops is available to interested individuals. Connections with credit-earning academic classes such as Career and Life Planning, Cooperative Education and Career Exploration are also offered.

## Child Care

Lane's Child and Family Center, center office Building 24,
Room 114, (541) 463-5519
The center is state licensed and located on the main campus. It provides care for students, staff and community families. The Child and Family Center is open from 6:45 am to $5: 30$ pm., Monday-Friday and serves children 30 months to five years old. Classrooms are staffed by professional teachers, Lane students and parents. The center is a lab school for students in the Early Childhood Education program and a cooperative where parents can work to reduce their fees. Limited child care tuition assistance is available. For additional information and fee schedules, contact the Child and Family Education Department office.

Lane Family Connections, Building 24, (541) 463-3954, or 1-800-222-3290
Lane Family Connections (LFC) 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 in Lane County. LFC provides the following services:

Parents Parents receive personalized referrals to child care options in Lane County 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.

Servicious en Espanol Servicios en Espanol son ofrecidos y disponibles a todos. Inclusive and accessible services are offered in Spanish.
Employers LFC helps employers assess the child care needs of their employees. Enhanced referral services, employer tax credits, dependent care assistance programs, and other family friendly benefit information is available.

Advocacy LFC advocates for improving the child care system in Lane County and produces data reports for public policy and community planning.
More information is available at lanecc.edu/lfc.

## Clubs and Organizations

See Student Life and Leadership Development.

## Community Center for Family Counseling See page 248.

## Computer Laboratories

All registered Lane students have unlimited access to the open computing laboratories on main campus and at the Cottage Grove and Florence Centers. The technology/ resource fees paid by each student provides this access.
Labs are available at various times weekdays and evenings. For more information on hours and availability of equipment, call the labs at the extensions below, or pick up a brochure at any of the labs.

The Library Laptop Lab has PC laptops. Software for word processing, spreadsheet, database, and miscellaneous educational programs is available. For more information, call (541) 463-3530.

The Microcomputer Lab in Building 4, Room 201, has Pentium and Macintosh computers. Software includes spreadsheet, database, word processing, graphics, desktop publishing, miscellaneous educational programs, and various program languages. For more information, call (541) 463-5288.
Students also have access to the SHeD, Student Help Desk, to receive assistance using the SSAN (Staff and Student Access Network) and with other issues. The SHeD is located in the open computer lab in the Library, and is open during the same operational hours as the lab. For more information, call (541) 463-3333.

## Counseling

Building 1, Room 103, (541) 463-3200
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:

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

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

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

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

## Disability Resources

Building 1, Room 218, (541) 463-5150, (voice); (541)
463-3079, TTY; (541) 463-4937, Fax;
disabilityresources@lanecc.edu; lanecc.edu/disability
Disability Resources collaborates with students, staff, faculty, and community members to create inclusive, equitable, diverse and sustainable learning environments for all.
The department is a resource for creative problem-solving to enhance access in the following areas:

- Admission/registration assistance, advising and advocacy
- Accommodations for classes, including:

Test accommodations (extended time, reduced distraction, separate room, reader, scribe)
Alternate format (enlargements, audio/ text formats, Braille)
Assistive technology (computer software and hardware, assistive devices)
Service Providers (sign language interpreter, classroom aide)

- Consultation, referral and disability awareness information
- Campus 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 therapeutic exercise and rehabilitation 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 assistive technology is available for use in the library; text scanners, screen readers, text-enlarging programs, CCTV, large screen monitors, closed caption decoders and cassette players/recorders. The library is also equipped with automatic doors and wheelchair accessible adjustable workstations.
TRiO Learning Center Students eligible for Disability Resouces also may be eligible for services through TRiO Learning Center.
Physical Campus Lane has an interconnecting ramp system that makes most buildings accessible. Restrooms, pay phones (V/TTY), and emergency phones also are accessible.


## English as a Second Language

See page 247.

## Enrollment and Student Financial Services/Financial Aid

Building 1, First Floor, (541) 463-3100, (877) 520-5391, TTY (541) 463-4722, or lanecc.edules/
Enrollment and Student Financial Services provides a variety of services for new and returning Lane students. These services include:

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


## Food Services

Foodservices provides three dining areas for students, faculty and staff. The Snack Bar features chicken tenders, grilled chicken, hamburgers and grab-n-go. The Foodcourt features pizza and pasta, fresh made sandwiches and salads, Pan Asian (Asian), Carvers Station (roasted meats, vegetables and potatoes), and Veggie Ville (vegetarian and vegan). The Blenders Espresso Bar features fresh Wandering Goat Organic coffee beverages, blended smoothies, sandwiches, grab-n-go, and fresh in house pastries. All are located on the first floor of the Center Building. A full line of vending machines are located throughout campus.

Hours of Operation (subject to change):

|  | Mon-Thurs | Fri | Sat |
| :--- | :---: | :---: | :---: |
| Snack Bar | 10:30 a.m.-2 p.m. | 10:30 a.m.-2 p.m. | Closed |
| Foodcourt | 7-10:45 a.m. | 7-10:45 a.m. | Closed |
|  | 11:15 a.m.-3 p.m. | 11:15 a.m.-2 p.m. |  |
| Espresso Bar | 7 a.m.-6 p.m. | 7 a.m-2 p.m. | Closed |



## Health Clinic

Building 18, Room 101 (541) 463-5665 lanecc.edu/healthclinic/
The LCC Health Clinic provides health care services to Lane students and employees, including treatment for acute illnesses, minor injuries, and some chronic conditions. Appointments are preferred. We also provide information and referrals to community resources.
The mission of the LCC Health Clinic is to provide affordable, accessible, efficient, evidence-based health care to the students and employees of Lane Community College. The Health Clinic staff provides holistic care in a collaborative partnership with the patient, with respect for diverse beliefs and needs, assisting the patient to make informed decisions about disease prevention and management of chronic health conditions. The clinic provides education to individuals and groups to enable them to be better consumers of health care and stewards of their own health.

## Services available to eligible students and employees

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

## Free Services:

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


## Low Cost Services:

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


## Family Planning Expansion Program:

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


## Services available to all students and employees regardless of eligibility <br> Free Services: <br> - Emergency response <br> - First aid <br> - Blood pressure checks <br> - Referrals to community agencies and health providers

## Services available to individuals with disabilities

- Limited personal care assistance
- Medication assistance
- Loan of crutches

Payment methods Payments for our fee-based services are due at time of service or can be charged to an open LCC account. Reference lab costs can be billed directly to your insurance by the reference lab.
Confidentiality All services provided are confidential. A confidential medical record is established for each patient. This record is kept for 10 years. Federal and Oregon State laws govern the release of these records.
Health Insurance Lane Community College does not sell health insurance or handle any insurance claims. Brochures for a low cost health insurance plan for students and their families are available in the clinic lobby.
Referrals Patients with health problems beyond the scope and mission of the LCC Health Clinic are referred to specialists in the community, the Peacehealth Urgent Care Center, or local emergency rooms at the patient's expense. If an ambulance is required, the patient will be responsible for costs incurred.
Health Clinic Hours The health clinic is open Monday through Friday during fall, winter, and spring terms on days that classes are in session. Appointment times are available from 8:20 a.m. until 4 p.m. The Health Clinic is closed from 12:15 p.m. to 1:15 p.m. for lunch. The clinic is also open summer term on a limited basis. Please call for times. Practitioners are not available on weekends, holidays or during school breaks.

## Housing

The following options are available for Lane Community College students taking credit classes leading to a degree, certificate or transfer program.
Students must meet application and income criteria determined by the agency operating each complex and must complete a separate application process for each location. Once the application process is complete, space will be allocated as available.

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

- St. Vincent de Paul offers these units in partnership with Lane. All units are two bedroom.
- Call (541) 687-5820, ext. 130 to get on the Lane Community College waiting list. As units become available students on the list will be contacted to complete application and verify income and student status.
Aurora Building, 100 East 11th, Eugene
Village Oaks, 3606 West 18th, Eugene
Firwood, 2139 West 12th, Eugene
- Students should apply in person at the Lane County Housing Authority, 300 West Fairview, Springfield.
- Some students may already be on the waiting list at these places. Students also may be on lists at other HACSA complexes. Contact the Lane County Housing Authority, 300 West Fairview, Springfield, and also ask to be placed on the Lane Community College waiting list.
College Corner, $\mathbf{7 0 4}$ Mill Street, Springfield
- ContactTim Breen at Jennings Property Management, (541) 683-2271 for more information regarding Jennings application process.
University of Oregon housinguoregon.edu
- Students who are dual-enrolled may access the UO Housing Office, (541) 346-4277.

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

Contact Tina Lymath, Lane Community College Student Life and Leadership Development, (541) 463-5336.

## International Student Program

International Admissions/Advising and Student Activities, Bldg 11
Jane Marshall 541-463-3404, Room 243; Colby Sheldon 541-463-5165, Room 242; Beth Schenderlein 541-463-3409, Room 219 internationaladvisor@lanecc.edu

Each year more than 200 international students attend Lane Community College. Students who are in the United States on a student visa can study in either the IESL Program or in credit level classes. There are special admission requirements for international students and support staff is available to help with this process. The International Student Program helps these students create a positive and successful educational experience that includes an orientation to the college and community, immigration advising, an academic schedule, assistance with housing and recreational activities.

Opportunities are available throughout the school for both international and American students, including on-campus activities and enrichment trips to local, regional and statewide places of interest. Students from all over the world join together and share their cultures in activities such as an English Conversation Partner program, social hours, holiday celebrations and an annual International Day. Activities focus on making friends and learning about each other.
International students are offered help in finding homestay living arrangements with local hosts. Students interested in homestays must make requests at least one month prior to arrival.

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

More information is available on the International Student Program website at lanecc.edu/stuser/internat.htm.

## Legal Services

Building 1, Room 210A, (541) 463-5365
Legal advice is free and available to all credit students on main campus through the mandatory student activity fee. A practicing attorney is available 20 hours per week and limited hours during summer term. Appointments may be made through the Legal Services office.

## Library

Center Building, Second Floor, (541) 463-5220
The Library provides a wide variety of 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, print subscriptions to more than 250 periodicals, and a variety of online databases. Remote access to the Library's online catalog and fulltext online databases is available to Lane students and staff. The Library's website is lanecc.edullibrary.

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. Membership in several library consortia, including the Orbis Cascade Alliance, makes it possible for Lane students to borrow materials from libraries in the Pacific Northwest and around the world. Library services include laptop checkout, group study rooms, a video viewing area, library classroom, and assistive technology.

Loan Policies Lane students, faculty, staff, and those who purchase a Community Borrower card may borrow materials. Lane credit students and staff may also borrow materials from other academic libraries in the Pacific Northwest through the Summit online catalog, or as a visiting patron.

Hours The Library is open 7:30 a.m.-7 p.m. Monday through Thursday and from 7:30 a.m.-5:30 p.m. Friday. The Library is closed Saturday and Sunday.
Library Class For a description of Library classes, see page 209.

## 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.

## 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, a concert choir, a vocal jazz ensemble, a symphonic band, a jazz ensemble, a 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 in all levels and idioms. Open show, at the end of each term, is an opportunity for students in all dance classes to come together to perform in a setting that is informal and fun. The annual Student Dance Concert provides a venue for student choreographers and dancers to demonstrate their skills in a theater setting. Advanced students are invited to audition for Lane Dance Company which performs in the faculty concert presented each year and also is invited to perform in several community venues throughout the year. Collaborations in Rhythm, presented annually, provides Hip-Hop and Jazz dancers performance opportunities.
Individual lessons are available to support students in any of the dance idioms as well as in Pilates and Dance Therapy. Call Bonnie Simoa at (541) 463-5645.
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 usually produces several shows a year. Casting policy puts students first and sometimes includes guest artists and performers from the greater Lane community. Lane has earned a reputation for producing some of the best shows in the area.
In addition to faculty directed plays, the Student Production Club 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, contact Patrick Torelle at (541) 463-5648.

## The Native American Program

Building 1, Room 201, (541) 463-5238
The Native American Program purpose is to recruit and retain Native American Indian and Alaska Native students to Lane Community College and assist them in attaining their academic and career goals. The program aim is to help students make a smooth transition into the academic setting by helping them identify, seek and use the appropriate academic and social support services, provided by the college, necessary for them to succeed. For information about the Native American Student Association, see page 33. Contact James Florendo, (541) 463-5238.

## Photo ID

A Lane Community College Photo ID is not required for conducting business at Lane. Many business processes will require a form of photo ID, including a valid driver's license, Lane photo ID or passport. The cost of a Lane Photo ID is not included in the ASLCC student activity fee. Any faculty/staff member or student currently registered at Lane may purchase a Lane Photo ID from Enrollment and Student Financial Services on the main campus. Replacement cards are $\$ 5$. For information and hours, contact Enrollment and Student Financial Services at (541) 463-3100.

## Sports and Fitness

Fitness Education Center, Building 5, Room 101, (541) 463-3987

The Fitness Education Center provides state-of-the-art exercise equipment and educational instruction in the area health and fitness. Staff and students gain access to the center during usage hours by registering for Fitness Education: Introduction and Fitness Education: Orientation. Students satisfy course requirements through attending exercise sessions during usage hours. The class is available for credit or non-credit through Continuing Education. The environment is supportive, not competitive, educational and encourages people of all fitness levels and abilities. In addition, a professionally trained and dedicated staff is always available for personal guidance.
The orientation covers important exercise principles, instruction in proper equipment adjustments for safety and biomechanical alignment, guidance for cardiovascular equipment, and instruction on the use of the flexibility and functional training area. Students have the opportunity to participate in a health and fitness assessment including blood pressure, body composition and cardiovascular, flexibility, muscular strength, and muscular endurance tests. Seminars on a variety of health, wellness and fitness topics also are available. Students may also sign up for assistance in developing a personalized fitness plan.
The primary objective of the center is to provide an educationbased exercise program in a safe, clean and supportive exercise
environment. Potential benefits of participation include added energy, improved self-image, improved ability to cope with stress, appetite control and reduced body fat, weight maintenance, and increased emotional stability.

Recreational and Club Sports Program, Building 5, Room 204, (541) 463-5293

The Recreational Sports program includes an array of services and programs for students, and their immediate families. These include: clubs and community sports, family activities, trips and outings, intramurals and drop-in activities.

Recreational sports special events provide a variety of opportunities for participation in individual and team activities. The one-day and weekend events provide 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. Recreational adventures/activities include:

| Basketball | Golf | Roller Skating/Blading |
| :--- | :--- | :--- |
| Badminton | Hockey Games | Tennis |
| Bowling | Ice Skating | Volleyball |
| Fun Runs/Walks | RaftTrips | Weight Lifting |

All recreational sports activities are governed by regulations provided in the Recreational Sports Handbook and supervised by the Recreational Sports office. All current students and their immediate family members are eligible for participation.

Open gyms (free gym time when classes are not held) are offered for students and faculty/staff in badminton, basketball, indoor soccer, volleyball, tennis, and weight lifting. These drop-in times are scheduled around facility availability. Brochures are available at the beginning of each term with exact times and locations.

The Club/Community Sports program serves individuals who desire to compete in city recreation leagues in the region. This program offers students the opportunity to participate in competitive sports events, to improve skill and overall knowledge of a sport, to help reach their athletic potential, and to build friendships as they enjoy individual and group activities. Club Sports and specific guidelines on eligibility are governed by regulations set forth in the Club Sports Handbook and supervised by the Recreational Sports Office.

Intercollegiate Athletics, Building 5, Room 205, (541) 463-5599

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

| Fall | Winter | Spring |
| :---: | :---: | :---: |
| Women's Cross Country | Women's Basketball | Men's Baseball |
| Men's Cross Country | Men's Basketball | Women's Track \& Field |
| Women's Soccer |  | Men's Track \& Field |

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

## Student Government: ASLCC

Building 1, Room 210, (541) 463-5290

The Associated Students of Lane Community College (ASLCC) legislative body is the Senate, composed of four executive officers, ten senators, and four student staff positions (appointed, non-voting positions). The purpose of ASLCC is to represent student interests and concerns and to promote student involvement in all phases of college life. Financing for ASLCC comes from the mandatory $\$ 46.25$ student activity fee.*

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

- serve on a college committee.
- form an organization.
- plan an activity.
- become involved in student government.
- make suggestions and express concerns.
*This fee is subject to change pending ASLCC elections.



## Student Life and Leadership Development

Building 1, Room 206, (541) 463-5336
The Student Life and Leadership Development office coordinates and supervises the following areas: Student Activities and 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, Student Health, Oregon Student Association, and the Oregon Student Public Interest Research Group.
Student activities and programs provide students with opportunities to develop and enhance leadership skills and gain experiences in administration, budget development, computers, programming, and communication through participation in ASLCC, committees, cultural programs, and workshops.

Active clubs vary from year to year and represent many student interests on campus. Students are encouraged to organize new clubs and special groups compatible with the spirit of the college community. Students interested in contacting specific clubs can stop by Student Life and Leadership Development and leave a note in the club's mailbox. Groups or individuals interested in forming clubs and organizations should contact the director of Student Life and Leadership Development or ASLCC.
The Student Life and Leadership Development office is open Monday - Thursday, 8 a.m.- 6 p.m. and Friday, 8 a.m. 5 p.m.
Black Student Union, Building 1, Room 201, (541) 463-5340
The Black Student Union (BSU) is a student-based organization focused on the cultural, social and academic needs of African-American students attending Lane. It seeks to build cultural and community bridges in the general context of the academic environment. The BSU is involved with the sponsorship of three campus/community events during the academic year: Kwanzaa, the Martin Luther King, Jr. Celebration, and Black History Month.
The BSU is open to all students, regardless of race, creed, color, religious affiliation, or sexual orientation. Membership in the BSU requires a commitment to the mission of the BSU. The BSU is committed to the development of cross-cultural ties with all groups on campus and in the community at-large. The faculty advisor for the BSU is Greg Evans.
Latino Student Union, Building 1, Room 201, (541) 463-3236

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

Oueer Straight Alliance, Building 1, Room 206, (541) 463-5331
Queer Straight Alliance (QSA) is dedicated to creating alliances between the local queer population and its straight allies. The primary objectives of the QSA include educating the college and community groups about homophobia, heterosexism, and queer experiences; raising awareness about anti-queer legislation at the state and local levels; providing a safe space for open discussions about sexuality and gender issues; and providing queer-positive outreach to local high schools and community organizations.
Native American Student Association, Building 1, Room 201A, (541) 463-5238
The Native American Student Association (NASA) is an organization established to provide Native American students an environment which supports traditional cultural values and beliefs and academic achievement. NASA's priority is fostering a positive educational environment for Native American students while they are attending Lane. NASA assists all Native American students in maintaining contact with their tribal educational and financial departments, family, and the Bureau of Indian Affairs. Contacts are supported through the NASA faculty advisor and the network of Lane advisors. NASA openly welcomes all students at Lane to actively participate in NASA events and feel at ease to ask questions about tradition, heritage and the history of the Native American people. The Native American Student Advisor is James Florendo.
Phi Theta Kappa Honor Society, Building 1, Room 206, (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 selfmotivated and committed to excellence. There are one-time dues which are payable in several options. For more information, contact chapter advisor Velda Arnaud.

## Student Media

Denali, Building 18, Room 213, (541) 463-5897
Denali is LCC's literary and visual arts magazine presently published once a year. Original poetry, prose, visual and graphic arts are accepted for evaluation by a student-run editorial board.

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

Students wishing to submit copy or art, or become involved in any aspect of producing the magazine may contact Bill Woolum, adviser at (541) 463-3398.

Students interested in earning Cooperative Education credit may contact Dorothy Wearne at (541) 463-5656.
Torch, Building 18, Room 212, (541) 463-5655
The Torch is an award-winning, student-produced, weekly campus newspaper with an average circulation of 4,000 copies. Published by authority of the Lane Community College Board of Education through the LCC Media Commission, it is an autonomous newspaper free from censorship by the college administration, faculty and student government.

The Torch serves three purposes: it provides news and information of importance and interest to Lane students and staff; it serves as a learning laboratory for students of journalism, graphic arts, photography, publication design, web design, and advertising; and it provides a communication channel for student commentary and debate. All Lane students may submit guest commentaries and letters for publication in the Torch.
Cooperative Education credit in journalism, graphic design and media arts is available for students working on the Torch. Students interested in joining the Torch staff as writers, photographers or designers may contact Frank Ragulsky, news and editorial adviser, at (541) 463-5654 or Dorothy Wearne, production adviser, at (541) 463-5656.

## Student Service Associates

Student Service Associates are peer mentors. Assist new and continuing students with ExpressLane functions, course scheduling and referrals to appropriate campus resources. Peer Mentors also assist students and community members in Career and Employment Services by linking them with career, major, college, scholarship, and job search. In addition, associates help with other department projects and campus-wide events as needed.
Interested students should inquire at Counseling, (541) 463-3200, in March to find out about the hiring and application process for the following academic year.

## Student Snack Shack

Building 1, Second Floor, (541) 463-5343
The student run snack shack is offered through Student Government and sells bagels, muffins, cold drinks, chips, water, fresh fruit, yogurt, coffee, etc. for students on a daily basis. Hours vary from 8 a.m. -3 p.m. most days. Free coffee is offered every Wednesday.

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

> Lane Tubers Cafe

## Student Book Consignment

Center Building, Second Floor (541)463-5344
The student run book consignment is offered through Student Government and sells students' used books at a discount. The Book Consignment is open 4 days a week, hours vary.

## Substance Abuse Prevention

The Recovery Center, Building 1, Room 226, (541) 463-5178
The Recovery Center offers comprehensive and confidential substance abuse prevention services for students and staff. Services include information, referral and individual and group 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.
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 being open meetings, they are facilitated by Lane students and therefore are subject to change from term to term. They are not held during finals week and school breaks.
All services are open to currently enrolled Lane Community College students (and their families) in credit, Adult Basic and Secondary Education, and Workforce Development classes. There is no cost to students or their families. Most services are provided by professionally trained staff. Information and referral services are provided by trained volunteers and students.
All services provided are confidential. Information is not released without student permission, except upon court order. Office hours for fall, winter and spring terms are 9 a.m. to 5 p.m., Monday through Friday. The center is closed summer term.
For more information, e-mail: harrism@lanecc.edu or call the center or visit lanecc.edu/stuser/subabus. $h$ tm.

## TRIO Learning Center

Building 1, Room 219, (541) 463-3131, lanecc.edu/trio/
The TRIO Learning Center (TLC) at Lane Community College helps students succeed. It is a federally funded program with the goal of helping students stay in school and successfully graduate from Lane Community College and/or 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. TLC staff are available to assist students individually with their concerns.
TLC offers advice, support and encouragement to students; individual and small group tutoring with emphasis in math, science, writing, and computers; computer lab; academic advising; personal and career counseling; information and referral to services on and off campus; mentoring; cultural
enrichment activities; study groups; special workshops and classes; assistance with transfer planning; and visits to Oregon four-year colleges and universities.

## Eligibility

The following criteria must be met to qualify for TRIO.

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


## Tutoring Services

lanecc.edu/tutor/
Tutoring Services coordinates free drop-in tutoring in many subject areas and centers on main campus. All tutoring is free to currently enrolled Lane students and provides one-on-one assistance in academic endeavors. Tutors will clarify information presented in class or textbooks, help students learn how to think about concepts in courses, engage in discussing ways to work problems, help with effective ways to study and learn, and offer support and encouragement. Tutors will not complete a student's homework, edit papers, help with take-home tests, rescue, or do problems without direct student involvement and critical thinking in the process of learning. Students are expected to take responsibility for their own learning, but tutors can empathize with the difficulty of a subject and offer coaching and guidance to make the process easier. For assistance in specific areas, visit the tutoring centers listed below. For general questions, contact Liz Coleman, Tutoring Services Coordinator by phone at (541) 463-5783, email at colemanl@lanecc.edu or come to Tutor Central in the Center Building, Room 208.

Tutor Central, Center Building, Room 210, (541) 463-5282 (Liz Coleman) lanecc.edu/tutor/tutorcent.htm
Fall, winter and spring term hours are Monday through Thursday, 9 a.m. -6 p.m.; Friday, 9 a.m. -2 p.m. This is a great place to study independently with easy access to tutors in the following subjects:

- Academic Learning Skills
- Computer Skills (CS 120, Center Building, Room 205)
- International Students/English as a Second Language
- Social Sciences
- Speech
- Writing Center (help with papers from any class)
- Quiet study room (Center Building, Room 206)
- Group study rooms (Center Building, Rooms 209, 214)

Business Lab, Building 2, Room 107, (541) 463-5765 (Judy Boozer)
The Business Lab provides assistance in Accounting and Business courses. Hours are posted on the door.

CIT Computer Lab, Building 19, Room 135A, (541) 463-5536
(Patty Hine)
The Computer Information Technology Department has tutoring available for all students enrolled in classes that use the lab. Tutors are generally advanced majors in the field of computing.
Math Resource Rooms, MTH 10 - MTH 97, Building 16, Room 163, (541) 463-5399; MTH 105 and up, Building 16, Room 177, (541) 463-5407 (Robert Thompson)
Peer and professional tutors are available.
math.lanecc.edu/math/mrc.html
Music Lab, Building 6, Room 125, (541) 463-5649
(Alberto Redondo)
Assistance is available for music theory, fundamentals, literature, history, and electronic music.
lanecc.edu/perarts/music/lab.htm
Science Resource Room, Building 16, Room 193, (541) 463-5041 (Star Glass)

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

## Adult Basic and Secondary Education

Volunteer tutors assist Adult Basic and Secondary Education Students. Tutors are provided with 12 hours of training before receiving an assignment. Classroom tutors may work with small groups or one-on-one with individual students. Tutors also are placed outside of a classroom with one or two students to tutor in reading, writing, math, English as a Second Language, GED, computer technology, American culture, or other necessary subjects. To become a tutor, contact Amy Gaudia at the Downtown Center, (541) 463-5919. If you need a tutor, contact your instructor for a referral or go to lanecc.edu/volunteertutor/.


## Veterans' Office

Building 1, Room 207, (541) 463-5663 lanecc.edu/va
Programs at Lane Community College are approved by the Oregon Department of Education State Approving Agency as a qualified training institution for students eligible for Veterans' Administration education benefits. All applications for federal VA educational benefits and enrollment certifications are processed through the VA Regional Office in Muskogee, OK. To confirm your eligibility for VA benefits, contact: Veterans Administration Regional Office, P. O. Box 8888, Muskogee, OK 74402-8888, 1-888-442-4551, 10 , gibill.va.gov

For determination of eligibility to collect VA educational benefits go to: lanecc.edu/va/

New Enrollments Students who have never applied for VA benefits should call (541) 463-5663 or email jonese@lanecc.edu prior to visiting the Veterans Office to find out what paperwork or information will be needed. The VA takes up to six weeks to process the initial paperwork on a first-time award.
Electronic Certification Enrollment Certifications for students who previously have used VA educational benefits, as well as subsequent changes in enrollment, will be submitted to the VA via Electronic Certification. Awards and/or changes usually are processed within four to five weeks.
Credit Load/Payment For payment purposes, during a standard term, 12 credits is considered full-time, $9-11$ credits is three-quarter-time, 6-8 credits is half-time. If a student registers for less than half-time, the student only receives tuition reimbursement, plus registration fees (not to exceed one-quarter-time) for the entire term. For non-standard terms, VA benefits are paid at an accelerated rate. Contact the Veterans Office for clarification of this policy.
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.



## Web Access

- Check Lane's home page for the latest information about Lane. (lanecc.edu)
- Choose "ExpressLane" for class
 registration (add or drop), view your account, pay your bill, view your class schedule, request a transcript, view term grades, and check your financial aid status. Review important ExpressLane announcements. (lanecc.edu/explane/index.htm)
- Choose "Student Services" for information about dozens of services including an updated "Student Alert" with important current information. (lanecc.edu/stuser/stuserv.htm)
- The Counseling page provides information about Counseling services, including a list of staff pages with pictures, office location, e-mail addresses and more.
(lanecc.edu/stuser/coundept.htm)
- The Advising page has information on planning your classes, who your assigned counselor is, and a glossary of advising terms. (lanecc.edu/stuser/acadv.htm)


## Women's Program

Building 1, Room 202, (541) 463-5353
The Women's Program provides integrated, comprehensive services and programs for women and a variety of gender equity activities and projects. The program ensures that women students have access to programs and services tailored to their needs and that the campus climate is sensitive to gender issues. Major program components include the Women's Center, Women in Transition, Career Technical Education advising, and Transiciones.

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

Purpose The Women's Program:

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

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

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

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

Transiciones Transiciones is a bridge program to help Spanish speaking women explore educational options and transition to credit classes. The program offers bilingual/bicultural advising, workshops, and credit and noncredit classes. For more information, call (541) 463-3253.

Transiciones Transiciones es un programa que ayuda a la mujer Latina, que habla español, encountrar su camino educativo y carera. El programa consiste en dos cursos y conserjería académica. Los cursos se llaman Transiciones y Teniendo Éxito en la Universidad. El curso de Teniendo Éxito en la Universidad se puede tomar por crédito o no. Este programa le ayuda entender y hacer planes realísticos de cómo aplicar para entrar en la escuela, becas, hacer un plan de estudio, y un plan de carera. Para más informatión llame a Judith Castro (541) 463-3253 y deje un mensaje lentamente con su teléfono.
Career and Technical Education Advising The Career and Technical Education advisor assists Women in Transition and Transiciones students in exploring the CTE programs offered at Lane. The advisor provides informaton, advising, group activities, workshops and other experiences that will assist students as they learn about one- and two-year training programs and other avenues to high-wage, high-demand employment.
Other activities of the Women's Program include working with departments to develop classes and services which meet women's needs, organizing workshops and events, providing leadership on gender equity issues, assisting with sexual harassment and gender based complaints, and marketing to women.

## Taking a class at Lane is easy!

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

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

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

Associate of Arts Oregon Transfer
Associate of Applied Science
Associate of General Studies
Associate of Science
Associate of Science Oregon Transfer: Business
Each student should consult with a counselor or advisor to determine an appropriate degree or certificate program.

## General Education and Core Abilities

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

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


## Core Ability Outcomes Statements

Students completing general education will:
Communicate effectively Courses fulfilling this outcome may require students to:

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

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

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

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

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

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

- value artistic expression and human creativity
- understand fundamental concepts of physical and life sciences
- understand diverse roots of our nation and world civilizations
- understand the role and appropriate uses of technology in our global society
Associate Degree or Certificate Requirements Candidates for an associate degree (AAOT, AAS, AS, AGS, or ASOT - Business) must meet the following requirements:

Total Credits Complete the number of credits as required for the individual degree, including Foundational Skills and Discipline Studies requirements
Minimum Credits at Lane Complete at least 24 credits at Lane
Grade Point Average Earn a cumulative GPA of not less than 2.00 at Lane

Pass/No Pass Maximum of 16 pass/no pass credits may be used toward a degree/certificate, except as specified by AAS or Certificate programs
Credit-by-Exam and Credit-by-Assessment credits used toward a degree/certificate may not exceed $25 \%$ of total degree credits
Lane does not authorize individual departments to waive general education requirements. The Academic Requirements Review Committee will consider petitions to substitute a college General Education requirement. Petitions are available on the web at lanecc.edu/es/forms.html. For additional information, see page 48.
Limits on Sequential Courses Lane promotes skill proficiency development. Therefore, lower level courses taken after completing a higher level course with a grade of C - or greater will not meet degree requirements, i.e., MTH 070 taken after MTH 111 completion. Students who complete courses in mathematics and writing may later elect to complete prerequisite courses, but these prerequisite courses may not then be credited toward a degree or certificate. Such "regression" may be desirable for review and relearning, but it does not count toward accumulating either required or elective credits for any degree or certificate.

Earning a Second Degree A student working toward a second degree must complete an additional 24 credit hours of course work. These additional hours must be completed at Lane and are in addition to the 24 credit minimum required to earn any degree or certificate. No additional credits are required for certificates.

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

## To Apply for a Degree or Certificate

Students are encouraged to apply for degrees or certificates within 3 terms of completion. Application forms are available online at lanecc.edu/es/forms.html and may require a fee.* The "Application for Diploma" form may be mailed to Enrollment and Student Financial Services or submitted in the drop box in the lobby of building 1 on main campus.
$* \$ 20$ fee for the Oregon Transfer Module notation on transcript; $\$ 5$ fee for
duplicate or additional copies of diploma parchment

## Application Guidelines

A student has three terms (including the term of application) in which to complete the degree or certificate. Students not completing within three terms of applying must reapply. A student attending less than full-time ( 12 credits) should take this into consideration at the time of application in order to complete within the three terms.

Applicants must apply by April 30 each year to ensure (1) publication in the commencement booklet for that year, (2) degree evaluation results will be returned to them by the last day of spring term, (3) earliest processing for completed degrees and certificates on their transcripts. Applications received after April 30 will be processed in date order as volume allows.

## Graduation Ceremony

Lane hosts one graduation ceremony each year at the end of spring term. Detailed information about the commencement ceremony is available from the office of Student Life and Leadership Development.

## Degree and Certificate Limitations

All state approved degrees and career and technical programs are designed for full-time students completing at least 45 credit hours per year. However, the College recognizes many students earning degrees and certificates are not able to complete a fulltime course load each term.
Program requirements evolve over time to reflect changes in knowledge, technology and professional standards. Programs also may be discontinued, depending on departmental review and budgetary decisions. Therefore, a part-time student must work closely with counselors, advisors and program coordinators to meet appropriate and current degree and certificate requirements. The following policies apply to students seeking degrees or certificates:

- Candidates for AAOT, AGS, AAS, AS, and ASOT - Business degrees or two-year certificates entering Lane credit programs prior to June 2010, and graduating by June 30, 2014, may use the requirements listed for graduation in this catalog or in any subsequent catalog. Candidates for one-year certificates who enter Lane credit programs prior to June 2010, and graduate by June 30, 2012, may use the requirements listed for graduation in this catalog or in any subsequent catalog.
- A candidate who does not complete a program within the above timeframes must meet graduation requirements and policies of the appropriate subsequent catalog. Program coordinators also may require such a candidate to repeat courses, or complete revised courses to meet updated program standards. Most courses do not expire within this timeframe.
- Students completing fewer than six credits per term should consult Counseling and Advising to determine which catalog year and program requirements to follow to achieve their goals.


## Transfer Limitations for Degrees and Certificates

The following policies apply to transfer course work:

- Lane uses course work from 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
The college or university must have been accredited or be a candidate for accreditation when the course work was taken. If the school was a candidate for accreditation, documentation is required.
- For college coursework done outside the US, students need to have transcripts reviewed by an evaluation service. Lane will need to receive a course-by-course evaluation or a detailed report. Students may use an agency of their choice, and the official report should be mailed directly to Lane Community College. A short list of services includes the agencies below; additional agencies may be found at the NACES site, naces.org
- AACRAO (aacrao.org/credential.index.html)
- World Education Services (wes.org)
- Educational Credential Evaluators Inc. (ece.org)
- Lane uses Advanced Placement (AP) depending on test and score; CLEP, depending on test and score; DANTES Subject Standardized Tests (DSST), depending on test and score; American Council of Education (ACE) as recommendations apply; International Baccalaureate (IB) depending on test and score; Military DD214 for Physical Education only, with official required reports. Transfer grades are considered "P" (Pass).
- Credit-by-Assessment and Credit-by-Exam may be granted for some courses and for a maximum of 25 percent of the degree or certificate. For information on these options, contact Enrollment and Student Financial Services.
- Coursework at 300 levels or above may require instructional department review on a case by case basis.
All documents submitted to Lane Community College become the property of Lane and are subject to federal law, The Family Education Rights and Privacy Act (FERPA).


## 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. 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 2004 is provided in accordance with the federal Student-Right-to-Know act. More
information about students and student outcomes at Lane is available at lanecc.edu/research/ir/index.html or from Institutional Research, Assessment and Planning, (541) 463-5576.
From a 2005 cohort of 593 full-time, first-time, degree/ certificate-seeking students, 47 completed a degree by spring 2008 (8 percent) and of those remaining, 138 transferred to another higher education institution ( 23 percent).
In 2007, Lane surveyed 2005-06 graduates and students who completed a majority of degree requirements before leaving Lane. According to the 448 survey respondents:

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


## Associate of Arts Oregon Transfer Degree

For students who intend to transfer within Oregon, the AAOT offers a degree accepted statewide with a balance of lowerdivision general education requirements and electives.
AAOT graduates admitted to Oregon University System institutions are guaranteed to have fulfilled all lower division general education requirements and are ensured junior status for registration purposes. Some OUS institutions may have additional course or GPA requirements for admission.
Students are encouraged to contact an advisor or counselor to determine which degree is appropriate to meet their goals.

## I. Foundational Skills:

Students must complete all requirements in this section with a minimum grade of C - or " P " (Pass).
Note: Foundational Skills are open to demonstration of proficiency. For information on waiver testing or credit for prior learning, contact a counselor or advisor.

## English Composition

At least two courses that meet statewide criteria - choose from WR 121, WR 122, WR 123, WR 227

## Mathematics

One Course - MTH 105; MTH 111; MTH 211, 212, or 213, or higher
Health/Wellness/Fitness-One or more courses totaling at least Three credits - HE 152, 209, 222, 250, 255, or 275; or HE 125, 252 (summer 1997 or later) or a combination of PE activity courses. For a list of approved courses, contact the Director of Health, Physical Education and Athletics
Oral Communication/Rhetoric
One Course - SP 100, SP 111, SP 112, SP 130, or SP 218
II. Discipline Studies:

In addition to courses used in section 1, additional courses in the areas identified below are required.
All courses under Arts/Letters, Social Science, and Science/Math/Computer Science classes must be at least three credits each. Approved courses that meet these requirements
are listed on pages 41-44.
Subject areas are separate academic disciplines at Lane; for example English (ENG), Speech (SP), Psychology (PSY),
Sociology (SOC), and Biology (BI) etc.
Some courses may be repeatable (see course descriptions). Repeatable courses may be used once for this requirement and up to two additional times as electives.

## Arts/Letters

At least three courses from approved list, chosen from at least two subject areas

## Social Science

At least four courses from approved list, chosen from at least two subject areas

## Science/Math/Computer Science

At least four courses from approved list, chosen from at least two subject areas, including three laboratory courses in Biological/Physical Sciences

## III. Cultural Literacy Requirement

One Course - See the list of approved courses page 44. This class may be used to meet requirements above or as an elective. The credits for this class are counted once toward the 90 credits required for the degree.

## IV. Electives

Any college level courses that would bring total credits to 90 quarter hours - with the following limitations:
Developmental Courses may not be used. Course numbers 001099 identify these courses (e.g., RD 090 or WR 080). Additionally, the following courses are considered developmental: ENG 110, 116, 117; RD 115; WR 110, 115 (taken before summer 1999) or 120.
Career Technical Courses - a maximum of 12 credits may be used. Courses are identified by prefixes listed on page 41.
Physical Education activity courses - a maximum of 12 credits, from courses PE 181-197
Cooperative Education - a maximum of 18 credits. See list, page 175-176.
Individual Music Lessons (MUP) - a maximum of 12 credits

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

Career technical courses are identified by the following prefixes:

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

Notes and Limitations See "Degrees and Certificates" on page 38-39.

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.

Approved courses for Oregon Transfer degree programs Only the following courses meet the OregonTransfer Module, Associate of Arts Oregon Transfer degree, and Associate of Science Oregon Transfer: Business degree requirements. There are additional
courses which can be used for the AS, AGS and the AAS degrees and certificates which are not listed as approved for statewide transfer programs. See course descriptions in this catalog and the limitations as listed with each of the individual degrees and certificates.

## Arts and Letters

Courses meeting the AAOT Arts and Letters requirements shall:

- be a minimum of three credits
- be regularly numbered offerings (not temporary or independent study)
- have as their main focus the broad exploration of traditional liberal arts

Arts and Letters qualifying courses shall also meet these criteria:

1. build upon already established basic skills
2. be grounded in theory, which informs practice
3. develop critical thinking or creative application of ideas
4. emphasize the value of artistic expression and human creativity
5. incorporate interactive learning activities, including performance or studio experiences
6. require learning at the level of analysis, synthesis, and evaluation
7. require substantial out-of-class learning, related to course content, on the students' part
8. require readings and research within experiential courses
9. connect course skills to other disciplinary learning
10. develop students' information literacy skills (use of library, internet, etc.)
11. foster recognition of diverse humanity and build respect for human diversity
AIL 201,202,203
ART 111
ART 115
ART 116
ART 117
ART 131
ART 200
ART 202

ART 204,205,206
ART 207,208,209
ART 210
ART 211
ART 212
ART 214
ART 217
ART 231,232
ART 234
ART 250
ART 251
ART 253
ART 261,262
ART 270
ART 271
ART 272
ART 275
ART 276
ART 277,278
ART 281,284
ART 291
ART 293
ART 294,295
D160
D 251
D 256
D 260
ENG 100
ENG 104,105,106
ENG 107,108,109
ENG 121
ENG 151
ENG 194
ENG 195,196,197
ENG 201,203
ENG 204,205,206
ENG 213
ENG 215
ENG 222
ENG 232
ENG 240
ENG 243
ENG 244

ART 203 Survey of American Indian Art and Achitecture:
Chinuk WaWa
Introduction to Visual Arts
Basic Design: Fundamentals
Basic Design: Color
Basic Design: 3-Dimensional
Introduction to Drawing
Graphic Design History
Survey of Western Art
North and Central
History of Western Art
History of Asian Art: India, China, Japan
The Photographic Vision
Survey of Visual Arts: Early Modern Art
Survey of Visual Arts: Modern Art
American Art
Islamic Art
Drawing: Intermediate; Perspective
Drawing: Figure
Ceramics: Hand Building
Ceramics: WheelThrowing
Ceramics: Intermediate
Photography 1,2
Printmaking, Intaglio
Printmaking, Relief
Printmaking, Monotype, Collograph
Silkscreen
Sculpture: Introduction
Sculpture: Welding; Wood
Painting: Introduction; Intermediate
Sculpture: Metal Casting
Sculpture: Figure
Watercolor: Introduction; Intermediate
Dance Composition
Looking at Dance
Body Fundamentals/Body as Knowledge
Group Choreography
Children's Literature
Introduction to Literature: Fiction, Drama, Poetry
Survey of World Literature
Detective Fiction
Black American Literature
Literature of Comedy
Introduction to Film Studies
Shakespeare
Survey of British Literature
Survey of Asian Literature
Latino/a Literature
Literature and Gender
Native American Literature
Nature Literature
Native American Autobiography
Asian American Literature

ENG 250
ENG 253,254
ENG 257
ENG 260
ENG 261
ENG 270
ENG 271,272,273,276 Film Genre: Varied Topics
FA 255
FA 263
FA 264
FA 265
FR 201,202,203
HUM 100
J 134
J 216
MUS 101
MUS 108
MUS 111,112,113
MUS 118,119
MUS 201,202,203
MUS 205
MUS 211,212,213
MUS 261,262,263
MUS 264,265,266
SP 100
SP 105
SP 111
SP 112
SP 115
SP 130
SP 218
SP 219
SP 220
SP 262
SPAN 201,202,203
TA 140
TA 141,142,143
TA 206
TA 241,242,243
WR 241
WR 242
WR 255

Bob Dylan: American Poet
Introduction to Folklore and Mythology Survey of American Literature
The American Working Class in Fiction and Non-Fiction
Non-Fiction
Introduction to Women Writers
Science Fiction

Understanding Movies: American Cinema
Film in the Fifties
Women Make Movies
African American Film Images
Second Year French
Humanities Through the Arts
Photojournalism
Newswriting 1
Music Fundamentals
Music in World Cultures
Music Theory 1
Music Technology MIDA/Audio 1,2
Introduction to Music and Its Literature
Introduction to Jazz History
Music Theory 2
Music History
History of Rock Music 1,2,3
Basic Communication
Listening and CriticalThinking
Fundamentals of Public Speaking
Persuasive Speech
Introduction to Intercultural Communication
Business and Professional Speech
Interpersonal Communication
Small Group Discussion
Communication, Gender and Culture
Voice and Articulation
Spanish, Second Year
Acting Shakespeare
Acting 1,2,3
Introduction to Theatre
Intermediate Acting
Introduction to Imaginative Writing: Fiction
Introduction to Imaginative Writing: Poetry
The Poet in the City

## Social Science

Courses meeting the AAOT Social Science requirements shall:

- be a minimum of three credits
- be regularly numbered offerings (not temporary or independent study)
- have as their main focus the exploration of a social science department discipline
Social Science qualifying courses shall do at least five of the following:

1. provide opportunities to develop information literacy in the social sciences (the ability to critically analyze, synthesize, and evaluate various forms of information including written texts and other media)
2. encourage the use of effective communication skills, such as active listening and the clear expression of ideas in speaking and writing
3. raise awareness of diversity issues and encourage respectful communication across cultural differences
4. use multiple theoretical approaches of a social science discipline to critically analyze problems and develop recommendations for problem solving
5. use multiple methodological approaches of a social science discipline to critically analyze problems and develop recommendations for problem solving
6. encourage students to examine individual experiences and perspectives in relationship to course material
7. encourage multidisciplinary thinking

ANTH 101
ANTH 102
ANTH 103
ANTH 227,228
ANTH 229
ANTH 231,232,233
CJA 214
ECON 200
ECON 201
ECON 202
ECON 204
ECON 250/ES 250
ECON 260
ES 101
ES 102
ES 211
ES 212
ES 213
ES 221
ES 222
ES 223
ES 231
ES 232
ES 233
ES 241
ES 242
ES 243
ES 250/ECON 250
GEOG 141
GEOG 142
GEOG 201
GEOG 216
GIS 245
GIS 246
GIS 248
HST 101,102,103
HST 104,105,106
HST 195
HST 201,202,203
HST 207
HST 208
HST 257
HST 261
HST 266
PHL 201
PHL 202
PHL 203
PHL 205
PHL 221
PS 104
PS 105
PS 201,202
PS 203
PS 204
PS 205
PS 208
PS 211
PS 212
PS 213
PS 225

PS $275 \quad$ Political Ideology

Physical Anthropology
World Archaeology
Cultural Anthropology
Prehistory of Mexico; Cultures of Mexico
Chicano Culture
American Indian Studies
Introduction to Forensic Science
Principles of Economics: Introduction to Economics
Principles of Economics: Introduction to Micro Economics
Principles of Economics: Introduction Macro Economics
Introduction to International Economics
Class, Race, and Gender in the U.S. Economy
Introduction to Environmental and Natural Resource Economics
Historical Racial and Ethnic Issues
Contemporary Racial and Ethnic Issues
Chicano/Latino Experience: Historical and Ideological Perspectives
Chicano/Latino Experience: Political and Ideological Perspectives
Chicano/Latino Experience: Contemporary Identity and Cultural Issues
African American Experience: Down From the Pyramids, Up From Slavery 10,000 BCE-1877
African American Experience: Aspiration 18771945
African American Experience: A Luta Continua:
The Struggle Continues 1945 to Present
Asian American Experience: First and Second Generation
Asian American Experience: Social
Movements of the 20th Century
Asian American Experience: Contemporary Issues in Asian America
Native American Experience: Consequences
of Native American and European Contact
Native American Experience: Nineteenth
Century Federal-Indian Relations
Native American Experience: Contemporary
Native American Issues
Class, Race, and Gender in the U.S. Economy
Natural Environment
Introduction to Human Geography
World Regional Geography
Geography of Pacific Asia
Maps and Spatial Information
Introduction to GIS
Applications in GIS
History of Western Civilization
World History
History of the Vietnam War
History of the United States
History of the American West
U.S. History Since 1945

American Indian History
Latin American History
U.S. Women's History

Ethics
Theories of Knowledge
Theories of Reality
Contemporary Moral Issues
Critical Thinking
Problems in U.S. Politics/Film 1
Problems in U.S. Politics/Film 2
U.S. Government and Politics

State and Local Government and Politics
Introduction to Comparative Politics International Relations
Introduction to Political Theory
Peace and Conflict Studies: Global
Peace and Conflict Studies: National
Peace and Conflict Studies: Local
Political Ideology

PS 297
PSY 201,202,203
PSY 214
PSY 215
PSY 216
PSY 218
PSY 235,236
PSY 239
REL 201
REL 202
REL 203
REL 230
REL 243
SOC 204
SOC 205
SOC 206
SOC 207
SOC 208
SOC 210
SOC 211
SOC 213
SOC 215
SOC 216
SOC 218
SOC 225
WS 101

Environmental Politics
General Psychology
Introduction to Personality
Lifespan Developmental Psychology
Social Psychology
Multicultural Psychology
Human Development 1,2
Introduction to Abnormal Psychology
Religions of India (Hinduism, Buddhism)
Religions of China and Japan (Taoism,
Confucianism, Buddhism, and Shinto)
Religions of the Middle East (Judaism,
Christianity, and Islam)
Christian Beginnings
Nature, Religion, and Ecology
Introduction to Sociology
Social Stratification and Social Systems
Institutions and Social Change
Women and Work
Sport and Society
Marriage, Family and Intimate Relations
Social Deviance
Race and Ethnicity
Social Class
Global Social Movements
Sociology of Gender
Social Problems
Introduction to Women's Studies

Science/Math/Computer Science
Courses meeting the AAOT Science/Math/Computer Science requirement course shall:

- be a minimum of three credits
- be regularly numbered offerings (not temporary or independent study)
- have the main focus be the systematic study of a branch of science, math or the discipline of computer science
Science/Math/Computer Science qualifying courses shall:

1. build upon and apply a systematized body of knowledge or principles (through observation and experimentation for science)
2. build a foundation to connect skills and knowledge to other disciplinary learning, thus meeting the needs of other programs and degree requirements
3. develop ability to symbolically express relationships between figures, forms, and/or quantities
4. communicate precisely, technically, quantitatively, and symbolically within a structured system
5. use multiple approaches to develop critical analytical thinking that includes synthesis, evaluation, and creative insight
6. require inductive and deductive reasoning
7. provide exposure to both theory and practical applications

## Biological Sciences with laboratories

BI 101,102,103 General Biology (See note next page)
BI $112 \quad$ Cell Biology for Health Occupations
BI $211 \quad$ Principles of Biology
BI $212 \quad$ Principles of Biology (formerly BOT 202 or Z 202)
BI 231,232,233
BI 234
BOT 213
Human Anatomy and Physiology 1,2,3 Introductory Microbiology
Principles of Botany (formerly BOT 203)
Principles of Zoology (formerly Z 203)

## Catch the ExpressLane

Use ExpressLane to apply for admission, registration, account payments, viewing schedules, class details, and grades. Check

each term's class schedule for information on registration dates, getting your "L" number and going on-line in ExpressLane.

Physical Sciences with laboratories
ASTR 107
CH 104,105,106
CH 110
CH 112
CH 114
CH 221,222,223
CH 241,242,243
CJA 214
ENVS 181
ENVS 182
ENVS 183
ENVS 184
G 101
G 102
G 103
G 146
G 147
G 201
G 202
G 203
GIS 245
GIS 246
GIS 248
GS 101
GS 104,105,106
GS 142
GS 147
PH 101,102,103
PH 201,202,203
PH 211,212,213
Astronomy

Organic Chemistry
Terrestrial Environment
Aquatic Environment
Global Climate Change

Evolving Earth
Rocks and Minerals
National Parks
Earth's Surface Systems
Evolution of the Earth
Introduction to GIS
Applications in GIS
Physical Science
Oceanography +L
General Physics

Introductory Chemistry 1,2,3
Chemistry in Everyday Life
Chemistry for Health Occupations
Introduction to Forensic Chemistry
General Chemistry 1,2,3
Introduction to Forensic Science
Atmospheric Environment and Population

Earth's Dynamic Interior
Earth's Dynamic Surface

Earth Materials and PlateTectonics

Maps and Spatial Information

General Science (Nature of the Northwest)
Earth Science: Earth Revealed +L
Fundamentals of Physics
General Physics with Calculus
+L must be taken for four credits to include lab
Note: Only one of the BI 101's, and one of the BI 102's, and one of the BI 103's can be used to meet the Science/Math/Computer Science requirements for any Lane degree. Any additional BI 101, 102, or 103 course credits will only be used as electives for a Lane degree. (See the course description section of this catalog for more information.)

## Other Science/Math/Computer Science Courses <br> (non-laboratory)

ANTH 101
ASTR 121
ASTR 122
ASTR 123
CS 160
CS 161,162
CS 233
CS 260
CS 271
GEOG 141
GIS 245
GIS 246
GIS 248
GS 142
GS 147
MTH 105
MTH 111
MTH 112
MTH 211,212,213
MTH 231,232,233
MTH 241,242
MTH 243
MTH 251
MTH 252
MTH 253
MTH 254
MTH 255
MTH 256
MTH 261
PSY 212
PSY 217

Physical Anthropology
Astronomy of the Solar System
Stellar Asrtonomy
Cosmology and the Large-Scale Structure of the Universe
Orientation to Computer Science
Computer Science 1,2
Advanced Programming
Data Structures 1
Computer Architecture and Assembly
Language
Natural Environment
Maps and Spatial Information
Introduction to GIS
Applications in GIS
Earth Science: Earth Revealed
Oceanography
Introduction to Contemporary Mathematics
College Algebra
Trigonometry
Fundamentals of Elementary Math 1,2,3
Discrete Mathematics 1,2,3
Elementary Calculus 1,2
Introduction to Probability and Statistics
Calculus 1 (Differential Calculus)
Calculus 2 (Integral Calculus)
Calculus 3 (Infinite Series and Sequences)
Vector Calculus 1 (Introduction to Vectors and Multi dimensions)
Vector Calculus 2 (Introduction to Vector

## Analysis)

Applied Differential Equations
Introduction to Linear Algebra
Introduction to Learning
Introduction to Experimental Psychology

## Cultural Literacy

Courses meeting the AAOT Cultural Literacy courses shall:

- be a minimum of three credits
- achieve the same outcomes if course sections are taught by more than one instructor
- be regularly numbered offerings (not temporary or independent study)
- have Curriculum Committee approval; if eligible, have applied for other degree requirement status for Arts \& Letters or Social Science requirement status
In addition, qualifying courses shall:

1. emphasize elements of critical thinking
2. have as their central focus the study of the unequal distribution of power within the framework of particular disciplines and course content
3. focus primarily on the United States, although global contexts are encouraged
4. provide illustrations of ways in which structural, institutional, and ideological discrimination arise from socially defined meanings attributed to difference
5. provide historical and contemporary examples of difference, power, and discrimination across
6. cultural, economic, social, and political institutions in the United States
7. provide illustrations of ways in which the interactions of social categories, such as race, ethnicity, social class, gender, religion, sexual orientation, disability, and age, are related to difference, power, and discrimination in the United States
8. provide a multidisciplinary perspective on issues of difference, power, and discrimination
9. incorporate interactive learning activities (e.g.: in-class writing exercises, classroom discussion, peer-review of written material, Webbased discussion groups)
The following courses fulfill the Ethnic/Gender/Cultural Diversity
Requirement for the AAOT degree. A course taken to meet the
Ethnic/Gender/Cultural Diversity Requirement will also be used to satisfy Introduction to Disciplines or Elective Requirements. The credits for such courses will only be counted once toward the 90 credits required to complete the degree.

## Arts and Letters

ART 207,208,209
ART 217
ENG 107,108,109
ENG 151
ENG 213
ENG 215
ENG 222
ENG 232
ENG 243
ENG 244
ENG 250
ENG 257

ENG 260
FA 264
FA 265
MUS 108
MUS 205
SP 115
SP 220
Social Science
ANTH 103
ANTH 211
ANTH 227,228
ANTH 229
ANTH 231,232,233
ECON 250/ES 250
ES 101
ES 102
ES 211
ES 212

ES 213
ES 221
ES 222

History of Asian Art: India; China; Japan Islamic Art
Survey of World Literature
Black American Literature
Survey of Asian Literature
Latino/a Literature
Literature and Gender
Native American Literature
Native American Autobiography
Asian American Literature
Introduction to Folklore and Mythology
The American Working Class in Fiction and Non-Fiction Introduction to Women Writers
Women Make Movies
African-American Film Images
Music in World Cultures
Introduction to Jazz History
Introduction to Intercultural Communication
Communication, Gender and Culture

Cultural Anthropology
Anthropology of Folk Religions
Prehistory of Mexico; Cultures of Mexico
Chicano Culture
American Indian Studies
Class, Race and Gender in the U.S. Economy
Historical Racial and Ethnic Issues
Contemporary Racial and Ethnic Issues
Chicano/Latino Experience: Historical and Ideological Perspectives
Chicano/Latino Experience: Political and Ideological Perspectives
Chicano/Latino Experience: Contemporary Identity and Cultural Issues
African American Experience: Down From the Pyramids, Up From Slavery 10,000 BCE-1877 African American Experience: Aspiration 18771945

ES 223

ES 231
ES 232
ES 233
ES 241
ES 242
ES 243
GEOG 142
GEOG 216
HST 104,105,106
HST 195
HST 250
HST 257
HST 261
HST 266
PHL 216
PSY 218
REL 201
REL 202
REL 203
SOC 207
SOC 208
SOC 213
SOC 215
SOC 216
SOC 218
WS 101

African American Experience: A Luta
Continua: The Struggle Continues 1945 to Present
Asian American Experience: First and Second Generation
Asian American Experience: Social
Movements of the 20th Century
Asian American Experience: Contemporary Issues in Asian America
Native American Experience: Consequences of native American and European Contact
Native American Experience: Nineteenth Century Federal-Indian Relations
Native American Experience: Contemporary Native American Issues
Introduction to Human Geography
Geography of Pacific Asia
World History
History of the Vietnam War
La America Latina Colonial
American Indian History
Latin American History
U.S. Women's History

Philosophy and Cultural Diversity
Multicultural Psychology
Religions of India (Hinduism, Buddhism)
Religions of China and Japan (Taoism,
Confucianism, Buddhism, and Shinto)
Religions of the Middle East (Judaism,
Christianity, and Islam)
Women and Work
Sport and Society
Race and Ethnicity
Social Class
Global Social Movements
Sociology of Gender
Introduction to Women's Studies

## Science/Math/Computer Science

BI 102J Ethnobotany
BI 103G General Biology: Global Ecology
Electives
ED 258 Multicultural Education
FR 280 Co-op: French
CG 191
CPSY 195
HE 255
HS 267
Issues in Cultural Diversity
Introduction to Addictive Behaviors
Global Health
SPAN 280

Cultural Competence in Human Services
Co-op: Spanish

## Associate of Science Oregon Transfer: Business

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

Each student must contact the specific OUS business school/program early in the first year of an ASOT: Business degree to be advised about additional requirements and procedures for admission consideration to the OUS institution and the Business school/program.
Admission to the Business school/program of any OUS institution is not guaranteed upon completion of the Associate of Science/Oregon Transfer in Business (ASOT: Business) degree.

## I. Foundational Skills

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

## Writing:

A minimum of 8 credits of college-transfer writing courses with a grade of " C " or better. Designated courses are: WR 121, WR 122, WR 227
Oral Communications:
A minimum of 3 credits with a grade of "C" or better: SP100, 105, 111, 112, 115, 130, 218, 219, 220, 262

## Mathematics:

A minimum of 12 credits with a grade of "C" or better: MTH 111 or above, 4 credits of which must be MTH 243.

## Computer Applications:

3 to 6 credits with a grade of "C" or better: proficiency in wordprocessing, spreadsheet, database, and presentation software as demonstrated by successful completion of appropriate courses. Each student must see an advisor or counselor to determine which course(s) will best meet the requirements of an intended transfer institution. CIS 101, CIS 131, CS 120

## II. Discipline Studies

Note: Courses must be at least 3 credits each.

## Arts and Letters:

A minimum of 12 credits, from approved list on page 41-42 chosen from at least two disciplines

## Social Sciences:

A minimum of 12 credits from approved list, with a minimum of eight credits of "principles of economics" (to include microeconomics and macroeconomics) at the 200 level. The courses in economics must be completed with a grade of "C" or better.

## Science:

A minimum of 12 credits of laboratory courses in the biological or physical sciences from approved list on pages 43.

## III. Business-Specific Requirements

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

BA 101 Introduction to Business, 4 credits
BA 211 Fundamentals of Financial Accounting and
BA 213 Decision Making with Accounting Information, 8 credits
BA 226 Business Law 1 (or other advisor-approved Business course from the list below), 4 credits
Check with a business advisor if you intend to substitute one of the courses below for BA 226 Business Law. Some OUS
institutions require BA 226.
BA 218 Personal Finance
BA 223 Marketing
BA 224 Human Resource Management
BA 227 Law of Business Transactions
BA 249 Retailing
BA 278 Leadership and Team Building
BA 280 Cooperative Education

## IV. Electives and University-Specific Prerequisites

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

## Notes and Limitations

For transfer students graduating from high school in 1997 and thereafter, the Oregon University System has a second language admission requirement: two terms of a college-level second language with an average grade of C - or above, OR two years of the same high school-level second language with an average grade of C - or above, OR satisfactory performance on an approved second language assessment of proficiency. Demonstrated proficiency in American Sign Language meets this second language admission requirement.
Lower-division courses taken at the community college may not meet the requirements of an upper-division course with a similar title and content offered by an Oregon University System Business School/Program. In such cases, the courses in question will normally transfer as electives.
The ASOT: Business degree may include up to 12 approved career technical credits as electives.
Important: Each student is encouraged to contact an advisor or counselor to determine how to match career goals with an appropriate program. Careful advising especially is needed for this degree program, as requirements at OUS institutions vary, and elective choices will differ depending on the intended transfer institution.

## Associate of Science Degree

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

## I. Foundational Skills:

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

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

## English Composition

Eight credits - complete two courses (minimum):
WR 115 (summer 1999 or after), WR 121, 122, 123, 227

## Mathematics

Four credits - MTH 105 or higher

## Physical Education

Three credits - activity courses completed over at least two terms; PE 181-197 and Dance (limited to 1 credit from Dance prefix). One course must be at an advanced level or in a different activity.

## Health

Three credits - HE 152, 209, 250, 255, or 275; or HE 125, 252 (summer 1997 or later)

## II. Discipline Studies:

In addition to courses used for foundational skills in section 1, students must select additional courses in the areas identified below.
Some courses may be repeatable (see the course description). Repeatable courses may be used once for this requirement and up to two additional times as electives.
Choose courses numbered 100 or higher; excluding developmental courses listed below. No courses numbered 198, 199, 298 or 299 may be used for distribution areas.
Developmental Courses may not be used. Course numbers 001-099 identify these courses (e.g., RD 090 or WR 080). Additionally, the following courses are considered developmental: ENG 110, 116, 117; RD 115; WR 110, 115 (taken before summer 1999) or 120.

## Arts/Letters

Ten credits - Choose from the following: Art, Dance, Effective Learning, Film Arts, Foreign Language, Humanities, Journalism Literature, Music, Speech, Theater Arts, Writing

## Social Science

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

## Science/Math/Computer Science

Thirty-six credits - Choose from the following: Biology (see page 43 for restriction), Astronomy, Botany, Chemistry, Computer Science (CS prefix courses only, not CIS), Engineering, Geology (G or ENVS), Mathematics (MTH105 and higher), The Natural Environment (GEOG101), Physical Anthropology (ANTH101), Physical Science (GS prefix), Physics, Zoology; Advanced Technology courses: EET 129, 130, 131, 145, 146, 151, 152; DRF 207, 205; FT 113.

## III. Electives

Twenty credits - numbered 100 or above with the following limitations:
Developmental courses may not be used.
Career Technical courses - a maximum of 12 additional credits may be used. Courses are identified by prefixes listed on page 41.
Physical Education activity courses - a maximum of 9 credits from courses PE 181-197

Cooperative Education - a maximum of 18 credits. See list, page 175-176.
Individual Music Lessons (MUP) - a maximum of 12 credits

Additional Information: See "Degrees and Certificates," page 38


## Associate of General Studies

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

## I. Foundational Skills:

Students must complete all requirements in this section with a minimum grade of C - or " P " (Pass).
Note: Foundational Skills are open to demonstration of proficiency. For information on waiver testing or credit for prior learning, contact a counselor or advisor.

## English Composition

Eight credits - complete two courses (minimum):
WR 115 (summer 1999 or after), WR 121, 122, 123, 227

## Mathematics

Four credits - complete one of the following options:
MTH 105 or higher
OR
MTH 052 or higher and one of the following: CIS 101, CIS 131, or CS 120

## Physical Education

Three credits - activity classes completed over at least two terms; PE 181-197 and Dance (limited to 1 credit from Dance prefix). One course must be at an advanced level or in a different activity.

## Health

Three credits - HE 152, 209, 250, 255, or 275; or HE 125, 252 (summer 1997 or later)

## II. Discipline Studies:

In addition to courses used in section 1, students must select additional courses in the areas identified below.
Some courses may be repeatable (see the course description). Repeatable courses may be used once to fulfill this requirement. Choose courses numbered 100 or higher; excluding developmental courses listed below. No courses numbered 198, 199, 298 or 299 may be used for distribution areas.
Developmental Courses may not be used. Course numbers 001099 identify these courses (e.g., RD 090 or WR 080). Additionally, the following courses are considered developmental: ENG 110, 116, 117; RD 115; WR 110, 115 (before summer 1999) or WR 120.

## Arts/Letters

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

## Social Science

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

## Science/Math/Computer Science

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

## III. Electives

Thirty-six credits - with the following limitations:
Developmental courses may not be used.
Physical Education activity courses - a maximum of 9 additional credits from courses PE 181-197
Cooperative Education - a maximum of 18 credits. See list, page 175-176.
Individual Music Lessons (MUP) - a maximum of 12 credits

Additional Information: See "Degrees and Certificates," page 38.


## Associate of Applied Science Degree

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

Career and Technical courses do not necessarily transfer to other institutions. See course prefixes listed on page 41.
Some programs offer certificates of completion for certificate requirements, see progam listing pages.

## I. Foundational Skills:

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

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

## English Composition

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

## Mathematics

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

## Physical Education/Health

Physical Education: Three credits - activity classes completed over at least two terms; PE 181-197 and Dance (limited to 1 credit from Dance prefix). One course must be at an advanced level or in a different activity.
OR
Health: Three credits - HE 152, 209, 250, 255, or 275; or HE 125, 252 (summer 1997 or later)

## II. Discipline Studies:

A minimum of twelve credits is required with at least three credits in each discipline area.
See the individual programs for specific course requirements. If no specific courses are listed, see the information below.
Some courses may be repeated (see course description).
Repeatable courses may be used once as a distribution requirement.
Choose courses numbered 100 or higher; excluding developmental courses listed below. Course numbers 001-099 identify these courses (e.g., RD 090 or WR 080). Additionally, the following courses are considered developmental: ENG 110, 116, 117; RD 115; WR 110, 115 (before summer 1999) or WR 120.
No courses numbered 198, 199, 298 or 299 may be used for distribution areas.

## Arts/Letters

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

## Human Relations/Social Science

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

## Science/Math/Computer Science

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

## III. Program Core Requirements

Core course work varies from program to program. Not all programs offer a degree. See the individual program descriptions for specific requirements and limitations, pages 69-155.

## Additional Information: See "Additional Information" under

 Certificate, page 49.
## Human Relations*

Three credits from this list will meet the Human Relations component for the AAS degrees and certificates.
ANTH 103 Cultural Anthropology
ANTH 211 Anthropology of Folk Religions
ANTH 226 Readings in Cultural Anthropology
BA 278
BT 146
CG 100
CG 140
CG 144
CG 145
CG 191
CG 202
CG 203
CG 204
CG 211,212
CG 213
CG 214
CPSY 200
GEOG 142
HO 102
HS 207
HST 264
PHL 201
PHL 205
PS 204
PS 213
PSY 110
PSY 205
SP 218
SP 219
SOC 108
SOC 204
SOC 205
SOC 206
SOC 207
SOC 210 Marriage, Family and Intimate Relations
SOC 211 Social Deviance
SOC 212 Social Control
SOC 225 Social Problems
SOC 227 Social Psychology
WS 101 Introduction to Women's Studies

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


## Certificate (One-Year and Two-Year)

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

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

## I. Foundational Skills:

Students must complete all General Education requirements in this section with a minimum grade of C - or " P " (Pass), unless otherwise noted by the sponsoring department that the course requires a letter grade and/or a higher grade.
Note: Foundational Skills are open to demonstration of proficiency. For information on waiver testing or credit for prior learning, contact a counselor or advisor.

## English Composition

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

## Mathematics

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

## Human Relations

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

## II. Program Core Requirements

Core course work varies from program to program. Not all programs offer a certificate. See the individual program descriptions for specific requirements and limitations, pages 69144. See Degree and Certificate Limitations, pages 39.

Additional Information: See "Degrees and Certificates," page 38.

- The requirements listed in Section I are minimums. Some career and technical programs may have higher general education course and/or grade requirements. Only the Academic Requirements Review Committee may waive a college General Education requirement. Petitions are available from Enrollment and Student Financial Services at lanecc.edu/es/forms $/ \mathrm{html}$.
- Programs may have specific courses listed to fulfill the General Education Requirements in Section I. For the Human Relations area, a department may substitute another course from the approved course list.
- A maximum of 18 credits of Cooperative Education listed on page 175-176 may be used.
- A maximum of 12 credits of Physical Education listed on pages 227-231 may be used.
- Developmental courses may be used only when listed specifically by certificate program requirements. Course numbers 001 through 099 usually identify these courses. However, WR 115 taken prior to summer 1999 may not be used.


## Oregon Transfer Module

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

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

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

## I. Foundational Skills:

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

Writing - Two courses of college-level composition (WR 121, WR 122, WR 123, or WR 227)
Oral Communications - One course of fundamentals of speech or communication (SP 100, SP 111 or SP 112)
Mathematics - One course of college-level mathematics, for which at least MATH 095 is a prerequisite (MTH 105 or higher)
II. Discipline Studies: (must be at least 3 credits each)

Arts and Letters - 3 courses from the approved list on page 41-42
Social Sciences - 3 courses from approved list on pages 42-43
Science/Math/Computer Science - 3 courses from the approved list on pages 43 including at least one biological or physical science with a lab

## III. Additional Requirements:

Electives - As required to bring the total credits to 45 . Courses must be from the Introduction to Disciplines areas (Arts and Letters, Social Sciences, or Science/Math/Computer Science). No developmental courses may be used.

Grades - All courses must have a grade of "C-" or better. Students must have a minimum cumulative GPA of 2.0 at the time the module is posted to the students transcript.
Developmental Courses - Courses that are designed to prepare students for college transfer courses are not applicable to the Oregon Transfer Module.

## Notes and Limitations

When choosing courses in science and mathematics, students and advisors should check the specific requirements at receiving schools. Courses that include a laboratory 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.

Lane Community College offers courses for students who wish to pursue a four-year degree at a public or private college or university. A student who attends Lane can complete lower division general education requirements of the four-year colleges and begin work on the requirements for a specific major. The advantages of beginning college studies at Lane include small classes, lower costs, individual help from instructors, and an opportunity to improve writing, reading, math, and study skills.

## Planning to Transfer

General education and graduation requirements for specific majors vary among colleges and universities.

Lane's Counseling is a complete resource for students who plan to transfer credit from Lane. The center has information on colleges and universities and the degree programs they offer. Counselors and advisors are available to help students with academic planning to ensure that course work is appropriate for programs at the four-year colleges they plan to attend. In addition, Counseling offers several transfer workshops each term to help students obtain up-to-date transfer information.
Planning is important because it helps students prepare for further studies in their programs. For instance, it may be important that a student begin mathematics studies as early as possible. For certain majors, students need to be attending the four-year school after the first year of study because specific major requirements are part of the second-year curriculum. Students who have taken advantage of Lane's advising opportunities have a smooth transfer process and continue on to complete their bachelor's degrees. Students have eight choices for transfer planning:
Direct Transfer This option is for any student who has selected a transfer school, major and degree and who wishes to satisfy the specific requirements for that college or university. It is especially important that a student who chooses this option works closely with a counselor or advisor at Lane.
It is the responsibility of students to learn the program requirements of their intended transfer school. Students should periodically contact Counseling for academic advising and to learn of any possible changes in a program.

Dual Enrollment Program/Lane Community College and University of Oregon Students may take advantage of this agreement between the two institutions to take classes concurrently. Students must be admitted to both institutions and complete an additional application insert that is available at the Admissions Office at the UO and in the
Counseling/Advising Center at Lane.
Dual Enrollment admission will allow students to use financial aid to take courses at both campuses. For students with 0-89 eligible credits, the financial aid award is administered by Lane; for students with 90 or more eligible credits, the financial aid award is administered by the University of Oregon.

Degree Partnership Program (DPP)/Lane Community College and Oregon State University Students can be Jointly admitted and enrolled at Lane and OSU. Students must be admitted to both institutions and complete an additional application for DPP available through OSU.
DPP will allow students to use financial aid to take courses at both campuses. For students with 0-89 eligible credits, the financial aid reward is administered by Lane; for students with 90 or more eligible credits, the financial aid is administered by OSU.

Oregon Transfer Module (OTM) For students intending to transfer within a year to an Oregon University System Institution, this transcript notation ensures the 45 credits of specific general education requirements and electives will be accepted at any state institution, and ensures sophomore status for registration purposes. Upon transfer, the receiving institution may specify additional course work required for a major or for degree requirements or to make up the difference between the Transfer Module and the institution's total General Education requirements.

Associate of Art: Oregon Transfer Degree (AAOT) This degree is designed for students who wish to obtain an associate of arts degree and want the flexibility to attend any school in the Oregon University System. Institutions in the Oregon University System accept the associate of arts Oregon transfer degree to meet that university's lower division general education requirements. (See the AAOT degree requirements on page 40.) A student selecting this transfer option still must meet that university's grade point average admission requirement and complete the coursework required for a major and degree with junior standing.

Associate of Science Oregon Transfer: Business (ASOT: Bus)
For students who intend to transfer to an Oregon University System Institution, this degree offers business-focused general education requirements and electives. Students who meet the transfer institution's admission requirements and transfer to an Oregon University System with this degree are guaranteed to have met that institution's lower-division general education requirements. They will have junior status for registration purposes.
Associate of Science (AS) (Transfer) For some transfer majors, this degree best matches pre-major requirements of specific colleges or universities. Requirements include a rigorous general education program balanced with electives. However, this degree does not carry the same transfer guarantees of meeting all lowerdivision general education requirements as the OTM, AAOT, or ASOT: Business described above. It does not ensure junior status upon transfer to a state four-year institution. Students seeking this degree must work closely with advisors at Lane and the intended transfer institution to determine which courses best match plans for transfer majors.

## Associate of General Studies (AGS) (Transfer) For students

 not pursuing specific transfer or professional programs, this degree provides an alternative to meet individual goals, including general education and elective transfer or career and technical coursework. However, this degree does not carry the same transfer guarantees of meeting all lower-division general education requirements as the OTM, AAOT, or ASOT:Business described above. It does not ensure junior status upon transfer to a state four-year institution.

## Degrees

For information about degrees and limitations, see pages 38-40.
Transfer Majors Students can begin preparing for many careers at Lane. The following is a list of majors and the counselor/advisor for Lane courses that may transfer to a university in the Oregon University System. (Not all majors are offered at every university.)

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Physical Therapy (pre-professional program)

Debby Ganser/Shirley Lukacs
Physics....................................................Debby Ganser/Shirley Lukacs
Political Science ...................................Anthony Hampton/Cindy Lott
Psychology .............................................Anthony Hampton/Cindy Lott
Public Administration..........................Anthony Hampton/Cindy Lott
Recreation.................................................Leslie Soriano/Rosa Lopez
Religion................................................Anthony Hampton/Cindy Lott
Secondary Education ...............................................Counseling Staff

Major
Counselor/Advisor
Social Science Anthony Hampton/Cindy Lott
Sociology............................................Anthony Hampton/Cindy Lott
Speech ..................................................Anthony Hampton/Cindy Lott
Theatre Arts Tim Blood
Veterinary Medicine (pre-professional
program). $\qquad$ .Debby Ganser/Shirley Lukacs
Transfer Hotline If a student has a problem in transferring classes to a college or university, the student should first try to resolve it with his or her advisor. If the problem cannot be solved at that point, the student may call the Transfer Problem Hotline at the Oregon Department of Education for additional help. The hotline number is (541) 378-8609.

Counselors for "Undeclared" Students A counselor is assigned to each academic department and to each student who is undecided about or is exploring a major. Students can receive guidance in taking initial courses, using career center resources, and setting educational goals.
A list of counselors for students who are undecided is located in Counseling. Students can make an appointment with a counselor at the appointment desk in Counseling or by calling (541) 463-3200. Or, students may drop in without an appointment during the counselor's office hours. Counselor schedules for each term are posted in Counseling, and on the door to the counselor's office.


## Career and Technical Programs

The career and technical programs described on the following pages appear in alphabetical order on the list below. Curriculum requirements are listed for each program and descriptions of required and elective courses can be found in the Course Descriptions section of this catalog. Curriculum information for Lane programs is updated annually. The most current information is available from a Lane counselor/advisor or the department offering a particular program. Current counselors/ advisors for each program are listed with each program.
Depending on the career and technical program in which they are enrolled, students can earn a two-year Associate of Applied Science degree or a one- or two-year certificate of completion.
Lane offers noncredit opportunities for career training and continuing education. These are described on page 245.
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
Accounting (AAS)..............................Marva Solomon/Deb Hupcey
Accounting Clerk (CPC) .....................Marva Solomon/Deb Hupcey
Bookkeeper (CPC) ............................Marva Solomon/Deb Hupcey
Payroll Clerk (CPC) .............................Marva Solomon/Deb Hupcey
Administrative Assistant (AAS) ............Marva Solomon/Deb Hupcey
Legal Office Skills (CPC)....................Marva Solomon/Deb Hupcey
Office Software Specialist (CPC) ........Marva Solomon/Deb Hupcey
Small Business Ownership (CPC)......Marva Solomon/Deb Hupcey
Auto Body and Fender Technology
(AAS and 2 -yr cert) ........................Carolyn Litty/Betty Svarverud
Auto Paint Option (AAS)....................Carolyn Litty/Betty Svarverud
Auto Collision Option (AAS) .............Carolyn Litty/Betty Svarverud
Automotive Technology
(AAS and 2 -yr cert) ........................Carolyn Litty/Betty Svarverud
Aviation Maintenance Technician
(AAS and 2 -yr cert) .......................Carolyn Litty/Betty Svarverud
Business Assistant (1-yr cert)................Marva Solomon/Deb Hupcey
Computer Network
Operations (AAS)..........................Debby Ganser/Shirley Lukacs
Network Security (CPC)
Computer Programming (AAS)...........Debby Ganser/Shirley Lukacs Geographic Information
Science (CPC). $\qquad$ Debby Ganser/Shirley Lukacs
Web Programming (CPC) ...............Debby Ganser/Shirley Lukacs
Computer Simulation and Game
Development (CPC) .......................Debby Ganser/Shirley Lukacs
Computer Game Programming in
$\mathrm{C}_{++}$(CPC)....................................Debby Ganser/Shirley Lukacs
Computer Specialist
(1-yr cert)....................................Debby Ganser/Shirley Lukacs
Computer User Support (AAS)...........Debby Ganser/Shirley Lukacs
Construction Technology
(AAS and 1-yr cert) .......................Carolyn Litty/Betty Svarverud
Culinary Arts and Food Service
Management (AAS)......................Carolyn Litty/Betty Svarverud
Baking and Pastry (CPC) ................Carolyn Litty/Betty Svarverud Food Preparation and
Production (CPC) ........................Carolyn Litty/Betty Svarverud
Dental Assisting (1-yr cert).........................Leslie Soriano/Rosa Lopez
Dental Hygiene (AAS) .............................Leslie Soriano/Rosa Lopez
Diesel Technology (AAS, 2-yr cert).......Carolyn Litty/Betty Svarverud Lift Truck/Material Handling Equipment Technician Option (AAS)

Drafting (AAS, 1-yr cert). ..Carolyn Litty/Betty Svarverud Early Childhood Education
(AAS and 1-yr cert). ()....... Electrician Apprenticeship
Technologies (AAS, cert) ...Marva Solomon/Deb Hupcey
$\qquad$ Colleen Cairney
Limited Electrician Apprenticeship Technologies (cert)
Electronic Technology (AAS) ................Carolyn Litty/Betty Svarverud
Emergency Medical Technician
(1-yr cert) ..............................................Leslie Soriano/Rosa Lopez
Emergency Medical Technology - Paramedic
(AAS)...................................................Leslie Soriano/Rosa Lopez
Employment Skills Training (less than 1-yr cert) $\qquad$ .Co-op
Energy Management
Technician (AAS)............................Debby Ganser/Shirley Lukacs
Renewable Energy Technician
Option (AAS) $\qquad$ ..Debby Ganser/Shirley Lukacs
Resource Conservation
Management Option (AAS).............Debby Ganser/Shirley Lukacs
Exercise and Movement Science (AAS)
Fitness Specialist (2-yr cert)... $\qquad$ ..Leslie Soriano/Rosa Lopez Fitness Technician (1-yr cert) ................Leslie Soriano/Rosa Lopez
Fabrication/Welding Technology
(AAS and 1-yr.cert)..................
.....Carolyn Litty/Betty Svarverud
Welding Processes (1-yr cert).............Carolyn Litty/Betty Svarverud
FlightTechnology (AAS).......................Carolyn Litty/Betty Svarverud
Graphic Design (AAS and 2-yr cert)...................................Tim Blood
Health Records Technology (1-yr cert) ......Leslie Soriano/Rosa Lopez
Medical Coding (CPC)..........................Leslie Soriano/Rosa Lopez
Medical Transcriptionist (CPC) .............Leslie Soriano/Rosa Lopez
Hospitality Management (AAS) ...........Carolyn Litty/Betty Svarverud Food Service
Management (1-yr cert)..................Carolyn Litty/Betty Svarverud
Restaurant Ownership (CPC)..........Carolyn Litty/Betty Svarverud
Human Services (AAS) ........................Anthony Hampton/Cindy Lott Adult Development and Aging (CPC)
..Anthony Hampton/Cindy Lott

## Human Services:

Criminal Justice (AAS) ...................Anthony Hampton/Cindy Lott
Human Services: Juvenile
Corrections (1-yr cert).....................Anthony Hampton/Cindy Lott
Manufacturing Technology
(AAS and 2-yr cert) ..........................Carolyn Litty/Betty Svarverud
Computer Numerical Control Technician Option (AAS)
Massage Therapy (Certificate of Completion) .................Kathy Calise Medical Office Assistant (1-yr cert) ...........Leslie Soriano/Rosa Lopez Multimedia Design (AAS and 1-yr cert) $\qquad$ .Tim Blood Nursing (AAS).......................................Jessica Alvarado/Rosa Lopez Occupational Skills Training (1-yr cert) ......................................Co-op Physical Therapist Assistant (AAS)
(pending accreditation candidacy)......Leslie Soriano/Rosa Lopez Professional Truck Driver (CPC)............Carolyn Litty/Betty Svarverud Respiratory Care (AAS) ............................Leslie Soriano/Rosa Lopez Retail Management
(AAS and 1-yr cert)..........................Marva Solomon/Deb Hupcey
Retail Management (CPC)................Marva Solomon/Deb Hupcey
Water Conservation Technician (AAS).Debby Gasner/Shirley Lukacs

## Noncredit Programs

## Business Development Center

Farm Business Management
Non-Profit Management
Small Business Management

## Continuing Education

Massage Therapist
Nursing Assistant

## Definitions

Academic Requirements Review Committee The Academic Requirements Review Committee is commissioned to act in an advisory capacity to the Vice President for Academic and Student Affairs on the subject of academic rules and regulations for Lane Community College. Part of the responsibility of the council is to insure that a high academic standard is maintained. The Academic Requirements Review Committee will not accept petitions solely for the purpose of improving a Grade Point Average or other cosmetic reasons. Typically, the Academic Requirements Review Committee meets once during fall, winter and spring terms to review student petitions. However, meetings may be held as needed throughout the year. Examples of petitions that will be considered by the Academic Requirements Review Committee include:

- substitutions to requirements for AAOT, AS, or AGS degrees
- waiver of requirements for AAS degrees and certificates
- grade appeals will be referred to the Grade Appeal Committee for further investigation
Academic Requirements Review Committee petitions are available from Enrollment and Student Financial Services at lanecc.edu/es/forms $/ \mathrm{html}$.
Academic Standards and Probation A student who does not achieve satisfactory academic progress according to administrative regulations will be placed on academic probation. Students on academic probation will be encouraged to meet with a counselor or advisor. Students who are on academic dismissal will need to seek the help of a counselor or advisor for readmission to the college. Lane's Academic Standards and Alert System are described on page 57.
Attendance Instructors will announce the attendance policy for each class. Students entering late who may have missed this announcement should contact the instructor for the attendance rules. Students are required to be in attendance during the first week of class unless they have contacted the instructor and received permission for the absence. Otherwise, their place in the class may be given to another student who is waiting for space in the class, and the original student may not be permitted to continue in the class. Sitting in on classes without registering is a violation of college policy.
Students will be held accountable for attending each class in which they have enrolled. A grade or a withdrawal notation will be assigned for each class unless the student drops the course during the refund period.
Class Schedule The quarterly class schedule is available on the web at lanecc.edu about one week before Advance Registration begins. Advance Registration usually begins the fourth week of the preceding term except fall term, which occurs the preceding spring term.
The print version of the quarterly class schedule, Aspire Magazine, also is mailed to homes in the college district approximately one week before registration begins each term. Centers at Cottage Grove and Florence also mail schedules specific to those centers.

Transfer of Credit Student's transfer college courses are officially reviewed and accepted when the student applies for their Lane degree or certificate. Students are eligible to apply for their degree or certificate when they are within three terms of completing their program or course of study. Please see "transfer Limitations for Degrees and Certificates," page 39 for information on the transfer documents accepted at Lane Community College.
Students are encouraged to use the Transfer Equivalency Lookup tool (lanecc.edu/es/transferringcredits.html) in order to see how their prior college classes transfer to Lane. The evaluations provided by the Look-up tool are unofficial and not binding. Transfer equivalent information is updated regularly; some transfer partners will have more extensive listings than others. A review for a specific course may be requested by an e-mail to degreeevaluators@lanecc.edu. Any e-mail should include your name, student "L" number, name of the college, specific course number and title, and year course was completed. An official transcript must be on file for the request to be addressed. Students may request an instructional department review of any transfer course work. Please provide an unofficial copy of your transcript showing the grade received and a course syllabus from the academic year you completed the course to the instructional department.
Counselors and advisors are also available at Lane campus sites to assist students with planning their courses at Lane. All students are encouraged to refer to the college catalog for degree and certificate requirements and academic policies.
Cooperative Education Cooperative education provides students with the opportunity for on-the-job education while offering college credit for the experience.
Students enrolled in co-op receive help locating part-time and full-time jobs and internships, guidance about career expectations and demands, instruction in resume preparation and job interviewing skills, and financial benefit from paid positions. Unless prior approval is received from the Cooperative Education Division Chair, students must enroll in a minimum of three credits of co-op per term.

Course A course is any class or subject (e.g., English Composition WR 121, Biology BI 101) for which a student may register.
Course Numbers Course numbers at Lane help students identify which courses count toward degrees and financial aid.

- Credit courses have a course ID that consists of a prefix of letters that identify the subject area followed by digits that identify the level of the course. In the example of WR 121, WR identifies the subject of writing and the 100 -level number identifies it as a first year college level course. All credit courses, including pre-college courses, may count toward the minimum course load for financial aid, provided the student meets financial aid criteria.
- Pre-college credit courses have numbers below 100. Precollege courses may be required as prerequisites to college level courses or as part of a career and technical certificate or applied degree. Pre-college courses do not transfer.
- College level transfer credit courses count toward completion of a degree or certificate and are generally accepted for transfer by other institutions.
- Career and technical credit courses count toward Associate of Applied Science degrees or certificates. With some limits, career and technical courses may count as electives for transfer degrees. Career and technical courses are not automatically accepted for transfer by other institutions. Prefixes for career and technical courses are listed on page 41.
- Noncredit courses have numbers in the format XART 5785. The " $X$ " before the discipline in the prefix and the four-digit numbers identify the course as noncredit. Noncredit course offerings are listed and described each term in the class schedule. Under the state's definition, a noncredit course "does not offer college credit for completion and generally cannot be used as part of a credit based degree or certificate program. No assessment of learning generally takes place." Noncredit courses will not be counted for financial aid, and will not transfer to another institution.
Credits Credits are granted in recognition of work successfully completed in specific courses. The average load for a full-time student is $12-15$ credits per quarter. Part-time students carry fewer than 12 credits per quarter.

Degree/Certificate Evaluation Degree/certificate evaluation is the final evaluation done when the student is within $\mathbf{3}$ terms of completing a program. The student fills out the "Application for Diploma" form. See page 39 for additional information on application for degree/certificate. After the evaluation is complete, the results will be mailed to the student. There is a $\$ 5$ fee for duplicate diplomas or second copies of diploma parchment.
Oregon Transfer Module The Oregon Transfer Module and OTM designation will be posted in the student's transcript by request and upon completion. Students must submit the form "Application for Diploma" to verify completion of the requirements. There is a $\$ 20$ processing fee for the OTM.
Direct Transfer Evaluation Direct transfer evaluation is done by Counseling when a student is in transit to another institution. Unofficial copies of transcripts may be used. Students must take copies of transcripts to Counseling for their review of transfer course work.

Enrollment and Student Financial Services Building 1, First Floor, (541) 463-3100, (877) 520-5391, or TTY (541) 463-4722
Process online admissions, provides registration and billing assistance to all students, and responds to all questions and issues regarding financial aid. Hours are Monday, Tuesday and Thursday 8 a.m. -5 p.m., Wednesday 10 a.m. -5 p.m., Friday 8 a.m.-2 p.m.
ExpressLane Lane Community College students use web registration on ExpressLane. Using the web, students register for classes from any computer connected to the Internet. For information about ExpressLane, visit Lane's website at lanecc.edu.
Full-Time Student A full-time student is anyone carrying 12 or more credit hours per term at Lane. The Social Security Administration defines full-time as 12 or more credit hours per term. Veterans are required to carry 12 credit hours per term to receive full benefits. In most cases, students receiving scholarships are required to complete 12 credit hours per term.
Half-Time Student A half-time student is anyone carrying between six and 11 credits hours per term at Lane. It is
important to know that the definition of a half-time student varies with different institutions. Also, it is important to know that a majority of student loans require a student be registered for at least six credits or more per term.

Honor Lists Lane honors students who achieve high academic standards. Honor list requirements are:

- President's List: A student must complete a minimum of 12 graded (A,B,C,D,F) credit hours with a term GPA of 4.00.
- Vice President's List: A student must complete a minimum of 12 graded (A,B,C,D,F) hours with a term GPA of 3.55 through 3.99.
Students wishing to receive a letter reflecting this honor should make request to Student Records, Enrollment and Student Financial Services by calling (541) 463-3100.
Hybrid A course combining traditional classroom activities with online learning so that time spent in the classroom is reduced but not eliminated. Hybrid courses have traditional class sessions, but some classroom hours are replaced by online interactions, assignments and projects. The ratio of classroom activities and online interactions in hybrid courses may vary, but the expectation is that each credit will require approximately 33 hours of student involvement during the quarter, including class time, homework, research projects, studying for exams, online work in hybrid courses, or other out-of-class activities. Hybrid sections of a course are coded with hyb in the term schedule and technical requirements for class participation are clearly explained in notes in the schedule.
"L" Number (User ID) Lane provides all students with a computer generated "user ID" for ExpressLane. 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 ExpressLane, including registration, account payments, schedules, grades, and financial aid information. Refer to each term's class schedule for information about obtaining an "L" number.
Program A program is state approved curriculum arranged to provide career and technical training leading toward an Associate of Applied Science degree or certificate of completion. The courses required for each program are listed under Programs in this catalog.
Student Grades Students access term grades through ExpressLane. 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 ExpressLane for advising purposes. Students can request an official transcript through ExpressLane for a $\$ 5$ transcript fee 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 ExpressLane. The deadline to make schedule changes to full-term classes (adds/drops, pass/nopass, audit options) is midnight Friday of the eighth week of the term. A "full term" is 11 to 12 weeks. Exceptions to this policy are classes that begin and end at times other than the first and last day of the term. Contact Enrollment and Student Financial Services for deadline information for classes shorter than 11 weeks. Students who drop classes after the first week of the term (refund period) will have a withdrawal notation recorded for the class.
Students registered in variable credit courses may add or drop credits through midnight Friday of the last week of classes (before finals week begins).
Course grade options for students after the eight-week deadline are: 1) the grade earned, 2) "NC" (no credit), or 3) "I" Incomplete with instructor approval.
Dropping Classes When a student does not attend classes, it is the student's responsibility to drop the classes using ExpressLane. To drop from classes, use ExpressLane by midnight Friday of the eighth week of a full-term class.

Administrative Withdrawal Students may be administratively withdrawn for nonattendance or failure to meet prerequisites. Instructors have the right to administratively withdraw/drop students who do not attend at least 50 percent of the class meetings the first week of the term. This period coincides with the refund period. Do not assume that an instructor will administratively drop you from your class. Students are still responsible for dropping classes they do not plan to attend by using ExpressLane. 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 ExpressLane. 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 ExpressLane 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 ExpressLane, financial aid students will be able to use their "L" number and PIN.

## Disclosure Statement

Required for use in collecting social security numbers See OAR 581-41-460(2)
Department of Community Colleges and Workforce Development Revised, January 2001
Providing your social security number is voluntary. If you provide it, the college will use your social security number for keeping records, doing research, reporting, extending credit, and collecting debts. The college will not use your number to make any decision directly affecting you or any other person. Your social security number will not be given to the general public. If you choose not to provide your social security number, you will not be denied any rights as a student. Please refer to the Disclosure Statement listed under the social security heading in your class schedule which describes how your number will be used. Providing your social security number means that you consent to the use of your number in the manner described.

On the back of the same form, or attached to it, or in the schedule of classes, the following statement shall appear:
OAR 589-004-0400 authorizes Lane Community College to ask you to provide your social security number. The number will be used by the college for reporting, research and record keeping. Your number also will be provided by the college to the Oregon Community College Unified Reporting System (OCCURS), which is a group made up of all community colleges in Oregon, the State Department of Community Colleges and Workforce Development, and the Oregon Community College Association. OCCURS gathers information about students and programs to meet state and federal reporting requirements. It also helps colleges plan, research and develop programs. This information helps the college support the progress of students and their success in the workplace and other education programs. OCCURS and the college may provide your social security number to the following agencies or match it with records from the following systems:

- state and private universities, colleges and vocational schools, to find out how many community college students go on with their education and to find out whether community college courses are a good basis for further education
- Oregon Employment Department, which gathers information, including employment and earnings, to help state and local agencies plan education and training services to help Oregon citizens get the best jobs available
- Oregon Department of Education, to provide reports to local, state and federal governments used to learn about education, training and job market trends for planning, research and program improvement
- Oregon Department of Revenue and Collection agencies only for purposes of processing debts and only if credit is extended to the student by the college

State and federal law protects the privacy of student records. Social security numbers will be used for the purposes listed above.

## Student Records/Enrollment and Student Financial Services

Student Records maintains and processes academic records for Lane. This includes but is not limited to online applications for admission, transfer institution transcripts, course substitution forms, grade change forms, student identification documentation, evaluations, and degree/certificate applications. Academic Requirements Review Committee petitions and Progress Review petitions are processed through Student Records 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 ExpressLane 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 Expresslane. 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
- Instructors may not list your name on distributed class lists or call your name out loud for attendance
- 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 Expresslane 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 ExpressLane at lanecc.edu, or through the National Student clearinghouse at studentclearinghouse.org. The fee is $\$ 5$ per transcript through Expresslane 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 ExpressLane, 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 institutions and international institutions recognized by their country's Ministry of Education or other government body will be considered by Student Records, with possible assistance of the department head or coordinator of the program. If the course work is not obviously or directly comparable, a course substitution form from the instructional department is required. 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 may order an unofficial copy for their use.

Courses from other schools and colleges are never part of a student's Lane Community College transcript. Transfer institutions may be noted on the Lane transcript. Such records are not required for admission to Lane, but may be required for financial aid, veterans' reporting, admission to a special program, or meeting a course prerequisite.
Grades At the end of each term, grades are recorded and made available to students using ExpressLane. Unofficial advising transcripts also may be printed from ExpressLane.

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 | Exam or CEU By Exam |

Please Note: @ Credit by Assessment and ~ Credit by Exam are limited to 25 percent of a degree or certificate. Students may do more than 25 percent, but only 25 percent may be used toward requirements.
Plus (+) and Minus ( - ) grades Issuing a " + " or "-" is at the instructor's discretion. Students with questions regarding an instructor's grading policy, must contact the instructor.

NC (No Credit) Issuing a "NC" is at the instructor's discretion when the instructor believes the student has not participated enough in the class to earn a grade. It is not meant to and should not be used to replace an "F" grade or an "I."

Academic Standards and Alert System The college believes it has an obligation and a responsibility to help students meet their educational goals. To meet this responsibility, the college will provide assistance to students who, for whatever reason, fail to meet the academic standards necessary to meet their educational goals.

Academic Standards Academic standards will be determined based on the total credits you have earned. As the number of credits earned increases, the cumulative GPA and percent of credits completed increases as well, according to the charge below:

| Cumulative <br> Credit Hours Earned | Cumulative <br> GPA | Percent of <br> Credits |
| :---: | :---: | :---: |
| $0-36$ | 1.70 | $50 \%$ |
| $37-100+$ | 2.00 | $50 \%$ |

In addition to the cumulative grade point average, students must complete 50 percent of their enrolled credits as of the eighth week.

Following is the resulting action for each consecutive term in which a student fails to meet academic standards:

- A student who fails to meet the academic standards will receive an Academic Warning letter. That letter will provide information covering the services of the college that might be helpful.
- A student who fails to meet the academic standards a second consecutive term will be placed on Academic Probation 1, and a letter will be sent encouraging a counselor/advisor conference.
- A student who fails to meet the academic standards a third consecutive term will be placed on Academic Probation 2, and again a letter will be sent encouraging a counselor/advisor conference.
- A student who fails to meet the academic standards a fourth consecutive term will be dismissed from college credit classes and programs for one calendar year.
Petitions to the Academic Progress Review Committee The student is provided the opportunity to petition the Academic Progress Review Committee for reinstatement into the college the next term following the dismissal if there is evidence that extenuating circumstances contributed to unacceptable academic progress. The student may be allowed to remain in class(es). Petitions are available from Enrollment and Student Financial Services at lanecc.edu/es/forms/html and must be turned in by the first Thursday of the following term.
Removal of Probation A student who is placed on probation can be removed by exceeding the cumulative grade point average standard. Once removed from probation, students who do not meet the academic standards start again at the warning step.
Pass/No Pass When a P/NP option has been selected, the instructor still grades on the regular ABCDF system. If the instructor records an $A+$ or $A$, the student will receive the $A+$ or A grade and it will be calculated in the Grade Point Average (GPA). If the grade is $\mathrm{A}-\mathrm{B}+, \mathrm{B}, \mathrm{B}-$ or $\mathrm{C}+, \mathrm{C}, \mathrm{C}-$, the student will receive a grade of P . If the grade is $\mathrm{D}+, \mathrm{D}, \mathrm{D}$ - 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 ExpressLane by the end of the eighth week of the term for full-term classes. Additional 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.

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 $\mathrm{B}, \mathrm{B}-\mathrm{C}+, \mathrm{C}, \mathrm{C}-, \mathrm{D}+, \mathrm{D}, \mathrm{D}-$ or F and the class has been repeated at Lane. A course can be retaken only once for this purpose. If a course is retaken more than once, only the oldest course credits will be removed from the grade point average under this policy. The repeated course credits must all be taken in one term at Lane, be taken for a letter grade, and must be equal to or greater than the number of credits completed in the original course.

Upon completion of a course, a student can exercise this option by filling out a Petition to Absolve Credit from the Cumulative Grade Point Average form. The form is available at lanecc.edu/forms/html. The Student Records Office will mark the student's record, noting the repeated course, and remove the credits and grade points of the original course from the cumulative grade point average. The original course and grade will remain on the student's transcript. This cannot be reversed once it is applied to the student's record.

## Academic Renewal Policy

Academic Renewal Academic renewal is an opportunity for students whose initial effort at Lane resulted in poor grades. After an absence of at least four years, a student who maintains a 2.5 or higher G.P.A. may request that prior grade records be removed from the calculation of the cumulative grade point
average. This policy applies only to Lane transcripts and is on a one-time only basis. See the criteria and procedures listed below.
To be eligible for academic renewal, a student must:

- have been absent from Lane for four or more years.
- have completed 24 credits with a GPA of 2.5 upon returning to Lane.
- have completed the academic renewal application.
- not have been granted academic renewal in the past.

Application of the academic renewal policy would result in the following:

- All course and grade information will remain on the transcript along with a notation about being granted academic renewal.
- All applicable course work including courses that have been excluded from the GPA will be used to meet graduation requirements if course work meets current degree/certificate standards.
- None of the excluded grades will be calculated in the GPA.

The Academic Renewal cannot be reversed once applied to the student's record.
Note: Many institutions will not recognize the Academic Renewal process when calculating a GPA for admission purposes.
Grade Point Average (GPA): Computation included in GPA computation are grades of $\mathrm{A}+\mathrm{A}, \mathrm{A}-, \mathrm{B}+, \mathrm{B}, \mathrm{B}-, \mathrm{C}+, \mathrm{C}, \mathrm{C}-$, $\mathrm{D}+, \mathrm{D}, \mathrm{D}-$, and F . Grades of P are included in earned credit, but not in GPA credit. I, NC, Y, U, *, EN, and W are considered administrative marks rather than grades and have no effect on a student's earned credit or GPA credit. The grades included in the computation have the following weights:
A $+=4.30$
$B+=3.30$
C+ $=2.30$
D+ $=1.30$
A $=4.00$
B $=3.00$
C $=2.00$
D $=1.00$
$\begin{array}{llll}\text { A- }=3.70 & \text { B- }=2.70 & \text { C- }=1.70 & \text { D- }\end{array}=0.70$

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 | P POIN | 19.60 |

$19.60 \div 6=3.264$ 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.

Credit Hour Credit granted at Lane is in terms of quarter hours, since Lane is on a quarter-system calendar. Three quarter hours are equal to two semester hours. The average amount of credits for a full-time student is 12 to 15 per term.

One credit hour equates to approximately thirty hours of student involvement over the quarter. For lecture classes, this means ten hours of instruction and twenty hours of preparation on the student's part. For lab classes, thirty hours in the lab are required per credit.

Classroom Hours There are 12 classroom hours per lecture (credit) hour, 24 classroom hours per lecture/lab (credit) hour and 36 classroom hours per lab (credit) hour.

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, such as business colleges, art schools, beauty colleges, and so on may be reviewed using the Credit-by-Assessment process. Applications for Credit by Assessment are available in online at lanecc.edu/es/. The student may be asked to submit certificates of completion, school records or other documentation. The student will be notified of the credit granted and a record kept in his or her file. A veteran student will be granted 3 credits of PE (either required or 3 cr. in open electives) by providing the college with a copy of a DD214 with an Honorable Discharge.
Graduation 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 limitations.
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 six to ten weeks. Students applying for degrees or certificates and completing their programs fall or winter terms will receive their degrees earlier in the year.
To be considered a Lane graduate, students must complete all program requirements. See page $38-39$ for more information.

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.

## Student Policies and Complaint Procedures

Lane Community College policies and procedures are subject to change without prior notice.

## Board Policies Directly Affecting Lane Students

Treatment of Learners-A. 020
With respect to interactions with learners, the president shall assure that procedures and decisions are safe, respectful and confidential.
Accordingly, the president shall assure that:

1. The institution represents itself accurately and consistently to prospective students through its catalogs, publications and official statements.
2. Admissions information forms avoid eliciting information for which there is no clear necessity.
3. Methods of collecting, reviewing, transmitting, or storing information about learners will be protected against improper access in compliance with federal and state regulations.
4. Facilities provide a reasonable level of privacy, both visual and aural.
5. The college environment is welcoming and accepting to all learners.
6. Learners have a clear understanding of what may be expected from the services offered.
7. Learners are informed of their rights and responsibilities and are provided a process to address grievances.
8. There is adequate provision for the safety and security of learners.

## Harassment Policy-D. 020

Lane has a zero tolerance policy regarding all forms of harassment. Any proven harassment will result in immediate and appropriate action to stop the harassment and prevent its recurrence, including employee discipline consistent with collective bargaining agreements, or student sanctions. Remedial action will be designed to stop the harassing behavior. Any remedial action will be in keeping with the educational mission of the college. Whether or not the alleged harassing behavior is sufficiently severe or pervasive to be judged a violation of this policy, the college may take action to address a complainant's concerns and to ensure that Lane, as a workplace and as an academic institution, maintains a respectful environment. All forms of harassment, including student- tostudent 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.

## Harrassment Based on Race/Ethnicity or National Origin

Harassment based on race, ethnicity or national origin is defined as unwelcome verbal, written or physical conduct based on a person's actual or perceived race, ethnicity or national origin that unreasonably interferes with an individual's work or academic performance, adversely affects the targeted individual's or others' work or learning opportunities, or creates an intimidating, hostile or offensive environment.

## Possession of Firearms-D. 030

No person, including students, employees, college patrons or 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 Oregon or federal law.

## Gambling-D. 040

Illegal gambling of any form, whether played for money, check or any item or service representative of value, is prohibited on the Lane Community College campus or facilities under its direction and control.

## Use of Intoxicants and Controlled Substances-D. 050

No person may bring onto college property or into any collegeowned 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/cops/foodalc.htm); or
d. under no circumstances shall alcohol be served at college-sponsored activities to underage minors as defined by state law.
2. With appropriate documentation, medical marijuana, prescription opiates, or other psychoactive medications, may be used as legally prescribed by a licensed practitioner. However, according to statute, marijuana may not be ingested on campus even with a medical marijuana card.
3. Glue and thinners may be used in class-related lab environments and in facilities construction and maintenance.

## Equality of Opportunity in Admissions-D. 070

Anyone who is at least 18 years of age for credit classes and at least 16 years of age for continuing education classes may enroll at Lane Community College. Under no circumstances shall an applicant who is otherwise qualified be denied admission or given a preference for admission to the college based on an individual's race, color, national origin, sex, age, marital status, familial relationship, sexual orientation, gender identity, pregnancy, disability, religion, expunged juvenile record, or veteran's status. Also, see general Equal Opportunity statement on the inside back cover of this catalog.

## Tuition-D. 110

In order to maintain a constant tuition rate relative to inflation each December, the board will adjust the per credit tuition rate to reflect changes in an appropriate index for two-year public colleges since the last tuition adjustment. The rate will be rounded to the nearest half-dollar and become effective the following academic year (summer term).
Periodically and as needed, the board will review Lane's tuition rates to ensure: a) that tuition revenues are appropriate for the needs of the district and, b) that Lane's tuition is comparable with other Oregon community colleges that are similar to Lane in terms of student FTE and instructional programs.

## Student Complaint Procedures and Accommodations

Lane Community College is committed to providing a respectful working and learning environment that is free from discrimination, harassment and retaliation. Lane Community College is committed to equal opportunity, affirmative action, cultural diversity and compliance with the Americans with

Disabilities Act. The college prohibits discrimination in admissions, employment and access to college programs, activities and services. Sexual harassment and other conduct which creates a hostile, intimidating or offensive environment is prohibited by the college.
For assistance, support or help in resolving problems or information about complaint procedures, please contact the following people:

## Harassment

- Jill Bradley, Women's Center, Bldg. 1/Rm. 202, (541) 463-5353
- Barbara Delansky, Student Life and Leadership, Bldg. 1/ Rm. 206, (541) 463-5337
- Mark Harris, Counseling, Bldg. 1/Rm. 226, (541) 463-5178
- Jim Garcia*, Multicultural Center, Bldg. 1/Rm. 201, (541) 463-5144
- Jerry deLeon*, Counseling, Bldg. 1/Rm. 103A, (541) 463-5870 * bilingual in Spanish


## Employment Discrimination

- Dennis Carr, Human Resources, Bldg. 3/Rm. 114, (541) 463-5585


## Disability Issues

- Student disability accommodations, assistance and disability related problems: Lynn Lodge, Disability Resources, Building 1, Room 218, (541) 463-5059,TDD (541) 463-3079
- Problems with access to Lane's facilities: Dave Willis, Director, Facilities Management and Planning, Building 7, Room 204B, (541) 463-5566
- Employee workplace accommodations: Mary Glenn, Human Resources, Building 3, Room 114, (541) 463-5583
- Disability related complaints/Section 504 Coordinators: Nancy Hart, Disability Resources, Building 1, Room 218, (541) 463-3010,TDD (541) 463-3079 (student and program issues); Dennis Carr, Human Resources, Building 3, Room 114, (541) 463-5585 (staff and employment issues)
- Student rights, responsibilities and conduct: Kate Barry, 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, Psilocybin - hallucinations; panic; tolerance; "flashbacks"; possible birth defects in user's children. (B.) Phencyclidine ("PCP," "Angel Dust") - depression; irrational behavior; confusion; convulsions; hallucinations; coma; death.
Narcotics - Lowers pain perception. (A.) Heroin. (B.) Morphine. (C.) Codeine. (D.) Opium - lethargy; apathy; loss of judgment and self-control; tolerance; dependence; convulsions; coma; death.
Deliriants - Mental confusion. (A.) Aerosol products (B.) Lighter Fluid (C.) Paint Thinner and other Inhalants - damage to brain, lungs; convulsions; death.
Alcohol - A sedative drug - tolerance; dependence; depression; coma; death. Alcohol abuse is linked to cancer, heart and liver damage. Fetal alcohol syndrome.

## School Policy

For Student Code of Conduct, including drug and alcohol violations and sanctions, see code above.

## State Laws

The trend in the State of Oregon is toward stiffer drug penalties. The following describes the penalties for POSSESSION of key drugs:
Schedule I - Class B Felony (heroin, LSD, marijuana, others) Max. prison time is 10 years. Max. fine is $\$ 100,000$.
Schedule II - Class C Felony (amphetamine, cocaine, morphine) - Max. prison time is 5 years. Max. fine is $\$ 100,000$.
Schedule III - Class A Misdemeanor (other stimulants, some depressants) - Max. prison time is 1 year. Max. fine is $\$ 2,500$.
Schedule IV - Class C Misdemeanor (valium-type tranquilizers, others) - Max. prison time is 30 days. Max. fine is $\$ 500$.
Schedule V - Violation (dilute mixtures, compounds with small amounts of controlled drugs) - No max. prison time. Max. fine is $\$ 1,000$.
Delivery of less than 5 grams or possession of less than one ounce of Marijuana is a violation. Oregon HB 2479 established mandatory evaluation, education and treatment services for those under 18 years old. If services are successfully completed, the charge will be dropped. Oregon also has strong new laws allowing cars, boats, etc., that transport illegal drugs to be seized and forfeited.
Alcohol is an illegal drug for those under 21 years of age. For drivers under 18, ANY detectable amount of alcohol (above . 00 BAC ) is grounds for losing their license until they are 18.
There are many more laws pertaining to alcohol and other drugs. This is a sample to demonstrate that the penalties for illegal drug involvement are real, and criminal conviction may bar a student from his or her chosen career path.

## Where to Get Help

For help or more information, contact the Substance Abuse Prevention Office, Building 1, Room 226, (541) 463-5178. Counselors are available to any student who may be experiencing alcohol/drug problems. Contact or referral can also be made through Counseling or the Health Clinic. Besides offering support, assessment and referral, these counselors have information on community treatment programs, support groups, private counselors as well as information regarding Lane's oncampus 12 -step meetings (A.A., N.A., ALANON, 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 obtain approval from their high school principal or if they have already received their high school diploma. Community education classes generally are open to anyone 16 or older.
Under no circumstances will an applicant be denied admission to the College because of age; sex; race; color; religion; physical or mental disability; national origin; marital status; sexual orientation; gender identity; pregnancy; veteran's status; familial relationship; expunged juvenile record; association with anyone of a particular race, color, sex, national origin; nor will preference for admission be based on economic status.

## A. Financial Aid

A student applying for or receiving financial aid has the right to know:

- The financial aid assistance available
- The procedures and deadlines for applying
- The cost of attendance
- The criteria used in awarding aid and how financial need is determined
- The terms and conditions of any aid accepted
- How and when aid will be disbursed
- The College's refund policy
- The repayment consequences of withdrawing from the College
- How satisfactory academic progress is evaluated and what happens if it is not maintained
- How to appeal decisions concerning aid

A student applying for or receiving financial aid has the responsibility to:

- Complete applications accurately and on time
- Read and follow instructions when submitting information
- Read and retain copies of all signed forms
- Choose an academic program and understand the requirements for such program
- Comply with the terms of any Federal Work Study job accepted
- Maintain satisfactory academic progress

For more information about financial aid, go to lanecc.edu/finaid

## B. Admissions

The College will be open within budgetary limitations to all applicants who are qualified according to its admission requirements. Students who enroll for high school or alternative school credit must comply with the Oregon Compulsory School Attendance Laws. While previous academic status at other institutions will not constitute criteria for denial of admission, not every program is open to every student. Priority to enter classes of limited enrollment will be given to indistrict students who have finished high school and/or are at least 18 years of age. However, the College will assist each student to develop a program of study which meets his or her individual needs and is consistent with feasible College operation. The College is committed to equality of opportunity, affirmation action, and nondiscrimination in admissions. No applicant shall be denied admission to the college because of protected class status.

## C. Financial Responsibility

It is the student's responsibility to pay monies owed the college in a timely manner. The College's policies regarding payment of tuition and fees are described in the term schedule as well as the College catalog.

## II. Evaluation Criteria

## A. Academic

Lane Community College instructors will encourage free discussion, inquiry and expression where relevant and appropriate to the educational objectives of the course. It is the instructor's responsibility to publish educational objectives and to make available to each class the criteria to be used in evaluating student success in that class. It is the responsibility of the students to become aware of these objectives and criteria as published and set forth by the College. Student opinions and behavior outside of class will not be the basis for determining class grades unless such evaluation is specifically related to course requirements.

## B. Protection of Freedom of Expression

Students are responsible for learning the substance of any course of study for which they are enrolled. However, students are free to state any reasoned exception to data or views offered in any course of study and to reserve judgment about matters of opinion.

## C. Protection Against Improper Academic Evaluation

Students have protection through orderly procedures against unfair academic evaluation. Students' grades will be based solely on academic achievement, unless otherwise specified by the professor in writing at the first class meeting. Complaints about class requirements and grades must first go through the instructor and the department division dean. Students may appeal grades received by following the Grade Appeals process. Grade appeals are filed with the Academic Requirements Review Committee. Contact Enrollment and Student Financial Services, Building 1, (541) 463-3100.

## D. Protection Against Improper Disclosure

Information which staff acquire in the course of their work as instructors, advisors and counselors about student views, beliefs and political associations should be considered confidential. Protection of the student against improper disclosure is a serious staff obligation.

## E. Utilization of Special Aids for Study

Disability Resources is committed to providing opportunities to all students with disabilities in order for them to have meaningful access to College programs and services in a barrierfree environment.

Lane's Disability Resources offers advocates for the removal of attitudinal and architectural barriers, and provides in-class accommodations, advising, resource/referral information, and adaptive equipment. These services are available to students with disabilities who are attending credit courses, Adult High School, Adult Basic Education, and Continuing Education classes on any of the LCC campuses. Students must request services at least two weeks in advance.

## F. Academic Dishonesty

Students are expected to conduct their academic affairs in a forthright and honest manner. In the event that students are suspected of classroom cheating, plagiarism or otherwise misrepresenting their work, they will be subject to due process as outlined in the Student Code of Conduct.

## G. Standards of Academic Progress

Lane Community College has established standards for academic progress which are applicable to all students. Failure to maintain satisfactory academic progress will result in loss of financial aid and warning, probation, suspension, or dismissal from the College.
H. Complaint Procedures See page 59.

## 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 Office of Student Activities 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, offcampus publications, and the distribution of these publications are protected on the main campus and outreach centers. Distribution may be restricted only if it can be shown that such activity would cause a disturbance or disruption of normal College activities.
Materials to be posted require authorization for such distribution from the Associate Dean, Student Life and Leadership Development. Once authorized, distribution will take place in the prescribed locations on campus, should not disrupt the normal operation of the institution, and should not cause a litter problem.
In case a student, employee, or organization is denied the right to distribute materials on campus, the decision is subject to appeal. All appeals or complaints are subject to the College complaint procedure.

The College reserves the right to designate specific areas for the distribution of printed materials. A listing of these areas is maintained by the Associate Dean, Student Life and Leadership Development on the main campus and by the designated building administrator at each of the following outreach centers: Downtown Center, LCC at Florence and LCC at Cottage Grove.

## G. Visiting Speakers

The College has the responsibility to develop informed, critical, and objective thinking; and such thinking can best be encouraged in an atmosphere assuring a free interchange of ideas. Therefore, Lane Community College students may invite to the campus and hear any person(s) of their choosing in compliance with administrative regulations governing scheduling, publicity, and management of campus activities.
The education of students is not limited to classroom activities.

Students have the right to hear a variety of outside speakers. The Student Activities Office and ASLCC are the primary program sources for outside speakers. Individual students or student organizations may request that ASLCC sponsor speakers or may contact Student Activities about other possibilities. All outside speakers must be scheduled through the Student Activities Office to insure that there is proper scheduling of facilities and other preparations for the event and that the event is conducted in an orderly manner appropriate to the academic community. Institutional control of campus facilities will not be used to censor activities. Sponsorship of guest speakers may be withheld if there are reasonable concerns that the controversial nature of the speaker or content of the speech would lead to disruptions on campus. It is the responsibility of the students sponsoring the event to make it clear to the campus community and the local community that all views expressed are not necessarily those of the students, staff or administration of Lane Community College.
H. Grievance Procedures for Alleged Discrimination or Harassment

Students who feel they have been discriminated against or treated in some unfair manner have access to formal and informal grievance procedures. See specific procedures outlined in the complete student code: General Student Complaint Process. Contact Office of Academic and Student Affairs, (541) 463-5732.

## V. Discipline

The Student Code of Conduct applies to anyone accepted for admission, registered for one or more classes, and/or enrolled in any special program approved by Lane Community College.

Students are required to provide identification such as a photo identification card, current registration receipt or class schedule on demand to campus safety personnel, faculty or administrators.

Students deserve fair and equal treatment, so instructors and administrators must employ discretion when initiating disciplinary actions and procedures. Action is warranted for protection of individuals, property and a positive learning climate.
Faculty members may dismiss a student from the class for the day for in-class behavior they judge to be disruptive or inappropriate. Such actions include, but are not limited to: racial, sexual or religious slurs; verbal or physical interruption; offensive language; chewing tobacco or spitting; smoking; and littering or creating unsanitary conditions.
If a student is dismissed for inappropriate behavior, faculty must submit a written report to their Division Dean and to the Executive Dean, Student Affairs detailing the student's name, date and time of class, and the improper behavior.
Students may be dismissed only for the day of the misbehavior, but may be dismissed from subsequent classes for a new or repeated behavioral offense. Dismissal as a result of faculty action is counted toward the maximum number of absences allowed in the class.

Campus Public Safety may be called to assist in any disciplinary situation. The assisting security officer must file a report on all
situation involvement with the Office of Academic and Student Affairs.

Instructors, administrators and classified staff are authorized to employ physical restraint when immediate restraint will prevent injury to the student or others. Physical restraint is not considered a form of physical discipline. The instructor, administrator or classified staff should send a reliable person to the nearest telephone to request emergency assistance from campus safety.

## VI. Off-Campus Students

Students enrolled at Lane Community College satellite campuses (Cottage Grove, Florence, Downtown Center, and community outreach sites) will enjoy the same rights and responsibilities as the students at the main campus and must comply with the Student Code of Conduct and any additional rules for conduct which are specific to the site.

## Student Code of Conduct

The purpose of this Code of Conduct is to protect the individual rights of students and staff and to control those actions that go beyond the exercising of such rights.
The College recognizes its obligation to develop intellectual curiosity as well as social and cultural awareness. Further, Lane Community College responsibly provides for the safety and wellbeing of students and staff, property protection, record security, and other education-related services.
Through this Code of Conduct, Lane Community College describes conduct interfering with the responsibilities and obligations of the College. This document also outlines the penalties imposed for prohibited conduct and explains the procedural due process for alleged student violations and the protection of student rights.

Students charged with code violations are entitled to due process as described in this code and students may appeal certain penalties imposed for violations.

## Article I: Definitions

1. The term "College" means Lane Community College.
2. The term "student" includes all persons taking courses at the College, both full-time and part-time, pursuing credit or noncredit classes or enrolled in any special program approved by the college. Persons who are not officially enrolled for a particular term, but who have a continuing relationship with the College, are considered "students."
3. The term "faculty member" means any person hired by the College to conduct classroom activities.
4. The term "College official" includes any person employed by the College, performing administrative or professional responsibilities.
5. The term "judicial advisor" means a College official authorized by the Executive Dean, Student Affairs on a case-by-case basis to impose sanctions upon students found to have violated the Code of Conduct. The Executive Dean, Student Affairs or designee may serve as the judicial advisor or authorize a judicial advisor to serve simultaneously as a judicial advisor and sole member or one of the members of a judicial body. Nothing shall prevent the Executive Dean from authorizing the same judicial advisor to impose sanctions in all cases.
6. The term "member of the College community" includes any student, faculty member, College official, or any other person
employed by the College. A person's status in a particular situation shall be determined by a judicial advisor.
7. The term "College premises" includes all land, buildings, facilities, and other property in the possession of, or owned, used, or controlled by the College (including adjacent streets and sidewalks).
8. The term "organization" means any number of persons who have complied with the formal requirements for College recognition.
9. The term "judicial body" means any person or persons authorized by the judicial advisor to determine whether a student has violated the Code of Conduct and to recommend imposition of sanctions.
10. The term "appellate board" means any person or persons authorized by the Executive Dean, Student Affairs to consider an appeal from a judicial body's finding that a student has violated the Code of Conduct, or from sanctions imposed by the judicial advisor.
11. The term "shall" is used in the imperative sense.
12. The term "may" is used in the permissive sense.
13. The Executive Dean, Student Affairs is that person designated by the College President and Vice President to be responsible for the administration of the Code of Conduct.
14. The term "policy" is defined as the written regulations of the College as found in, but not limited to, the Code of Conduct, College board policies, the ASLCC Constitution and By-Laws, and the College Catalog.
15. The term "cheating" includes, but is not limited to: 1 ) use of any unauthorized assistance in taking quizzes, tests, or examinations; 2) dependence upon the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments; or 3) the acquisition, without permission, of a test or other academic material belonging to a member of the College faculty or staff.
16. The term "plagiarism" includes, but is not limited to, the use, by paraphrase or direct quotation, of the published or unpublished work of another person, without full and clear acknowledgment. It also includes the unacknowledged use of materials such as term papers or other academic materials prepared by a person other than the submitting student.

## Article II: Judicial Authority

1. The Executive Dean, Student Affairs or designee shall determine the composition of judicial bodies and appellate boards, determining which judicial body, judicial advisor and appellate board shall be authorized to hear each case.
2. The Executive Dean, Student Affairs or designee shall develop policies for the administration of the judicial program and the procedural rules for the conduct of hearings which are consistent with the provisions of the Lane Community College Student Code of Conduct.
3. Decisions made by a judicial body and/or judicial advisor shall be final, pending the normal appeal process.
4. A judicial body may be designated as an arbiter of disputes within the student community in cases which do not involve a violation of the Code of Conduct. All parties must agree to arbitration, and to be bound by the decision, with no right of appeal.

## Article III: Proscribed Conduct

## A. Jurisdiction of the College

Generally, College jurisdiction and discipline shall be limited to conduct which occurs on College premises and Collegesponsored activities which take place off-campus including placements and internships. This code applies to all students.

## B. Conduct - Rules and Regulations

Any student found to have committed the following misconduct is subject to the disciplinary sanctions outlined in Article IVB:

1. Acts of dishonesty, including but not limited to the following:
a. Cheating, plagiarism, or other forms of academic dishonesty.
b. Furnishing false information to any College official, faculty member or office.
c. Forgery, alteration or misuse of any College document, record or instrument of identification.
d. Tampering with the election of any College recognized student organization.
2. Disruption or obstruction of teaching, research, administration, other College activities, including publicservice functions on or off campus, or other authorized activities, when the act occurs on College premises.
3. Sexual assault, physical abuse, verbal abuse, threats, intimidation, harassment, coercion and/or other conduct which threatens or endangers the health or safety of any member of the College community.
4. Attempted or actual theft of and/or damage to property of the College or property of a member of the College community or other personal or public property.
5. Hazing, defined as an act which endangers the mental or physical health or safety of a student, or which destroys or removes public or private property, for the purpose of initiation, admission into, affiliation with, or as a condition of continued membership in, a group or organization.
6. Failure to comply with orders or directions of College officials or law enforcement officers acting in performance of their duties and/or failure to identify oneself to these persons when requested to do so.
7. Unauthorized possession, duplication or use of keys to any College premises or unauthorized entry to, or use of, College premises.
8. Violation of published College policies, rules or regulations.
9. Violation of federal, state, or local law on College premises, or at College sponsored and supervised activities including but not limited to:
a. Use, possession or distribution of narcotic or other controlled substances except as expressly permitted by law.
b. Illegal or unauthorized possession of firearms, explosives, other weapons,or dangerous chemicals on College premises.
10. Public intoxication, use, possession or distribution of alcoholic beverages except as expressly permitted by law and College regulations.
11. Participation in a campus demonstration which disrupts the normal operations of the College and infringes on the rights of other members of the College community; leading or inciting others to disrupt scheduled and/or normal activities within any campus building or area; intentional obstruction which unreasonably interferes with freedom of movement, either pedestrian or vehicular, on campus.
12. Obstruction of the free flow of pedestrian or vehicular traffic on College premises or at College sponsored or College supervised functions.
13. Conduct which is disorderly, lewd, or indecent; breach of peace; or aiding, abetting or procuring another person to breach the peace on College premises or at functions sponsored or participated in by the College.
14. Sexual discrimination in the form of sexual harassment is prohibited. Sexual harassment is defined as unwanted sexual advances; requests for sexual favors; and/or other verbal, written, visual, or physical sexual conduct that makes the terms or conditions of employment contingent on the acceptance of unwanted sexual advances, that negatively affects employment or educational opportunities, or that creates an intimidating, hostile, or offensive environment for one of the parties.
15. Theft, or other abuse of computer time, including but not limited to:
a. Unauthorized entry into a file to use, read, or change contents, or for any other purpose.
b. Unauthorized transfer of a file.
c. Unauthorized use of another individual's identification and password.
d. Use of computing facilities to interfere with the work of another student or College official.
e. Use of computing facilities to send obscene or abusive messages.
f. Use of computing facilities to interfere with normal operation of the College computing system.
16. Abuse of the judicial system, including but not limited to:
a. Failure to obey the summons of a judicial body or College official.
b. Falsification, distortion, or misrepresentation of information before a judicial body.
c. Disruption or interference with the orderly conduct of a judicial proceeding.
d. Knowingly initiating a judicial proceeding without cause (i.e., filing a false report).
e. Attempting to discourage an individual's proper participation in, or use of, the judicial system.
f. Attempting to influence the impartiality of a member of a judicial body prior to, and/or during, the course of a judicial proceeding.
g. Harassment (verbal or physical) and/or intimidation of a member of a judicial body prior to, during, or after the course of a judicial proceeding.
h. Failure to comply with the sanction(s) imposed under the Code of Conduct.
i. Influencing or attempting to influence another person to abuse the judicial system.

## C. Violation of Law and College Discipline

1. College disciplinary proceedings may be instituted against a student charged with violation of a law which is also a violation of this Code of Conduct. This would apply if both violations result from the same factual situation, without regard to pending civil litigation in court, or criminal arrest and prosecution. Proceedings under the Student Code of Conduct may be carried out prior to, simultaneously with, or following civil or criminal proceedings off campus.
2. When a student is charged by federal, state or local authorities with a violation of law, the College will not request, or agree, to special consideration for that individual because of his or her status as a student. If the alleged offense is also the subject of a proceeding before a judicial body under the Code of Conduct, the College may advise offcampus authorities of the existence of the Code of Conduct and of how such matters will be handled internally within the College community. The College will cooperate fully with law enforcement and other agencies in enforcement of criminal law on campus and in the conditions imposed by criminal courts for the rehabilitation of student violators. Individual students and staff members, acting in their personal capacities, remain free to interact with governmental representatives as they deem appropriate.

## Article IV: Judicial Policies

## A. Charges and Hearings

1. Any member of the College community may file charges against any student for misconduct. Students should deal with their concerns either through Campus Public Safety or by filing a student complaint. Staff should prepare charges in writing and direct them to the Executive Dean, Student Affairs and/or designee. Charges shall be submitted within 90 days after the incident.
2. The judicial advisor may conduct an investigation to determine the merit of the charges and/or if they can be disposed of administratively by mutual consent of the parties
involved on a basis acceptable to the judicial advisor (see Informal Report and Resolution Process). If the charges cannot be disposed of by mutual consent, the judicial advisor may later serve in the same manner as the judicial body or a member thereof (see Formal Complaint Process).
3. All charges shall be presented to the accused student in written form. A time of not less than five nor more than fifteen calendar days after the student notification shall be set for a hearing. Time limits for scheduling a hearing may be extended at the discretion of the judicial advisor.
4. Hearings shall be convened by the judicial advisor and conducted by a judicial body according to the following guidelines:
a. Hearings shall be conducted in private. Hearings will be chaired by the judicial advisor or his or her designee.
b. Admission of any person to the hearing shall be at the discretion of the judicial body and/or its judicial advisor.
c. In hearings involving more than one accused student, the chairperson of the judicial body, at his or her discretion, may permit separate hearings for each student.
d. The complainant and the accused have the right to be assisted by any advisor they choose, at their own expense. The advisor may be an attorney. The complainant and/or the accused is responsible for presenting his or her own case. Therefore, advisors are not permitted to speak or to participate directly in any hearing before a judicial body.
e. The complainant, the accused and the judicial body shall have the right of presenting witnesses, subject to the right of cross examination by the judicial body.
f. Pertinent records, exhibits and written statements may be accepted as evidence for consideration by a judicial body at the discretion of the chairperson.
g. All procedural questions are subject to the final decision of the judicial body chairperson.
h. After the hearing, the judicial body shall determine (by majority vote if the body consists of more than two people) whether the student has violated the code(s) of conduct as charged.
i. The judicial body's determination shall be made on the basis of whether it is more likely than not that the accused student violated the Code of Conduct.
j. The judicial body shall report its findings to the judicial advisor who will impose sanctions.
5. There shall be a single record of all hearings before a judicial body. The record shall be the property of the College.
6. Except in the case of a student charged with failing to obey the summons of a judicial body or College official, no student may be found to have violated the Code of Conduct solely because the student failed to appear before a judicial body. In all cases, the evidence in support of the charges shall be presented and considered.

## B. Sanctions

1. The following sanctions may be imposed by the judicial advisor upon any student, group or organization found to have violated the Code of Conduct.
a. Counseling, educational activities, and/or training - For violations involving substance abuse the student will be required to work with the Substance Abuse Prevention Coordinator.
b. Warning - A notice in writing to the student that the student is violating or has violated institutional regulations.
c. Probation - A written reprimand for violation of specified regulations. Probation is for a designated period of time and includes the probability of more severe disciplinary sanctions if the student is found to be violating any institutional regulation(s) during the probationary period.
d. Loss of Privileges - Denial of specified privileges for a designated period of time.
e. Fines - Fines may be imposed.
f. Restitution-Compensation for loss, damage or injury. This may take the form of appropriate service and/or monetary or material replacement.
g. Discretionary Sanctions - Work assignments, service to the College or other related discretionary assignments.
h. Deactivation - Loss of all privileges, including College recognition, for a specified period of time (applies to student groups or organizations).
i. College Suspension Separation of the student from the College for a definite period of time, after which the student is eligible to return. Conditions for re-admission may be specified.
j. College Expulsion - Permanent separation of the student from the College.
2. More than one of the sanctions listed above may be imposed for any single violation.
3. Disciplinary sanctions shall not be made part of the student's permanent academic record, but shall become part of the student's confidential record. Upon graduation, the student's confidential record may be expunged of disciplinary actions other than College suspension or expulsion, upon application to the Executive Dean, Student Affairs. Cases involving the imposition of sanctions other than College suspension or expulsion shall be expunged from the student's confidential record, consistent with the College's schedule of record disposition.
4. In each case in which a judicial body determines that a student has violated the Code of Conduct, the sanction(s) shall be determined by the judicial advisor. In cases in which persons other than, or in addition to, the judicial advisor have been authorized to serve as the judicial body, the recommendation of all members of the judicial body shall be considered by the judicial advisor in determining and imposing sanctions. The judicial advisor is not limited to sanctions recommended by members of the judicial body. Following the hearing, the judicial body and the judicial advisor shall advise the accused in writing of its determination and any sanction(s) imposed.

## C. Interim Suspension

In certain circumstances, the Executive Dean, Student Affairs or designee may impose a College suspension pending a hearing before a judicial body, or imposition of sanctions.

1. Interim suspension may be imposed only: a) to ensure the safety and wellbeing of members of the College community or the preservation of college property; b) to ensure the student's own physical or emotional safety and well-being; or c) if the student poses a threat of disruption to, or interference with, the normal operations of the College.
2. During interim suspension, students shall be denied access to the campus (including classes) and/or all other College activities or privileges for which the student might otherwise be eligible, as the Executive Dean, Student Affairs or designated judicial advisor determines appropriate.

## D. Appeals

1. A decision reached by a judicial body, or a sanction imposed by the judicial advisor, may be appealed by the accused student or complainant to an appellate board within five (5) school days of the decision. Such appeals shall be in writing and shall be delivered to the Executive Dean, Student Affairs or designee.
2. Appeals shall be limited to review of the record of the initial hearing and supporting documents, except as required to explain the basis of new evidence for any of the following:
a. To determine whether the original hearing was conducted fairly in light of the charges and evidence presented and in conformity with the prescribed procedures, giving the complaining party a reasonable opportunity to prepare and present evidence that the Code of Conduct was violated, and giving the accused student a reasonable opportunity to prepare and to present a rebuttal of those allegations.
b. To determine whether the decision reached regarding the accused student was based on substantial evidence; that is, whether the facts in the case were sufficient to establish the fact that a violation of the Code of Conduct had occurred.
c. To determine whether the sanction(s) imposed were appropriate for the violation of the Code' of Conduct which the student was found to have committed.
d. To consider new evidence sufficient to alter a decision or other relevant facts not brought out in the original hearing because such evidence and/or facts were not known to the person appealing at the time of original hearing.
3. The appellate board will submit a written report of its findings and recommendations to the Executive Dean, Student Affairs or designee within 20 working days. The appellate board's report may include both majority and dissenting opinions. The Executive Dean, Student Affairs or designee will make the final decision on the appeal and notify the accused student and/or complaint in writing within 10 working days. If the Executive Dean, Student Affairs was the judicial advisor in the original complaint, the appellate board's report will be submitted to the Vice President for Academic and Student Affairs for final decision.
4. In cases involving appeals by a student accused of violating the Code of Conduct, review of the sanction by an appellate board may not result in more sanction(s) for the accused student. Instead, following an appeal, the Executive Dean, Student Affairs may upon review of the case, reduce, but not increase, the sanctions imposed by the judicial advisor.
5. In cases involving appeals by persons other than the student accused of violating the Code of Conduct, the Executive Dean, Student Affairs may, upon review of the case, reduce or increase the sanctions imposed by the judicial advisor or remand the case to the original judicial body and judicial advisor.

## Article V: Interpretation and Revision

## A. Code Interpretation

Any question of interpretation regarding the Code of Conduct shall be referred to the Executive Dean, Student Affairs or designee for final determination.

## B. Code Revision

The Code of Conduct shall be reviewed every five years under the directions of the Executive Dean, Student Affairs.

## 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/cleryreport2007/htm or may be obtained in writing at the Public Safety office. At Lane, security and safety are collegewide efforts. With students, faculty and staff committed to prevention, crime can be minimized.
The Lane Community College Public Safety department provides direct services to the 30th Avenue campus and to the Downtown Center and Wildish Building. All other college centers - including Cottage Grove, Florence and the community learning centers - are served by their local law enforcement agencies, which report incidents at college sites to the college's Public Safety department.
Lane Community College Public Safety Officers are Private Security Professionals certified under Oregon Department of Public Safety Standards and Training. Campus Public Safety Officers utilize citizen's arrest powers under ORS 133.225 and are supported by the college in the enforcement of all college regulations and applicable federal, city and county laws and ordinances on college property. Officers are granted peace officer authority pertaining to traffic and parking enforcements under ORS 341.300. They maintain an atmosphere conducive to education, contribute to a safe campus environment, enforce parking and traffic regulations, conduct investigations of reported crimes, and make reports to local law enforcement agencies.

## Preventing Crimes

Education The majority of criminal incidents on campus result from leaving property unattended, lockers unlocked and valuable property visible in cars. Taking basic common-sense precautions will greatly reduce these crimes. The college Public Safety department provides speakers on crime prevention.
Firearms and Intoxicants No firearms, drugs or intoxicants are permitted on campus, except under very specific circumstances which are spelled out in detail in the Student Policies section.
Lighting and Landscaping College staff work constantly to maintain good lighting and to clear undergrowth to improve visual access on campus.

## Emergency Assistance

There is always a Public Safety Officer on campus. To contact Public Safety:
Red Telephones Use one of the 40 red telephones on main campus and at the Downtown Center and Wildish Building. These emergency phones automatically ring in the Public Safety department when the receiver is lifted.

Dial 5555 Dial or ask a staff member to dial 463-5555 for emergencies from other college phones to reach Public Safety.

Non-emergency Dial (541) 463-5558 for non-emergency calls.
After Hours From 5 p.m. to 8 a.m. Monday through Friday, on weekends and holidays, the college's emergency after-hours Junction City Police Department will answer. Give your name, location and phone number, and the service will contact the on-site officer to return your call and respond to your location.
Emergency Car Services Emergency car booster pack service is offered 24 hours a day. Call or visit Public Safety. Public Safety does not assist in vehicle entry, but will assist in contacting local locksmiths or other help.
Emergency Escorts If your safety is threatened, contact Public Safety and an officer will be dispatched.

## Reporting and Response

Anyone knowing of or suspecting a crime should promptly report it to Public Safety in Building 13, Room 107. When a suspect is apprehended, the suspect may be served an order to appear at a Student Conduct Code hearing, given into custody of a law enforcement agency or both. Public Safety Officers may facilitate contact between victim and local law enforcement agencies.

## Services

Counseling and the Women's Program Counseling provides limited services to crime victims and/or makes referrals to other resources in the community. The Women's Program provides services and referral to victims of sex and domestic violence offenses.

## 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/main/htm.
For more information about Lane's Public Safety Department, contact (541) 463-5558.

## Accounting

Offered by the Business Department
Two-Year Associate of Applied Science Degree, Accounting

## Career Pathway Certificate of Completion, Accounting

 ClerkCareer Pathway Certificate of Completion, Bookkeeper
Career Pathway Certificate of Completion, Payroll Clerk
Purpose To prepare students to enter the field of accounting. The program offers three directed elective sequences. The student can choose to prepare for employment in full-cycle bookkeeping, specialize in payroll accounting or prepare to transfer to a four-year institution. Upon successful completion of first year courses, students will be prepared for employment as an accounts receivable or payable clerk, and will be eligible for the Business Assistant One-Year Certificate of Completion.

Learning Outcomes The graduate of the Associate of Applied Science program will be able to:

- understand accounting as the "language of business."
- use computerized and manual systems to record data and prepare accounting statements and reports.
- organize and manage the daily business functions of an organization.
- use research and analytical skills to support the activities of the organization.
- apply critical thinking and analytical skills in decision making and problem solving.
- formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them.
- apply accounting theory to analyze accounting information.
- anticipate and actively explore innovative solutions to technological and organizational challenges.
- use software including word processing, spreadsheets, databases, and Web tools to input, manage, and interpret information to meet organizational needs.
- provide basic training and technical support for users of office equipment and software systems.
- create professional, accurate documents.
- make effective presentations to internal and external audiences.
- work independently within diverse business environments, apply individual strengths and critical thinking to collaborative efforts.
- engage customers and co-workers in a purposeful manner listening to and accurately interpreting their responses within diverse cultural contexts.
- perform on the job in ways that reflect professional ethics, legal standards, and organizational expectations.

Employment Trends For bookkeeping and accounting clerks, the state of Oregon project 982 annual openings, with approximately 86 in Lane County, including openings resulting from growth and the need to replace those who retire or transfer to other occupations. Employers increasingly seek
applicants with proficiency in accounting software or expertise in specialized areas such as payroll or tax accounting. Because many businesses may require working on teams with others from different backgrounds, communicating accounting and financial information clearly and concisely is essential.

Wages Statewide wages for bookkeeping and accounting clerks average $\$ 16.26$ hourly and $\$ 33,815$ annually plus benefits. Lane county wages average $\$ 15.15$ hourly and $\$ 31,524$ annually plus benefits.

## Costs in Addition to Tuition (estimate)*

Books and fees $\qquad$ \$2,550
Some Business courses have a one-time fee of $\$ 5$ per term to help support the Student Resource Center. See the Business department for details.

* Subject to change without notice.

Prerequisites The entering student must have the ability to type by touch, have a basic knowledge of the Windows operating system, and place at least into WR 121 and MTH 060, or take classes to reach these levels before enrolling in program courses. Before enrolling in BA 214 Business Communications, students must pass a Language Skills and Proofreading test in the Testing office or pass BT 180 Business Proofreading and Editing. A computer is highly recommended for all Business Department majors; contact the department or advisor for details.

Cooperative Education (Co-op) Co-op offers students graded college credit for on-the-job work experience related to educational and career goals. Through Co-op, students connect theory and practice, develop skills, expand career knowledge, and make contacts for future employment. Three credits of Coop are required for the AAS degree. Additional Co-op credit is strongly recommended as an elective. Contact Jamie Kelsch, Accounting Co-op Coordinator, Bldg. 2, Rm. 143, (541) 463 5540.

Program Advisor Deb Hupcey, Bldg. 2, Rm. 135, (541) 463. 5635, hupceyd@lanecc.edu

Program Counselor Marva Solomon, Bldg. 1, Rm. 103B, (541)
463-5625, solomonm@lanecc.edu

A Meets Arts/Letters requirement
B Must be passed with grade of " $\mathrm{B}-$ " or better to use as a prerequisite
D Degree or certificate requirement; must be passed with grade of "C-" or better
G Must be taken for a grade, not P/NP; major requirement

[^1]
## Accounting

|  |
| :---: |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |


|  | Winter |
| :---: | :---: |
| BA 101 Introduction to Business D,G. | 4 |
| BT 114 MS EXCEL for Business *,B,D,G | 4 |
| BT 165 Introduction to the Accounting Cycle B,D,G | 4 |
| WR 121 English Composition: Exposition and Introduction to Argument ${ }^{*}, \mathrm{D}, \mathrm{G}, \mathrm{W}$. | 4 |
| Total Credits | 16 |
|  | Spring |
| BA 195 Service and Ethics in Business *,D,G ..................... | 1 |
| BA 214 Business Communications *,D,G | 4 |
| BA 218 Personal Finance D,G. | 4 |
| BT 175 Survey of Accounting Software *,B,D,G ................... | 4 |
| Total Credits | 13 |
| Second Year | Fall |
| BA 211 Financial Accounting *,3,D,G. | 4 |
| BA 226 Business Law D,G... | 4 |
| Directed elective ${ }^{3,4, D, G}$.. | 3-4 |
| Directed elective ${ }^{\text {3,4,D,G }}$. | 3-4 |
| Choice of: | 3 |
| Physical Education Activity requirement 1 1,2,R |  |
| Health requirement $2, R$ |  |

Total Credits 17-19

|  |  | Winter |
| :---: | :---: | :---: |
| Directed elective 3 3,4,D,G |  | 3-4 |
| Directed elective ${ }^{3,4, D, G}$. |  | 3-4 |
| Speech course A, ${ }^{\text {d }}$. |  | 4 |
| MTH 065 Elementary Algebra or higher *,D,G,S |  | 4 |
| Total Credits |  | 14-16 |
|  |  | Spring |
| BA 278 Leadership and Team Dynamics D,G,H |  | 4 |
| BA 280AC Co-op Ed: Accounting D,G .. |  |  |
| Directed elective ${ }^{3,4, D, G}$... |  | 3-4 |
| Directed elective ${ }^{\text {3,4,D,G }}$. |  | 3-5 |
| Total Credits |  | 13-16 |
| 2 | PE Activity requirement, credits must be taken in at least two terms to satisfy degree requirement. |  |
|  | Can be taken any term. |  |
| 2 | Must be passed with grade of "B-" or better to satisfy degree requirement. |  |
|  | Students must choose one of the follo |  |

## Bookkeeper Elective Sequence

BT 172 Tax Concepts and Preparation $3, D, G$....

BT 170 Payroll Records and Accounting *,3,B,D,G.
BT 250 Automated Accounting Systems *,3,B,D,G ..... 4
Payroll Elective SequenceBT 172 Tax Concepts and Preparation 3,D,GFall
Choice of: ..... 3-4
BT 245 Office Management ${ }^{*, 3, D, G}$
BA 206 Management Fundamentals *,3,D,G
Winter
BT 170 Payroll Records and Accounting *,3,B,D,G ..... 4
BA 224 Human Resource Management *,3,D,G ..... 4
BT 113 QuickBooks 3,D,G ..... 3
BT 171 Payroll Laws and Regulations 3,D,G ..... 4
Transfer Elective Sequence
ECON 200 Principles of Economics: ..... Fall
Introduction to Economics 3,D,G ..... 3
BA 213 Managerial Accounting *,3,D,G ..... 4
BT 250 Automated Accounting Systems *,3,B,D,G ..... 4
ECON 201 Principles of Economics: Introduction to Microeconomics *,3,D,G ..... 3
BT 263 Applied Financial Accounting *,3,D,G
ECON 202 Principles of Economics:Introduction to Macroeconomics *,3,D,G3
Accounting Clerk
Career Pathway Certificate of Completion

Purpose This Career Pathway Certificate is designed for professional office personnel who are interested in career enhancement, or for current Business students who wish to expand their options to enter the field of accounting as Accounts Payable or Accounts Receivable clerks.
BT 165 Introduction to the Accounting Cycle D,G ..... 4
BT 170 Payroll Records and Accounting ${ }^{*}$,D,G ..... 4
BT 245 Office Management ${ }^{*}, \mathrm{D}, \mathrm{G}$ ..... 3
BT 175 Survey of Accounting Software *,D,GSpring
BT 113 QuickBooks D,G ..... 3
Total Credits18

## Bookkeeper

## Career Pathway Certificate of Completion

Purpose This Career Pathway Certificate of Completion is designed for professional office personnel who are interested in career enhancement, or for current Business students with office experience who wish to expand their options to enter the field of accounting as a bookkeeper. The program prepares students to accomplish a wide variety of tasks within the broad area of accounting. The program also provides the foundation necessary to prepare for the American Institute of Professional Bookkeepers (AIPB) certification exam.

BT 172 Tax Concepts and Preparation $3, \mathrm{D}, \mathrm{G}$.
BT 217 MS EXCEL for Business - Expert *,3,D,G ..... 3
Winter

BA 211 Financial Accounting *,3,D,G.

|  | Spring |
| :---: | :---: |
| BT 263 Applied Financial Accounting *,3,D,G ..................... | 5 |
| BT 295 Professional Bookkeeping Course ${ }^{\text {3,D,G }}$................. | 3 |
| Total Credits | 23 |

3 Must be passed with grade of "B-" or better to satisfy degree requirement.

## Payroll Clerk

## Career Pathway Certificate of Completion

Purpose This Career Pathway Certificate of Completion is designed for professional office personnel who are interested in career enhancement, or for current Business students with office experience who wish to expand their options to enter the field of accounting as payroll clerks. The program provides the foundation necessary to prepare for the Fundamental Payroll Certification Test (FPC) offered by the American Payroll Association.

|  | Fall |
| :---: | :---: |
| BT 175 Survey of Accounting Software *,3,B,D,G | 4 |
|  | Winter |
| BA 224 Human Resource Management *,D,G. | 4 |
| BT 170 Payroll Records and Accounting *,3,B,D,G | 4 |
| Spring |  |
| BT 171 Payroll Laws and Regulations 3,D,G | 4 |
| Total Credits | 20 |
| 3 Must be passed with grade of " $B$-" or better to satisfy degree requirement. |  |

## Administrative Assistant

Offered by the Business Department
Two-Year Associate of Applied Science Degree, Administrative Assistant

Career Pathway Certificate of Completion, Legal Office Skills

Career Pathway Certificate of Completion, Office Software Specialist

Career Pathway Certificate of Completion, Small Business Ownership

Purpose To train administrative assistants 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.

Administrative assistants can work effectively as a member of a team, as well as provide high-level administrative support by conducting research, preparing statistical reports, and handling information requests. Administrative assistants will have high proficiency in document production and the use of computer software programs, including the ability to assist others with
computer problem solving. 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 Web tools to input, manage, and interpret information to meet organizational needs.
- perform on the job in ways that reflect professional ethics, legal standards, and organizational expectations.
- create professional, accurate documents.
- anticipate and actively explore innovative solutions to technological and organizational challenges.
- provide basic training and technical support for office equipment and software systems.
- understand accounting as the "language of business."
- engage customers and co-workers in a purposeful manner listening to and accurately interpreting their responses within diverse cultural contexts.
- use research and analytical skills to support the activities of the organization.
- work independently within diverse business environments, apply individual strengths and critical thinking to collaborative efforts.
- make effective presentations to internal and external audiences.
- use appropriate library and information resources to research business topics.
- apply critical thinking and analytical skills in decision making and problem solving.
- perform administrative, management, financial, and Web support functions using technology.
- apply and integrate advanced computer software applications to complete complex projects and documents.
- use communication, teamwork, and interpersonal skills for internal and external customer support.
- perform in office management level positions after additional office experience.
- have enhanced employment opportunities based on selection of directed electives, such as accounting, E-Business, legal, and medical
- formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them.
- use good keyboarding skills to prepare documents quickly and accurately according to employer standards.

Employment Trends For administrative assistants, the projected number of annual openings for the state of Oregon is 583, with approximately 51 in Lane County. Employers particularly seek employees with good communication, teamwork, and interpersonal skills, as well as those who present themselves in a professional manner. Workers with postsecondary training have a competitive advantage in the labor market.

[^2][^3]Wages Statewide wages for administrative assistants average $\$ 18.97$ hourly and \$39,444 annually plus benefits. Lane County wages average $\$ 18.69$ hourly and $\$ 38,876$ annually plus benefits.

## Costs in Addition to Tuition (estimate)*

Books and fees
es ...................................................................

Some Business courses have a one-time fee of $\$ 5$ per term to help

$$
\$ 2,550
$$ support the Student Resource Center. See the Business department for details.

* Subject to change without notice.

Prerequisites The entering student must have the ability to type by touch, have a basic knowledge of the Windows operating system, and place at least into WR 121 and MTH 060, or take classes to reach these levels before enrolling in program courses. Before enrolling in BA 214 Business Communications, students must pass a Language Skills and Proofreading test in the Testing office or pass BT 180 Business Proofreading and Editing. A computer is highly recommended for all Business Department majors; contact the department or advisor for details.

Cooperative Education (Co-op) Co-op offers students graded college credit for on-the-job work experience related to educational and career goals. Through Co-op, students connect theory and practice, develop skills, expand career knowledge, and make contacts for future employment. Three credits of Coop are required for the AAS degree. Additional Co-op credit is strongly recommended as an elective. Contact Jamie Kelsch, Administrative Assistant Co-op Coordinator, Bldg. 2, Rm. 143, (541) 463-5540.

Program Advisor Deb Hupcey, Bldg. 2, Rm. 135, (541) 463 5635,hupceyd@lanecc.edu
Program Counselor Marva Solomon, Bldg. 1, Rm. 103B, (541)
463-5625, solomonm@lanecc.edu

## Administrative Assistant

Two-Year Associate of Applied Science Degree

| First Year | Fall |
| :---: | :---: |
| BT 120 MS WORD for Business *, D,G . | 3 |
| BT 146 Team Building Skills ${ }^{\text {D,G,H ... }}$ | 4 |
| CIS 103 Computer Fundamentals: Systems at Work D,G .... | 4 |
| MTH 060 Beginning Algebra or higher *,D,G,M .................. | 4 |
| Total Credits | 15 |
|  | Winter |
| BA 101 Introduction to Business D,G ................................. | 4 |
| BT 114 MS EXCEL for Business *, B,D,G | 4 |
| BT 165 Introduction to the Accounting Cycle B,D,G ............ | 4 |
| WR 121 English Composition: Exposition and Introduction to Argument *,D,G,W $\qquad$ | 4 |


|  | Spring |
| :---: | :---: |
| BA 195 Service and Ethics in Business *,D,G ..................... | 1 |
| BA 214 Business Communications ${ }^{*}$, D, G | 4 |
| BA 218 Personal Finance D,G. | 4 |
| BT 144 Administrative Procedures *,D,G............................ | 4 |
| Total Credits | 13 |

Second Year ..... Fall
BT 220 MS WORD for Business - Expert *,D,G ..... 3
BT 245 Office Management *,D,G ..... 3
Directed Elective 3,D,G ..... 4
Speech course A,D ..... 4
Choice of: ..... 3
Physical Education Activity requirement 1,2,RHealth requirement $2, R$
Total Credits ..... 17
Winter
BT 243 Document Formatting *,D,G ..... 4
Directed Elective 3,D,G ..... 4
Directed Elective 3,D,G ..... 4
MTH 065 Elementary Algebra or higher *,D,G,S ..... 4
Total Credits ..... 16
BA 278 Leadership and Team Dynamics $\mathrm{D}, \mathrm{G}, \mathrm{H}$
Spring
BA 280AA Co-op Ed: Admin Assist D,G ..... 4
Directed Elective 3,D,G ..... 4
BT 248 Integrated Office Systems *,D,G ..... 4
Total Credits ..... 15
1 PE Activity, credits must be taken in at least two terms to satisfy degreerequirement.
2 Can be taken any term.
3 Students must choose a minimum of 16 credits in one or more areasfrom the following Directed Electives list (can be from more than onecategory):
Accounting Electives
BA 211 Financial Accounting ${ }^{*}$,D,G ..... 4
BA 213 Managerial Accounting *, D,G ..... 4
BA 215 Accounting: Language of Business Decisions *,D,G ..... 4
BA 217 Budgeting for Managers *,D,G. ..... 4
BT 113 QuickBooks D,G. ..... 3
BT 170 Payroll Records and Accounting *,B,D,G ..... 4
BT 171 Payroll Laws and Regulations $\mathrm{D}, \mathrm{G}$. ..... 4
BT 172 Tax Concepts and Preparation D,G. ..... 4
BT 175 Survey of Accounting Software *,B,D,G ..... 4
BT 217 MS EXCEL for Business - Expert *,D,G ..... 3
BT 263 Applied Financial Accounting *,D,G ..... 5
Note: Because BA 211 and BA 215 have similar course outcomes,only one of these courses may be counted as a directed elective.
E-Business Electives
BT 129 Business Web Pages D,G ..... 3
BT 251 E-Business Fundamentals *, D,G ..... 3
BT 252 Web Tools: Photoshop and Dreamweaver D,G ..... 4
BT 253 Internet Marketing D,G ..... 4
Legal Office Electives
BA 226 Business Law D,G4
LGL 100 Introduction to the American Legal System D,G... ..... 4
LGL 201 Legal Procedures $1^{*}$,D,G ..... 4
LGL 202 Legal Procedures 2 *,D,G ..... 3
LGL 203 Legal Procedures 3 *,D,G ..... 3
Medical Office Electives
HIT 196 Medical Transcription 2 *,D,G ..... 2
HO 100 Medical Terminology 1 D,G. ..... 3
HO 110 Medical Filing and Records Mgmt D,G ..... 3
HO 112 Medical Insurance Procedures *,D,G ..... 3
HO 195 Medical Transcription 1 *, D,G ..... 2

## Additional Electives

BA 206 Management Fundamentals *,D,G. 4
BA 223 Marketing D,G
......................................
BA 224 Human Resource Management *, D,
BA 249 Retailing D,G..................................................
$\qquad$
G..................................... $\qquad$ 4

BA 250 Small Business Management *,D,G. Assist D, 4

BA 280AA Cooperative Education: Admin Assist D,G
BT 020 10-Key Calculators D,G $\qquad$
$\qquad$
BT 118 MS POWERPOINT for Business *,D,G . $\qquad$ $\ldots$. 4 *, D,G

1

BT 125 WordPerfect for Business D,G
$\square$

Legal Office Skills

## Career Pathway Certificate of Completion

Purpose This Career Pathway Certificate of Completion is designed for professional office personnel who have a minimum of two years' experience in office administration and are interested in career enhancement, or for current Business students with equivalent office experience who wish to expand their options for career choices. Legal office courses provide opportunities for mobility and advancement. Career possibilities include office positions in law firms, courts, insurance companies, human resource departments, banks, and other law-related business and government offices.

Learning Outcomes The graduate of the Legal Office Skills Certificate of Completion will be able to:

- use and understand basic legal terminology and concepts.
- understand the role of lawyers in the legal system.
- prepare accurately formatted legal documents, letters, and pleadings and compose correspondence commonly used in legal settings.
- understand and use a variety of legal office systems including document management and calendaring.
- understand the purposes and many of the functions of court rules, schedules, and procedures.
- use law library, computing and communication services to obtain legal forms, information, and data from regional, national, and international networks.
- create professional, accurate documents.
- use research and analytical skills to support the activities of the organization.

BA 226 Business Law D,G
LGL 201 Legal Procedures 1 *,D,G

LGL 202 Legal Procedures 2 *, D,G.

BA 280AA Co-op Ed: Admin Assist D,G .

## 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, multisheet data, form controls, look up functions, date and time functions, and math and statistical functions in a business problem solving context.
- create presentations from a template, from existing slides, or by using the AutoContent Wizard and apply appropriate design principles to design, create, and present an original slide show using PowerPoint software.
- customize color schemes, apply slide transitions and animation effects, create a custom background, add animated clip art, link slides within the presentation, resize and scale objects, add action buttons, hide slides, and set automatic slide timings.
- enter, edit, move, and delete information in established databases with accuracy.
- sort, index, and search databases, create custom forms and reports, link tables, and import/export information.

BT 118 MS POWERPOINT for Business *,D,G ....................... 3
BT 120 MS WORD for Business *,D,G ..................................... 3
BT 114 MS EXCEL for Business *,B,D,G Winter
BT 220 MS WORD for Business - Expert *,D,G......................... 3
BT 115 MS ACCESS for Business *,D,G ..Spring
BT 217 MS EXCEL for Business - Expert *,D,G .................... 3
Total Credits
19

[^4][^5]
## Small Business Ownership

## Career Pathway Certificate of Completion

Purpose This Career Pathways Certificate is designed for individuals who may want to own and operate a business in the near term or sometime in the 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. The program includes two courses in accounting and one course in each of the follow: Intro to Business, Business Law, Excel, Marketing, Management Fundamentals, QuickBooks, and Small Business Management.

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.

BA 101 Introduction to Business D,G
BT 114 MS EXCEL for Business *,B,D,G ................................ 4
BT 165 Introduction to the Accounting Cycle B,D,G ............. 4
Winter
BA 223 Marketing D,G4

BA 226 Business Law D,G ..... 4

BT 113 QuickBooks D,G

BA 206 Management Fundamentals *,D,G.
Spring
BA 215 Accounting: Language of Business Decisions *,D,G
4

BA 250 Small Business Management *,D,G... $\qquad$
Total Credits

## American Indian Experience

## Offered by Multiple Departments

Suggested Course of Study
Lane Community College offers students courses with focus on American Indian Languages, Art, Anthropology, Biology, Cooperative Education, Ethnic Studies, and Literature. A suggested course of study is not the same as a state-approved vocational program in which a student earns a degree or certificate with a vocational major issued by the Lane Board of Education.

These courses provide needed credits for graduation and transfer, and a supportive and community environment.
Students who directly benefit from these offerings include

- Students who wish to study an American Indian language as their language requirement at a four-year college or university
- Students who plan to study Native American (or American Indian) Studies at a four-year college or university
- Students who prefer that their educational experience be less institutional and more in keeping with American Indian culture and tradition
- Anyone who has a strong interest in American Indian cultures, histories, languages, or literatures

A notable feature of this Course of Study is the three excellent Learning Communities it offers. Learning communities link subjects and classes to integrate assignments and ideas.
Students work closely with and learn from both faculty and peers to gain deeper understanding of the combined subject matter. These Learning Communities are
Ecotrails BI 103G Global Ecology and WR 122; Multicultural study of ecological and social communities, including American Indian perspectives.
Native Circles An entry for students into career planning and college success accomplished in an American Indian cultural context.

Reconnecting with Nature BI 103G Global Ecology; REL 243
Nature, Religion, and Ecology; and PS 297 Environmental Politics. Exploration of reconnecting with nature from the perspectives of science, spirituality, and political activism.

This suggested course of study offers the following disciplines and course sequences:
American Indian Languages
AIL 100 Foundations of American Indian Languages
AIL 101 Chinuk Wawa - first year
AIL 102 Chinuk Wawa - first year
AIL 103 Chinuk Wawa - first year
Successful completion of two terms of first-year courses fulfills the Oregon University Systems's requirements for admission to state colleges/universities.
AIL 201 Chinuk Wawa - second year
AIL 202 Chinuk Wawa - second year
AIL 203 Chinuk Wawa - second year
Successful comoletion of this second-year series of courses will fulfill the Oregon University Systems's language requirement for graduation.
AIL 280 Cooperative Education, integrates classroom learning with field experience

Art 203 Survey of American Indian Art and Architecture: North and Central America

## Anthropology

ANTH 231 American Indian Studies, northeastern and southeastern states
ANTH 232 American Indian Studies, central and southwestern states

ANTH 233 American Indian Studies, west of the Rockies
Biology
BI 103G Global Ecology, examine nature through Indian eyes and western science
Ethnic Studies
ES 211 Chicano/Latino Experience: Historical and Ideological
ES 241 Native American Experience, Consequences of Native Americans and European Contact
ES 242 Native American Experience, 19th Century FederalIndian Relations
ES 243 Native American Experience, Contemporary Native American Issues

History
HST 257 American Indian History
Literature
ENG 232 Native American Literature
Human Relations
CG 101 Native Circles: College Success Native American Style

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, and the
- Native American Student Association (NASA), an America Indian student organization or club that fosters traditional values and unity among students
- Long House Lane Community College began construction in 2006 of an American Indian long house on campus for Native programs and activities
- Rites of Passage: Umista is a Summer Academy for Native American youth in middle and high schools

For more information, contact Jerry Hall at (541) 463-5084, or department offices.

## Auto Body and Fender Technology

## Offered by the Advanced Technology Division

Two-Year Associate of Applied Science Degree

## Auto Collision Option

## Auto Paint Option

## Two-Year Certificate of Completion

Purpose To train technicians in the latest paint and collision technology, and provide substantial practical experience essential to becoming proficient in this industry, for careers in car dealerships, independent body and paint shops, heavy-duty truck shops, or with jobbers selling paint and collision equipment and materials.

Auto Collision Option prepares students for specialization in
the auto collision industry, for careers in auto dealerships, custom repair shops, independent body shops, motor home manufacturing, employment with collision jobbers, auto collision repair estimators, and auto collision manufacturers.

Auto Paint Option prepares students for specialization in the auto paint industry, for careers in auto dealerships, custom paint shops, independent paint shops, heavy-duty truck shops, the motor home industry, and with paint jobbers and paint equipment manufacturers.

Learning Outcomes The student who successfully completes all
Auto Body and Fender program requirements will:

- adhere to OSHA and industry safety standards.
- effectively use the latest collision repair equipment as well as refinishing procedures.
- repair and refinish automobile bodies to industry standards.
- access library, computing, and communications services and obtain information and data from regional and national networks.
- interpret the concepts of a problem-solving task and translate them into mathematics.

In addition to the outcomes for Auto Body and Fender, the student who successfully completes all Auto Collision Option program requirements will:

- effectively use state-of-the-art measuring and collision repair equipment.
- demonstrate a thorough knowledge of advances in technology in auto collision.
- enter the workforce with substantial practical experience in collision repair.
- repair and reconstruct automobile bodies to industry standards.

In addition to the outcomes for Auto Body and Fender, the student who successfully completes all Auto Paint Option program requirements will:

- demonstrate thorough knowledge of advances in technology in auto paint.
- effectively use state-of-the-art equipment and materials as well as refinishing procedures.
- enter the workforce with substantial practical experience.

Employment Trends Statewide, 100 annual openings for auto paint and collision are projected in Oregon and 20 openings are projected annually in Lane County. Those with an associate degree in one of the program options will have a competitive advantage in the labor market.

Wages Statewide average, $\$ 19.36$ hourly, $\$ 40,300$ annually ( $\$ 50,000+$ with experience). Lane County average, $\$ 23$ hourly, $\$ 47,000$ annually.

[^6]| Costs in Addition to Tuition and Registration Fees (estimate)* |  |
| :---: | :---: |
| Books | 600 |
| Auto Collision-tools | \$550 |
| Auto Paint-tools | \$475 |
| Fees | \$1,224 |
| Total | \$2,650 |
| *See the online class schedule for program differential fees. Subject to change without notice. |  |

Licensing or Other Certification Exams Required Completion of this program may substitute for one year of the two years of work experience required for taking written exams for ASE certification.

Prerequisites Minimum placement score of 68 in Reading OR completion of RD 080 OR prior college. A high school diploma or equivalent is recommended for all applicants to this program.
Criteria Used for Admission Students may enter this program fall, winter or spring term. For consent to enroll in major courses, students must attend a program orientation for fall terms (dates available in Counseling or Enrollment and Student Financial Services) or contact advisor/counselor in winter and spring terms.

Cooperative Education (Co-op) Co-op offers students college credit and a grade for on-the-job work experience related to their educational and career goals. Through Co-op, students connect theory and practice, develop skills, expand career knowledge, and make contacts for the future. Work schedules and work sites vary. Under the supervision of the Auto Body and Fender Co-op Coordinator and with instructor consent, a maximum of 18 Co-op credits in AB 280 may be earned in lieu of required Auto Body and Fender course credits. Contact Marv Clemons, Auto Body Co-op Coordinator, Bldg. 8, Rm. 111, (541) 463-3158.

Program Advisor Betty Svarverud, Bldg. 12, Rm. 203, (541) 463-5378, svarverudb@lanecc.edu

Program Counselor Carolyn Litty, Bldg. 12, Rm. 202, (541) 463-5236, littyc@lanecc.edu


|  | Winter |
| :---: | :---: |
| AB 132 Beginning Auto Paint *,D,G................................... | 6 |
| AB 134 Paint and Collision ${ }^{*}, \mathrm{D}, \mathrm{G}$. | 6 |
| EL 115 Effective Learning A. | 3 |
| Art elective | 2 |
| Total Credits | 17 |
|  | Spring |
| AB 133 Beginning Auto Collision *,D,G .............................. | 6 |
| AB 134 Paint and Collision *,D,G. | 6 |
| CS 120 Concepts of Computing: Info Processing $S$ or higher computer science | 4 |
| Total Credits | 16 |

Second Year ..... Fall
AB 133 Beginning Auto Collision *,D,G ..... 6
AB 261 Intermediate Auto Collision *,D,G ..... 6
MTH 076 Applied Geometry forTechnicians * or higher mathematics ..... 4
WR 115W Introduction to College Writing: Workplace Emphasis $\mathrm{D}, \mathrm{W}$ or higher writing ..... 3
Total Credits ..... 19
Winter
AB 260 Intermediate Auto Paint ${ }^{*}, \mathrm{D}, \mathrm{G}$ ..... 3
AB 261 Intermediate Auto Collision *,D,G ..... 9
$P E / H e a l t h$ requirement $D, R$ ..... 3
Arts/Letters requirement R ..... 3
Total Credits ..... 18
Spring
AB 260 Intermediate Auto Paint ${ }^{*}$,D,G ..... 12
Business elective ..... 3
Human Relations requirement ${ }^{R}$ ..... 3
Total Credits ..... 18
Elective AB 280 Co-op Ed: Auto Body Repair (optional)
Note: Recommended courses prior to entering major core courses-
Effective Learning, Basic Mathematics Applications, and Introduction toCollege Writing: Workplace Emphasis.
Auto Collision Option
Two-Year Associate of Applied Science Degree ..... Fall
AB 133 Beginning Auto Collision *, D,G ..... 6
AB 134 Paint and Collision *,D,G ..... 6
MTH 060 Beginning Algebra*, D,G,M or higher mathematics. ..... 4
Total Credits ..... 16
Winter
AB 133 Beginning Auto Collision *,D,G ..... 6
AB 134 Paint and Collision *,D,G ..... 6
EL 115 Effective Learning A ..... 3
Art elective ..... 2
Total Credits ..... 17
AB 134 Paint and Collision *, D,G
Spring
AB 261 Intermediate Auto Collision *,D,G ..... 6
6
CS 120 Concepts of Computing: Info Processing S or higher computer science ..... 4
Total Credits ..... 16
Second Year ..... Fall
AB 261 Intermediate Auto Collision *,D,G ..... 9
AB 263 Advanced Auto Collision *,D,G. ..... 3
MTH 076 Applied Geometry for Technicians * or higher mathematics. ..... 4
WR 115W Introduction to College Writing: Workplace Emphasis $\mathrm{D}, \mathrm{W}$ or higher writing. ..... 3
Total Credits ..... 19
Winter
AB 263 Advanced Auto Collision *,D,G ..... 12
$P E / H$ ealth requirement $D, R$ ..... 3
Arts/Letters requirement $R$ ..... 3

|  | Spring |
| :---: | :---: |
| AB 132 Beginning Auto Paint *,D,G.................................. | 12 |
| Business elective | 3 |
| Human Relations requirement ${ }^{\mathrm{R}}$..................................... | 3 |
| Elective AB 280 Co-op Ed: Auto Body Repair (optional) |  |
| Total Credits | 18 |
| Auto Paint Option |  |
| Two-Year Associate of Applied Science Degree |  |
| First Year | Fall |
| AB 132 Beginning Auto Paint *,D,G..................................... | 6 |
| AB 134 Paint and Collision ${ }^{*}, \mathrm{D}, \mathrm{G}$. $\qquad$ <br> MTH 060 Beginning Algebra*,D,G,M <br> or higher mathematics. $\qquad$ | 6 |
|  | 4 |
|  | 16 |
|  | Winter |
| AB 132 Beginning Auto Paint *,D,G.................................. | 6 |
| AB 134 Paint and Collision *,D,G...................................... | 6 |
| EL 115 Effective Learning A ............................................ | 3 |
| Art elective .................................................................. | 2 |
| Total Credits | 17 |
|  | Spring |
| AB 134 Paint and Collision *,D,G ..................................... | 6 |
| AB 260 Intermediate Auto Paint *, $\mathrm{D}, \mathrm{G}$. | 6 |
| CS 120 Concepts of Computing: Info Processing $S$ or higher computer science | 4 |
| Total Credits | 16 |
| Second Year | Fall |
| AB 260 Intermediate Auto Paint *,D,G .............................. | 9 |
|  | 3 |
| MTH 076 Applied Geometry forTechnicians * or higher mathematics. | 4 |
| WR 115W Introduction to College Writing: Workplace Emphasis D,W or higher writing. | 3 |
| Total Credits | 19 |
|  | Winter |
| AB 262 Advanced Auto Paint *,D,G .................................. | 12 |
| PE/Health requirement D,R............................................. | 3 |
| Arts/Letters requirement ${ }^{R}$ | 3 |
| Total Credits | 18 |
|  | Spring |
| AB 133 Beginning Auto Collision *,D,G ............................ | 12 |
| Business elective ......................................................... | 3 |
| Human Relations requirement ${ }^{\mathrm{R}}$...................................... | 3 |
| Total Credits | 18 |

Note: Recommended courses prior to entering major core coursesEffective Learning, Basic Mathematics Applications, and Introduction to College Writing: Workplace emphasis.

## Auto Body and Fender Technology

## Two-Year Certificate of Completion

First Year ..... Fall
AB 132 Beginning Auto Paint *,D,G ..... 6
AB 134 Paint and Collision ${ }^{*}, \mathrm{D}, \mathrm{G}$ ..... 6
EL 115 Effective Learning ..... 3
Total Credits ..... 15
Winter
AB 132 Beginning Auto Paint ${ }^{*}, \mathrm{D}, \mathrm{G}$ ..... 6
AB 134 Paint and Collision ${ }^{*}, \mathrm{D}, \mathrm{G}$ ..... 6
Art elective ..... 2
Total Credits ..... 14
Spring
AB 133 Beginning Auto Collision *,D,G ..... 6
AB 134 Paint and Collision ${ }^{*}, \mathrm{D}, \mathrm{G} . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~$
Emphasis $\mathrm{D}, \mathrm{W}$ or higher writing ..... 3
Second Year ..... Fall
AB 133 Beginning Auto Collision *,D,G ..... 6
AB 261 Intermediate Auto Collision *,D,G ..... 6
Technicians *, D,G,M or higher mathematics ..... 4
Total Credits ..... 16
Winter
AB 260 Intermediate Auto Paint ${ }^{*, D, G}$ ..... 3
AB 261 Intermediate Auto Collision *,D,G ..... 9
PE/Health Elective D . ..... 3
Total Credits ..... 15
Spring
AB 260 Intermediate Auto Paint *,D,G ..... 12
Human Relations requirement $D$ ..... 3

## Automotive Technology Fast Track

## Offered by the Advanced Technology Division

## Suggested Course of Study

The curriculum outlined is a suggested course of study, an advising guide for students preparing to enter the work force as automotive technicians.

This advising guide allows students to complete the majority of the automotive classes in a one-year time frame and get into the work force in a short period of time. A suggested course of study is not the same as a state-approved vocational program in which a student earns a degree or certificate with a vocational major issued by the Lane Board of Education. Students completing this curriculum may be eligible for a departmental recognition award which is not transcripted.

All of the following courses are state-approved for credit and may be applied to the Associate of Applied Science Degree in Automotive Technology. The courses are divided into groups of 20 credits per term with students attending classes 8 hours per day, 4 or 5 days per week. An application to the Fast Track program is required. New students may enter in fall terms only.


## Automotive Technology

Offered by the Advanced Technology Division
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 Outcome s The graduate 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.

Employment Trends Statewide, 300 annual openings for automotive technicians are projected in Oregon and 30 openings are projected annually in Lane County. Those with an associate degree have a competitive advantage in this labor market.

Wages Statewide average, $\$ 19$ hourly, $\$ 39,000$ annually ( $\$ 50,000+$ with experience). Lane County average, $\$ 18$ hourly, $\$ 38,000$ annually.
Costs in Addition to Tuition and Registration Fees (estimates)*

| Books | \$1,100 |
| :---: | :---: |
| Tools. | \$700-1,000 |
| Fees... | \$504 |
| Total .. | \$2,154-2,304 |

*See the online class schedule for program differential fees. Subject to change without notice.

Program Certification National Automotive Technicians Education Foundation, a nonprofit foundation within the National Institute for Automotive Service Excellence.

Prerequisites Minimum placement score of 68 in Reading OR completion of RD 080 OR prior college. A high school diploma or equivalent is recommended for all applicants to this program.

Program Application for Admission New students to the Automotive program are required to:

1. Complete an application for admission to Lane Community College [available online] and complete placement testing in reading, writing, and mathematics;
2. Complete an application for admission to the Automotive Technology program, available in the Advanced Technology Division office; and
3. Submit your completed program application (including the $\$ 25$ non-refundable application fee) to the Advanced Technology Division office by the date noted on the application.

Students may enter this program fall, winter or spring terms. Students must attend the program orientation for fall term entry (dates available in Counseling or Enrollment and Student Financial Services) or contact advisor/counselor for winter or spring term entry.

Criteria for Admission Students are selected based on a timely application to the program and a point allocation system. NOTE: Contact the Division Office for information on the Fast Track curriculum (Fall term entry only).

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. 8, Rm. 111, (541) 463-3158.


| AM 242 Automatic Transmissions/Transaxles *,D,G ............ | Spring |
| :---: | :---: |
|  | 12 |
|  | 3 |
| Total Credits | 15 |
| Second Year | Fall |
| AM 243 Electrical and Electronic Systems *,D,G ... | 12 |
| WR 115W Introduction to College Writing: Workplace |  |
| Emphasis D,W or higher writing.................................... | 3 |
| Total Credits | 15 |
|  | Winter |
| AM 244 Engine Performance *,D,G. | 12 |
| CG 203 Human Relations at Work H | 3 |
| Total Credits | 15 |
|  | Spring |
| AM 143 Brakes *,D,G .. | 8 |
| AM 246 Heating and Air Conditioning *,D,G...................... | 4 |
| AM 280 Co-op Ed: Automotive ${ }^{\text {D,G }}$.................................. | 3 |
| Total Credits | 15 |

## Aviation Maintenance Technician

## Offered by the Lane Aviation Academy

Two-Year Associate of Applied Science Degree

## Two-Year Certificate of Completion

Purpose To prepare technicians for Federal Aviation Administration (FAA) certification exams (written, oral and practical) for the airframe and powerplant airman's certificate. Federal regulations direct the following minimum number of hours of instruction for rating shown.

- Airframe is 1150 hours ( 400 General, plus 750 Airframe).
- Powerplant is 1150 hours ( 400 General, plus 750 Powerplant).
- Combined Airframe and Powerplant is 1900 hours (400 General, plus 750 Airframe and 750 Powerplant).

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.

Employment Trends Employment opportunities are favorable for trained aircraft mechanics. Annual new openings are expected to be at about the state average. Reasonable employment opportunities exist for trained workers. Those with an associate degree have a competitive advantage in this labor market.

Wages Statewide, $\$ 16-21$ hourly, $\$ 25$ median hourly, and $\$ 52,783$ average annually.

[^7][^8]

Program Approval The program is approved under Part 147 of the Federal Aviation Regulations of the Federal Aviation Administration.

Licensing or Other Certification Exams Required FAA oral, practical, and written certification exams are required.

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. Procedures for crediting and guidelines for the determination of documented military or field experience are available through application with the FAA liaison.

Note See a counselor or advisor to learn what entry-level skills are suggested for successful completion of this program.

Criteria Used for Admission Students may enter major courses fall term. For consent to enroll in major courses, students must attend a program orientation for fall terms (dates available in Counseling or Enrollment and Student Financial Services) or contact advisor/counselor for possible entry in winter and spring terms.

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 Aviation Maintenance Co-op Coordinator and as approved by the FAA Liaison and Return to Service instructor, a maximum of six Co-op credits in AV 280 may be authorized in lieu of the final Return to Service course. Co-op may be taken summer term. Contact Marv Clemons, Aviation Maintenance Co-op Coordinator, Bldg. 8, Rm. 111, (541) 463-3158.

Program Advisor Betty Svarverud, Bldg. 12, Rm. 203, (541) 463-5378, svarverudb@lanecc.edu

Program Counselor Carolyn Litty, Bldg. 12, Rm. 202, (541) 463-5236, littyc@lanecc.edu

## Two-Year Associate of Applied Science Degree

| Required Prior to Beginning of First Year |  |
| :---: | :---: |
| MTH 076 Applied Geometry forTechnicians *,D,G,M or equivalent. $\qquad$ WR 115W Introduction to College Writing: Workplace |  |
| WR 115W Introduction to College Writing: Workplace Emphasis 1,D,W or higher writing $\qquad$ | 3 |
| First Year | Fall |
| AV 193 General 102 *,D,G | 6 |
| AV 194 General 103 *,D,G | 6 |
| AV 279 Airframe (Section 1) * ....................................... | 6 |
| Total Credits | 18 |43

a
AV ..... -
Winter
AV 192 General 101 *, D,G ..... 6
AV 195 General 104 *,D,G ..... 6
MTH 086 Applied Algebra forTechnicians *,2,D,G,S or higher mathematics ..... 4
$P E /$ Health requirement $1,3, D, R$ ..... 3
Total Credits ..... 19
AV 279 Airframe (Section 2, 3, and 4) *,D,G
SpringTotal Credits18
Second Year ..... Fall
AV 281 Powerplant (Section 1 and 2) *,D,G ..... 12
Science/ Computer Science requirement $1, \mathrm{R}$ ..... 3
Total Credits ..... 15
AV 281 Powerplant (Section 3 and 4) * ..... 12
AV 282 Airframe Return to Service *,D,G
AV 282 Airframe Return to Service *,D,G ..... 6 ..... 6
Total Credits ..... 18
Spring
AV 283 Powerplant Return to Service *,D,G ..... 6
AV 196 General 105 *,D,G ..... 6
Human Relations requirement $1, R$ ..... 3
Elective AV 280 Co-op Ed: Aviation Maintenance (optional)
Total Credits ..... 18
Two-Year Certificate of Completion
Required Prior to Beginning of First Year
MTH 076 Applied Geometry forTechnicians *,D,G,Mor equivalent4
First Year ..... Fall
AV 193 General 102 *,D,G ..... 6
AV 194 General 103 *,D,G ..... 6
AV 279 Airframe (Section 1) * ..... 6
Total Credits ..... 18
Winter
AV 192 General 101 *, D,G ..... 6
AV 195 General 104 *,D,G ..... 6
MTH 086 Applied Algebra for Technicians *,2,D,G,M or higher mathematics. ..... 4
Spring
AV 279Airframe (Section 2, 3, and 4) *, D,G
AV 279Airframe (Section 2, 3, and 4) *, D,G
Second Year ..... Fall
AV 281 Powerplant (Section 1 and 2) *,D,G ..... 12
WR 115W Introduction to College Writing: Workplace Emphasis 1,D,W or higher writing ..... 3
PE/Health elective ${ }^{1,3, D}$ ..... 3


## Aviation Technology

## Offered by Lane Aviation Academy

## Suggested Course of Study

The curriculum outlined is a suggested course of study for students preparing for a transfer degree and aviation careers. Examples of aviation career fields are professional pilots, managers, airways sciences (air traffic control) or air transportation security.
A suggested course of study is not the same as a stateapproved vocational program. Completion of these courses leads to an Associate of Arts Oregon Transfer Degree, with coursework appropriate for a baccalaureate major in aviation fields. Students intending to transfer to an Oregon university should consult with their career counselors for a specific course of study.

| Two-Year Core Curriculum |  |
| :---: | :---: |
| First Year | Fall |
| FT 102 General Aviation Careers.. | 1 |
| FT 103 Aircraft Development * | 4 |
| FT 115 Aircraft Systems and Structures.. | 3 |
| PSY 201 General Psychology or $\qquad$ SOC 204 Introduction to Sociology (3) | 3 |
| WR 121 English Composition: Exposition and Intro. to Argument * $\qquad$ | 4 |
| HE 275 Lifetime Health and Fitness. | 3 |
| AS 111 Air Force Today (optional). | (1) |
| Total Credits | 18-19 |
|  | Winter |
| ECON 201 Principles of Economics: Microeconomics * .... | 3 |
| GEOG 142 Introduction to Human Geography ................. | 4 |
| SP 111 Fundamentals of Public Speaking......................... | 4 |
| WR 122 Composition: Style and Argument * ................... | 4 |
| CG 203 Human Relations at Work. | 3 |
| AS 120 Leadership Laboratory (optional)......................... | (1) |
| Total Credits | 18-19 |
|  | Spring |
| ECON 202 Principles of Economics: Macroeconomics * | 3 |
| SP 112 Persuasive Speech | 4 |
| FT 113 Aviation Science. | 4 |
| FT 130 Primary Flight Brief * | 3 |
| WR 123 Composition: Research * ................................... | 4 |
| Total Credits | 18 |
| Second Year | Fall |
| BA 211 Financial Accounting .......................................... | 4 |
| PH 101 Fundamentals of Physics *. | 4 |
| MTH 111 College Algebra * | 5 |
| WR 227 Technical Writing * | 4 |
| AS 211 Development of Air Power (optional).................... | (1) |
| Total Credits | 17-18 |
|  | Winter |
| PH 102 Fundamentals of Physics * ................................. | 4 |
| MTH 243 Introduction to Probability and Statistics * ........ | 4 |
| FT 254 Aerodynamics.. | 3 |
| GS 109 Meteorology.. | 5 |
| Arts and Letters Elective ............................................... | 3 |
| Total Credits | 19 |
|  | Spring |
| PH 103 Fundamentals of Physics * | 4 |
| BA 254 General Aviation Management ............................ | 3 |
| SP 218 Interpersonal Communication............................. | 4 |
| Arts and Letters Elective** | 3 |
| Social Science Elective**. | 3 |
| AS 220 Leadership Laboratory (optional)......................... | (1) |
| Total Credits | 17-18 |
| * Prerequisite required. |  |
| ** Choose from list for Ethnic/Gender/Cultural Diversity requirement if this requirement has not been met. |  |

First Year ..... Fall
FT 103 Aircraft Development * ..... 4PSY 201 General Psychology or3
WR 121 English Composition: Exposition and
ntro. to Argument * ..... 4
AS 111 Air Force Today (optional) ..... (1)Winter
GEOG 142 Introduction to Human Geography ..... 4
WR 122 Composition: Style and Argument * ..... 4
AS 120 Leadership Laboratory (optional). ..... 1)
pring
FT 113 Persuasive Speec4FT 130 Primary Flight Brief *3
WR 123 Composition: Research * ..... 4
Second Year ..... Fall
PH 101 Fundamentals of Physics * ..... 4WR 227 Technical Witin4
AS 211 Development of Air Power (optional) ..... (1)
PH 102 Fundamentals of Physics * ..... 4FT 254 Aerodynamics3
GS 100 Meteorology. ..... 5SpringBA 254 U3
SP 218 Interpersonal Communication3
Social Science Elective**(1)* Prerequisite required.** Choose from list for Ethnic/Gender/Cultural Diversityrequirement if this requirement has not been met.

[^9]
## Business Assistant

## Offered by the Business Department

## 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 Assistant Two-Year Associate of Applied Science degrees. See program listings, or contact the Business Department office, counselor, or advisor for details.

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 Web 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.

Employment Trends For business/office assistants, the projected number of annual openings for the state of Oregon is 1,598 , with approximately 134 in Lane County. Employers particularly seek employees with good communication, teamwork, and interpersonal skills, as well as those who present themselves in a professional manner. Workers with postsecondary training have a competitive advantage in the labor market.
Wages Statewide wages for business/office assistants average $\$ 13.75$ hourly and $\$ 28,603$ annually plus benefits. Lane County wages average $\$ 13.21$ hourly and $\$ 27,475$ annually plus benefits.

## Costs in Addition to Tuition (estimate)*

## Books and fees

\$1,350
Some Business courses have a one-time fee of $\$ 5$ per term to help support the Student Resource Center. See the Business department for details.

* Subject to change without notice.

Prerequisites The entering student must have the ability to type by touch, have a basic knowledge of the Windows operating system, and place at least into WR 121 and MTH 060, or take classes to reach these levels before enrolling in program courses. Before enrolling in BA 214 Business Communications, students must pass a Language Skills and Proofreading test in the Testing office or pass BT 180 Business Proofreading and Editing. A computer is highly recommended for all Business Department majors; contact the department or advisor for details.

Program Advisor Deb Hupcey, Bldg. 2, Rm. 135, (541) 463 . 5635, hupceyd@lanecc.edu

Program Counselor Marva Solomon, Bldg. 1, Rm. 103B, (541)
463-5625, solomonm@lanecc.edu

BT 120 MS WORD for Business *,D,G ................................... 3
BT 146 Team Building Skills D,G,H......................................... 4
CIS 103 Computer Fundamentals: Systems at Work D,G..... 4
MTH 060 Beginning Algebra or higher *,D,G,M .................... 4
Total Credits
15
BA 101 Introduction to Business D,G.................................... $\begin{array}{r}\text { Winter } \\ 4\end{array}$
BT 114 MS EXCEL for Business *,B,D,G ................................ 4
BT 165 Introduction to the Accounting Cycle B,D,G ............. 4
WR 121 English Composition: Exposition and
Introduction to Argument ${ }^{*}$, D,G,W
4

Total Credits 16
Spring
BA 195 Service and Ethics in Business *,D,G ....................... 1
BA 214 Business Communications *,D,G ............................... 4
BA 218 Personal Finance D,G
Choice of:
BT 144 Administrative Procedures *,D,G
BT 175 Survey of Accounting Software *,B,D,G
Total Credits
13

## Computer Network Operations

## Offered by the Computer Information Technology Department

## Two-Year Associate of Applied Science Degree

Career Pathway Certificate of Completion, Computer Network Security

Purpose To train entry-level network support technicians and more advanced network administrators in specific computer networking skills and general troubleshooting of hardware and software related problems.

Learning Outcomes The graduate will:

- install and configure workstations, servers and networked printers.
- install and configure internetworking devices such as switches and routers.
- install and configure a variety of network operating systems and provide for interoperability between them.
- administer an organization's computer network infrastructure.
- understand network security issues and use appropriate tools to insure network integrity.
- understand the critical features of wireless networking.
- understand fundamental networking theory, terminology, and industry recognized standards.
- interpret the concepts of a computer network related problemsolving task.
- use appropriate library and information resources to research network management issues and tools and support lifelong technical learning.

Employment Trends The Oregon Labor Market Information System projects statewide 359 annual openings for network and computer systems administrators and computer support specialists, and 37 annual openings in Lane County. For the decade ending in 2016, the statewide projected increase is $20 \%$ annually, and for Lane County $21 \%$ annually.

Wages Statewide average hourly wage for network and computer systems administrators is $\$ 30.83$, and annually $\$ 64,125$. Lane County average hourly wage is $\$ 28.33$, and annually $\$ 58,927$.

## Costs in Addition to Tuition (estimate)*

Books and lab fees
\$2,500-3,000
Students taking courses using CIT labs are assessed a one-time fee up to $\$ 28$ per term. See the CIT department for details.

* Subject to change without notice.

Prerequisites Students must qualify for WR 121, either by placement testing or completing prerequisite courses, and by the third term, qualify to begin MTH 095. Each student should consult with a counselor or advisor to plan a program of study.

Computer Network Security Students who complete the Computer Network Operations degree are well positioned to continue their studies in computer network security by completing the curriculum for the Network Security Certificate of Completion offered by the CIT department. See the following Computer Network Security Certificate of Completion description or contact the certificate coordinator Ron Little, (541) 463-5464, littler@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 Larry Scott, Computer Network Operations Co-op Coordinator, Bldg. 19, Rm. 154, (541) 463-5458, scottl@lanecc.edu.

Program Lead Gary Bricher, Bldg. 19, Room 148, (541) 4635294, bricherg@lanecc.edu

Program Advisor Shirley Lukacs, Bldg. 16, Rm. 162M, (541) 463-3244, lukacss@lanecc.edu

Program Counselor Debby Ganser, Bldg. 16, Rm. 162L, (541) 463-5034, sanserd@lanecc.edu

Note Students completing the curriculum for the Computer Network Operations degree will also satisfy the requirements for the Computer Specialist certificate. In addition, students taking CS 295 Web Development 2 as the Fall term, secondyear elective will satisfy the requirements for the Web Programming certificate. Students taking CS 188 Wireless Networking, and CS 285 Operating System Hardening as the Winter and Spring term, second-year electives would need to complete only one additional course, CS 286 Firewalls and VPNs, to qualify for the Computer Network Security certificate.

Note The first-year networking curriculum is known as the "CIT Core." These courses provide a solid foundation in information technology.

Note Students with an interest in Geographic Information Systems could take GIS 245 Maps and Spatial Information, GIS 246 Introduction to GIS, and GIS 248 Applications in GIS, as their three electives and then be left with just one class, CIS 247 Information Analysis and Visualization, to qualify for the GIS certificate.

| First Year | Fall |
| :---: | :---: |
| CIS 100 Computing Careers Exploration D,G ..................... | 2 |
| CIS 102 Problem Solving with Computers D,G | 4 |
| CIS 125H Software Tools 1: XHTML 4,D,G. | 3 |
| CIS 140 Operating Systems: Managing Windows D,G......... | 4 |
| WR 121 English Composition: Exposition and Introduction to Argument *,W $\qquad$ | 4 |
| Total Credits | 17 |
|  | Winter |
| ART 288 Introduction to Web Design 4,D,G. | 2 |
| CS 133JS Beginning Programming Javascript ${ }^{*, 4, D, G, S}$..... | 4 |
| CIS 125D Software Tools 1 Databases D,G......................... | 4 |
| CS 179 Introduction to Computer Networks *,D,G .............. | 4 |
| ET 287 Microcomputer Hardware D,G. | 4 |
| Total Credits | 18 |
|  | Spring |
| CS 295 Web Development 1 *,4,D,G .................................. | 4 |
| CG 203 Human Relations at Work H. | 3 |
| CIS 227N Systems Support: Network and Operating Systems *, D,G $\qquad$ | 4 |
| MTH 095 Intermediate Algebra or higher *,M..................... | 5 |
| Total Credits | 16 |
| Second Year | Fall |
|  | 4 |
| CS 140 U Introduction to Unix/Linux *,D,G ......................... | 4 |
| CS/CIS/GIS Elective 1,3,D,G ....................... | 4 |
| WR 227 Technical Writing *,A. | 4 |
| Total Credits | 16 |

[^10][^11]|  | Winter |
| :---: | :---: |
| CS 284 Network Security Fundamentals *,D,G,S ................ |  |
| CIS 225 Computer End-User Support *,D,G $\qquad$ CS 240 U Advanced Unix/Linux: Server Management *,D,G CS/CIS/GIS Elective 1,3,D,G $\qquad$ |  |
|  | 4 |
|  | 4 |
| Total Credits | 16 |
|  | Spring |
| CS 289 Cisco Router and Switch Administration *,D,G,S.... | 4 |
| CS 280CN Coop Ed: Computer Networks D,G.................... | 3 |
| PE/Health requirement ${ }^{R}$. | 3 |
| CS/CIS/GIS Elective 1,3,G or Speech Elective ${ }^{2}$ | 4 |
| Elective (optional). | (4) |

Total Credits 14 (18)
1 The Computer Network Operations degree contains three second-year CS/CIS/GIS electives. You may want to consider using your 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, or Computer Science transfer area. For more specific information about electives, contact the program academic advisor or program counselor to help determine what elective courses best fit your goals.
2 List of approved speech electives:
SP 100 Basic Communication
SP 111 Fundamentals of Public Speaking
SP 112 Persuasive Speech
SP 130 Business and Professional Speech
SP 219 Small Group Discussion
3 Students planning to pursue a bachelor's degree in Computer Science are advised to also complete the following courses in mathematics: MTH 111 College Algebra and MTH 231, 232, 233 Discrete Mathematics 1, 2, 3
4 Instead of the Web programming courses: ART 288, CIS 125H, and CS 295, these Game programming courses may be taken: ART 245, CIS 125G, and CS 133G, respectively. Also, instead of the Web programming courses: ART 288, CIS 125H, CS 133JS, and CS 295, these Game programming courses may be taken: ART 245, CIS 125G, CS 133G, and CS 233G, respectively. In addition, instead of the Web programming courses: CS 133JS and CS 295, these programming courses may be taken: CS 133 and CS 233, respectively.

## 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.

Employment Trends The Oregon Labor Market Information System projects statewide 359 annual openings for network and computer systems administrators and computer support specialists, and 37 annual openings in Lane County. For the decade ending in 2016, the statewide projected increase is $20 \%$ annually, and for Lane County $21 \%$ annually.

Wages Statewide average hourly wage for network and computer systems administrators is $\$ 30.83$, and annually $\$ 64,125$. Lane County average hourly wage is $\$ 28.33$, and annually $\$ 58,927$.

## Costs in Addition to Tuition (estimate)*

Books and lab fees \$200-300
Students taking courses using CIT labs are assessed a one-time fee up to $\$ 28$ per term. See the CIT department for details.

* Subject to change without notice.

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 Ron Little, Bldg. 19, Room 156, (541) 463 -
5464, littler@lanecc.edu
Program Advisor Shirley Lukacs, Bldg. 16, Rm. 162M, (541)
463-3244, lukacss@lanecc.edu
Program Counselor Debby Ganser, Bldg. 16, Rm. 162L, (541)
463-5034, ganserd@lanecc.edu
Courses required Credits
CS 188 Wireless Networking ${ }^{*}, \mathrm{D}, \mathrm{G}$....................................... 4
CS 284 Network Security Fundamentals *,D,G ..................... 4
CS 285 Operating System Hardening *,D,G.......................... 4
CS 286 Firewalls and VPNs *,D,G

Total Credits 16

## Computer Programming

## Offered by the Computer Information Technology

 DepartmentTwo-Year Associate of Applied Science Degree, Computer Programming

## Career Pathway Certificate of Completion, Web Programming

## Career Pathway Certificate of Completion, Geographic

 Information SystemsPurpose To prepare technicians for entry-level positions as web 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.

Employment Trends The Oregon Labor Market Information System project statewide 132 annual openings for Computer Programmer, and 11 annual openings for Lane County. For the decade ending in 2016, the statewide projected increase is $14.2 \%$ and for Lane County $15.4 \%$. Related job categories such as Software Engineer, Web Developer, Systems Analyst, Database Programmer show projected increases statewide and for Lane County of 20-25\%.

Wages Statewide average hourly wage is $\$ 31.68$ and $\$ 69,447$ annually. Lane County average hourly wage is $\$ 26.24$ and \$53,384 annually.

Costs in Addition to Tuition (estimates)*
Books and Materials ................................................... \$2,500
CIT Lab Fees.............................................................. \$ 168
$\qquad$
Students taking courses using CIT labs are assessed a one-time fee up to
$\$ 28$ per term. See the CIT department for details.

* Subject to change without notice.

Prerequisites Students must qualify for WR 121, either by placement testing or completing prerequisite courses, and by the third term, qualify to begin MTH 095. Each student should consult with a counselor or advisor to plan a program of study.

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 Larry Scott, Computer Programming Co-op Coordinator, Bldg. 19, Rm. 154, (541) 463-5458, scottl@lanecc.edu.

Program Lead Mari Good, Bldg. 19, Rm. 158, (541) 463-5838, goodm@lanecc.edu

Program Advisor Shirley Lukacs, Bldg. 16, Rm. 162M, (541) 463-3244, lukacss@lanecc.edu

Program Counselor Debby Ganser, Bldg. 16, Rm. 162L, (541)
463-5034, ganserd@lanecc.edu

| First Year | Fall |
| :---: | :---: |
| CIS 100 Computing Careers Exploration D,G | 2 |
| CIS 102 Problem Solving with Computers D,G .................. | 4 |
| CIS 140 Operating Systems: Managing Windows D,G ........ | 4 |
| WR 121 English Composition: Exposition and Introduction to Argument *, W $\qquad$ | 4 |
| PE/Health requirement ${ }^{\text {R }}$............................................... | 3 |
| Total Credits | 17 |
|  | Winter |
| ART 288 Introduction to Web Design D,G. | 2 |
| CIS 125D Software Tools 1: Databases D,G. | 4 |
| CIS 125H Software Tools 1: XHTML D,G.. | 3 |
| CS 133 Beginning Programming *,D,G,S ........................... | 4 |
| CS 179 Introduction to Computer Networks *,D,G,S ............ | 4 |
| Total Credits | 17 |

[^12]|  | Spring |
| :---: | :---: |
| CG 203 Human Relations at Work H .................................. | 3 |
| CS 133JS Beginning Programming Javascript *,D,G,S ....... | 4 |
| CS 233 Intermediate Programming *,D,G,S | 4 |
| MTH 095 Intermediate Algebra or higher *,M.................... | 5 |
| Total Credits | 16 |
| Second Year | Fall |
| CIS 244 Systems Analysis *,D,G......................................... | 4 |
| CS 295 Web Development 1 *,D,G ..................................... | 4 |
| CS/CIS/GIS Elective 1,D,G (see below) ..................................... | 4 |
| WR 227 Technical Writing *,A ............................................ | 4 |
| Total Credits | 16 |
|  | Winter |
| CS 275 Data Base Program Development *,D,G................. | 4 |
| CS 296 Web Development 2 *,1,G,S ................................... | 4 |
| Speech Elective 2 (see approved list below) ............................... | 4 |
| CS/CIS/GIS Elective 1,D,G (see below).................................... | 4 |
| Total Credits | 16 |
|  | Spring |
| CIS 297 Programming Capstone *,D,G ............................... | 5 |
| CS 280PR Co-op Ed: Computer |  |
| Programming (second-year standing required) D,G ........ | 3 |
| CS/CIS/GIS Elective *,1,D,G (see below)................................... | 4 |
| Open Elective ................................................................. | 4 |
| Total Credits | 16 |

1 For more specific information about the Fall/Winter/Spring CS/CIS/GIS elective sequences please contact the Program Academic Advisor (Shirley Lukacs) or the Program Counselor (Debbie Ganser) to help determine which elective sequence best fits your goals.
2 List of approved speech electives:
SP 100 Basic Communication
SP 111 Fundamentals of Public Speaking
SP 112 Persuasive Speech
SP 130 Business and Professional Speech
SP 219 Small Group Discussion

## Web Programming

## Career Pathway Certificate of Completion

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

Learning Outcomes The certificate recipient will:

- design, implement, test, debug and document web based computer programs using a variety of current tools and technologies.
- understand the use of web programming to support organizational processes.
- interpret the mathematical concepts of a programming related problem-solving task and translate them into programming logic and expressions.
- use appropriate library and information resources to research programming tools and technologies and support lifelong technical learning.

[^13]Employment Trends The Oregon Labor Market Information System projects 132 annual openings statewide for Computer Programmer, and 11 annual openings for Lane County. For the decade ending in 2014, the statewide projected increase is $15.4 \%$ and for Lane County $14.2 \%$. Related job categories such as Software Engineer, Web Developer, Systems Analyst, Database Programmer show projected increases statewide and for Lane County of 20-25\%.

Wages Statewide average hourly wage is $\$ 33.39$ and $\$ 69,447$ annually. Lane County average hourly wage is $\$ 25.67$ and \$53,384 annually.

Costs in Addition to Tuition (estimate)*
Books and lab fees .................................................... \$200-300
Students taking courses using CIT labs are assessed a one-time fee up to $\$ 28$ per term. See the CIT department for details.

* Subject to change without notice.

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

Program Advisor Shirley Lukacs, Bldg. 16, Rm. 162M, (541)
463-3244,lukacs@lanecc.edu
Program Counselor Debby Ganser, Bldg. 16, Rm. 162L, (541)
463-5034, ganserd@lanecc.edu
Courses required Credits
ART 288 Introduction to Web Design D,G ............................. 2
CIS 125H SoftwareTools 1: XHTML D,
CS 133JS Beginning Programming Javascript *,D,G,S ........ 4
CS 295 Web Development 1 *,D,G
Total Credits $\quad 13$

## Geographic Information Systems

## Offered by the Social Science Department

## Career Pathway Certificate of Completion

Learning Outcomes The graduate will understand:

- basic cartographic principles of global reference and coordinate systems, maps and generalization.
- types of maps including reference, thematic, topographic, aerial photography.
- skills and techniques used to create, analyze, and display spatial data using geographic information system software.
- principles of information analysis including how information is designed, organized, analyzed, visualized, used and misused.
- use of software tools to communicate information effectively through descriptive statistics and narratives, graphical visualization and mapping applications.
- project management of basic GIS tasks such as data management, cartographic design, and document conversion and analysis.
Courses required
Credits
GIS 245 Maps and Spatial Information D,G, Credits GIS 246 Introduction to GIS D,G,
GIS 248 Applications in GIS,D,G
CIS 247 Information Analysis and Visualization,D,G,S $\qquad$


## Computer Science Transfer

## Offered by the Computer Information Technology Department

## Suggested Course of Study

This is a suggested course of study for students interested in pursuing a bachelor's degree in computer science. A suggested course of study is not the same as a state-approved vocational program in which a student earns a degree or certificate issued by the Lane Board of Education.

Lane Community College offers the first two years of college core computer science and general education courses needed for computer science majors at most Oregon colleges and universities. Certain computer science degree options may require additional courses. Most Lane students transfer to the University of Oregon or Oregon State University, but many have continued successfully at other well-known schools. Students who wish to complete all lower division general education requirements before transferring to Oregon public universities may wish to consider earning an Associate of Arts Oregon Transfer (AAOT) degree while at Lane. At the earliest opportunity, an interested student should meet with one of Lane's Computer Science program advisors. A well-planned course of study at Lane is essential to ensure a smooth transition to a university. In addition, it is very important for a transfer student to consult the computer science advisor at the specific intended transfer college or university.

## Two-Year Core Curriculum

First Year ..... Fall
CS 160 Orientation to Computer Science 5,G ..... 4
CS 161 Computer Science 1 1,G ..... 4
MTH 111 College Algebra ..... 5
WR 121 English Composition: Exposition and Introduction to Argument. ..... 4
Total Credits ..... 17
CS 162 Computer Science 2 1,G
Winter ..... 4MTH 097 Geometry
WR 122 Composition: Style and Argument 54
General Education requirements ${ }^{3}$ ..... 3-4
Total Credits
15-16
CS 260 Data Structures 4,5,G ..... Spring
MTH 112 Trigonometry ..... 4
WR 227 Technical Report Writing G ..... 4
General Education requirements ${ }^{3}$. ..... 3-4
Total Credits ..... 15-16
Second Year ..... Fall
MTH 231 Discrete Mathematics 1 G ..... 4
PH 211 General Physics w/Calculus 2,5,G ..... 5
MTH 251 Calculus 1 G ..... 5
Choice of: ..... 4SP 111 Fundamentals of Public Speaking ${ }^{5}$SP 112 Persuasive Speech ${ }^{5}$


## Computer Simulation and Game Development

## Offered by the Computer Information Technology Department

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 simulation or game programs 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.

Employment Trends The Oregon Labor Market Information System projects statewide 132 annual openings for Computer Programmer, and 11 annual openings for Lane County. For the decade ending in 2014, the statewide projected increase is $15.4 \%$ and for Lane County $14.2 \%$. Related job categories such as Software Engineers show similar employment trends.
Wages Statewide average hourly wage is $\$ 33.39$ and $\$ 69,447$ annually. Lane County average hourly wage is $\$ 25.67$ and \$53,384 annually.

## Costs in Addition to Tuition (estimates)*

## Books and Materials ......................................................... \$1,500

Laptop Computer ................................................................................... \$1,500
CIT Lab Fees ................................................................................. \$ 355
Total......................................ice.
Prerequisites Students must qualify for MTH 111 and WR 121 either by placement testing or completing prerequisite courses. Students should consult with a counselor or advisor to plan a program of study.
Second Year Requirements A personal laptop is required for 2nd-year students in the Computer Simulation and Game Programming degree program. If you receive financial aid, some of those funds may be used for this purchase. Please contact the CIT Department or go to http://www.lanecc.edu/cit for options and system requirements.
Cooperative Education (Co-op) Co-op is a required and important part of the Computer Simulation and Game Development Degree program. It provides relevant field experience that integrates theory and practice while providing opportunities to develop skills, explore career options, and network with professionals and employers in the computer programming field. Contact Larry Scott, Computer Simulation and Game Development Co-op Coordinator, Bldg. 19, Rm. 154, (541) 463-5458, scott@lanecc.edu.
Program Lead Jim Bailey, Bldg. 19, Rm. 146, (541) 463-3148, baileyj@lanecc.edu

Program Advisor Shirley Lukacs, Bldg. 16, Rm. 162M, (541)
463-3244, lukacss@lanecc.edu
Program Counselor Debby Ganser, Bldg. 16, Rm. 162L, (541)
463-5034, ganserd@lanecc.edu

## Computer Simulation and Game Development

## Two-Year Associate of Applied Science Degree

First Year ..... Fall
CIS 100 Computing Careers Exploration D,G ..... 2
CIS 125G Software Tools 1: Game Development D,G ..... 4
CS 133G Beginning C++ Programming for Games D,G,S ... ..... 4
ART 245 Drawing for Media D, ..... 4


Standard footnotes:

* Prerequisite required

A Meets Arts/Letters requirement
B Must be passed with grade of " $\mathrm{B}-$ " or better to use as a prerequisite
D Degree or certificate requirement; must be passed with grade of "C-" or better
G Must be taken for a grade, not P/NP; major requirement

[^14]|  | Spring |
| :---: | :---: |
| CS 253 Computation for Computer Graphics *,D,G,S........... | 4 |
| CS 260 Data Structures *,D,G, | 4 |
| PE/Health requirement ${ }^{\text {R }}$............................................... | 3 |
| Elective Course ${ }^{1}$. | 3 |
| Total Credits | 17 |
| Second Year | Fall |
| CIS 135G Software Tools 2: Game Development *,D,G,S ..... | 4 |
| CS 234G Advanced C++ Programming for Games ${ }^{*}, \mathrm{D}, \mathrm{G}, \mathrm{S}$.. | 4 |
| WR 121 English Composition: Exposition and Introduction to Argument *, W $\qquad$ | 4 |
| MTH 231 Discrete Math 1 *,D,G,S ..................................... | 4 |
| Total Credits | 16 |
|  | Winter |
| CS 235G Software Tools 3: Game Development *,D,G,S | 4 |
| Speech course ${ }^{2}$........................................................... | 4 |
| FA 261 Writing for Interactive Media *, D,G | 3 |
| MTH 232 Discrete Math 2 *,D,G,S | 4 |
| Total Credits | 15 |
|  | Spring |
| CS 297G Simulation and Game Development |  |
| Capstone *,D,G,S .......................................................... | 4 |
| CS 280SGD Co-op Ed: Simulation and Game |  |
| Development (second-year standing required) D,G .......... | 3 |
| CG 203 Human Relations at Work ${ }^{\text {H }}$......................... | 3 |
| MTH 233 Discrete Math 3 *,D,G,S | 4 |

Elective courses: See program counselor or advisor for course suggestions.
Speech course: See program counselor or advisor for course suggestions.

## Computer Game Programming in C++

## Career Pathway Certificate of Completion

Purpose To provide students with the knowledge and skills required to program in $\mathrm{C}^{++}$, specifically focused on simulation and game programming.
Learning Outcomes The certificate recipient will:

- understand the syntax and semantics of $\mathrm{C}++$ 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.

Employment Trends The Oregon Labor Market Information System project statewide 132 annual openings for Computer Programmer, and 11 annual openings for Lane County. For the decade ending in 2014, the statewide projected increase is $15.4 \%$ and for Lane County $14.2 \%$. Related job categories such as Software Engineer, Web Developer, Systems Analyst, Database Programmer show projected increases statewide and for Lane County of $20-25 \%$.

Wages Statewide average hourly wage is $\$ 33.39$ and $\$ 69,447$ annually. Lane County average hourly wage is $\$ 25.67$ and \$53,384 annually.

Costs in Addition to Tuition (estimates)*
Books and lab fees $\qquad$ \$150-\$200
Students taking courses using CIT labs are assessed a one-time fee up to $\$ 28$ per term. See the CIT department for details.

* Subject to change without notice.

Prerequisites Students are expected to be comfortable working on a computer, including the ability to create files with a text editor and manage file folders. CS 260 has a prerequisite of MTH 111.

Certificate Lead Jim Bailey, Bldg. 19, Rm. 146, (541) 463-3148, baileyj@lanecc.edu
Program Advisor Shirley Lukacs, Bldg. 16, Rm. 162M, (541) 463-3244,lukacss@lanecc.edu
Program Counselor Debby Ganser, Bldg. 16, Rm. 162L, (541)
463-5034, ganserd@lanecc.edu

## Courses required

Credits
$\begin{array}{ll}\text { CS 133G Beginning C++ Programming for Games D,G ......... } & 4 \\ \text { CS } 233 G \text { Intermediate C++ Programming for Games }{ }^{*, D, G} & 4\end{array}$
CS 260 Data Structures *,D,G
CS 234G Advanced C++ Programming for Games ${ }^{*}, \mathrm{D}, \mathrm{G} \ldots .$.
Total Credits $\quad 16$

## Computer Specialist

## Offered by the Computer Information Technology Department

## One-Year Certificate of Completion

Purpose To prepare specialists in the use of computer information systems. Specialists use a computer's capabilities as a problem-solving tool for positions that require end-user knowledge of computer hardware, software, and operating procedures.

Learning Outcomes The graduate will:

- have a broad range of skills necessary to be an effective user of information systems.
- have core skills in the use of computers, as well as the related skill areas of mathematics and writing.
- use appropriate library and information resources to research user support issues, concepts, and tools and support lifelong technical learning.
- install and configure operating system software.
- interpret the concepts of a problem-solving task.
- manipulate variables using computer software applications.
- collect and display data as lists, tables, and charts using computer software.
- design web pages and post them to the internet.

Employment Trends The state economist forecasts 12 openings annually for Lane County over the next decade and 126 statewide in Oregon. This remains one of the fastest growing job categories in the county, state, and the nation.

Wages Starting wages in Lane County are $\$ 16.85$ per hour and $\$ 35,048$ annually; statewide in Oregon, starting wages are $\$ 19.02$ per hour and $\$ 39,562$ annually.

## Costs in Addition to Tuition (estimate)*

Books and lab fees ..................................................... \$1,800
Students taking courses using CIT labs are assessed a one-time fee up to $\$ 28$ per term. See the CIT department for details.

* Subject to change without notice.

Prerequisites Students must qualify for WR 121, either by placement testing or completing prerequisite courses, and by the third term, qualify to begin MTH 095. Each student should consult with a counselor or advisor to plan a program of study.

Cooperative Education (Co-op) Co-op is an important part of the Computer Applications Specialist 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. Contact Larry Scott, Computer Specialist Co-op Coordinator, Bldg. 19, Rm. 154, (541) 463-5458, scottl@lanecc.edu.

Program Lead Ron Little, Bldg. 19, Room 156, (541) 463-5464, littler@lanecc.edu

Program Advisor Shirley Lukacs, Bldg. 16, Rm. 162M, (541) 463-3244, lukacss@lanecc.edu

Program Counselor Debby Ganser, Bldg. 16, Rm. 162L, (541) 463-5034, ganserd@lanecc.edu

Note The curriculum for the Computer Specialist certificate is known as the "CIT Core." These courses provide a solid foundation in information technology. The first-year curriculum for the Computer Programming and Computer Network Operations degrees share these core courses. This means that students pursuing either of these degrees may change their degree goals during the first year with very little extra course work required.

CIS 100 Computing Careers Exploration D,G
CIS 102 Problem Solving with Computers D,G $\qquad$
CIS 125H Software Tools 1: XHTML D,G $\qquad$4CIS 140 Operating Systems: Managing Windows D,G
$\qquad$
WR 121 English Composition: Exposition and Introduction to Argument *,W $\qquad$
$\qquad$

ART 288 Introduction to Web Design D,G
CIS 125D Software Tools 1: Databases D,G ..............
CS 179 Introduction to Computer Networks *,D,G,S
Choice of: $\qquad$
ET 287 Microcomputer Hardware D,G
Total Credits
14
CS 133JS Beginning Programming Javascript *,D,G,S
CG 203 Human Relations at Work H4
Choice of: ..... 4
CIS 227N Systems Support: Network andOperating Systems *,D,G
CS 233 Intermediate Programming *,D,GMTH 095 Intermediate Algebra or higher *,M.5
Total Credits ..... 16

## Computer User Support

## Offered by the Computer Information Technology Department

## Two-Year Associate of Applied Science Degree

Note The Computer User Support curriculum is under review for the 2009-10 academic year. Students interested in this area of study should consider taking the CIT Core, described under Computer Specialist. For additional information, contact Shirley Lukacs in the Counseling Department, (541) 463-3244, or the CIT department, (541) 463-5826.

## Construction Technology

## Offered by the Advanced Technology Division

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.

Employment Trends Statewide, 476 annual openings for construction are projected in Oregon and 40 openings are projected annually in Lane County. Those with formal training and related work experience have a competitive advantage in this labor market.

Wages Statewide average, $\$ 18$ hourly, $\$ 39,000$ annually ( $\$ 45,000+$ with experience). Lane County average, $\$ 20$ hourly, $\$ 41,000$ annually.

## Standard footnotes:

## * Prerequisite required

A Meets Arts/Letters requirement
B Must be passed with grade of "B-" or better to use as a prerequisite
D Degree or certificate requirement; must be passed with grade of "C-" or better
G Must be taken for a grade, not P/NP; major requirement

[^15]| Books | \$700 |
| :---: | :---: |
| Tools | \$100-200 |
| Total. | \$800-900 |

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.

Criteria Used for Admission Students may enter this program fall, winter or spring term. Students should attend a program orientation in fall terms (dates available in Counseling or Enrollment and Student Financial Services) or contact advisor/counselor in winter and spring terms.

Cooperative Education (Co-op) Co-op offers students college credit and a grade for on-the-job work experience related to their educational and career goals. Through Co-op, students connect theory and practice, develop skills, expand career knowledge, and make contacts for the future. Work schedules and work sites vary. Under the supervision of the Construction Technology Co-op Coordinator and with instructor consent, a maximum of 18 Co-op credits may be earned in lieu of required Construction Technology course credits. Contact Marv Clemons, Construction Technology Co-op Coordinator, Bldg. 8, Rm. 111, (541) 463-3158.

Program Advisor Betty Svarverud, Bldg. 12, Rm. 203, (541) 463-5378, svarverudb@lanecc.edu

Program Counselor Carolyn Litty, Bldg. 12, Rm. 202, (541) 463-5236, littyc@lanecc.edu

## Two-Year Associate of Applied Science Degree

## First Year

CIS 101 Computer Fundamentals
CST 110 Blueprint Reading $1^{*}$, D,G $\qquad$
CST 111 Construction Orientation and Environment *,1,D,G
[
Environment *,1,D,G
$\qquad$
CST 118 Building Construction *, D,G $\qquad$ MTH 076 Applied Geometry forTechnicians
or higher mathematics ${ }^{*, D, G, M}$ $\qquad$4

Total Credits $\quad 17$

|  | Winter |
| :---: | :---: |
| CST 118 Building Construction ,D,G ................................ | 5 |
| CST 122 Construction Codes D,G .................................... | 2 |
| CST 211 Blueprint Reading 2 *,D,G | 3 |
| $\mathrm{PE} /$ /Health requirement $\mathrm{D}, \mathrm{R}$. | 3 |
| WR 121 English Composition: Exposition and Introduction to Argument *, D,W | 4 |
| Total Credits | 17 |
|  | Spring |
| CST 116 Construction Estimating D,G ............................... | 4 |
| CST 118 Building Construction ${ }^{*}$, D,G . | 5 |
| CST 119 Building Construction Surveying D,G ................... | 3 |
| Human Relations requirement ${ }^{\text {R }}$.................................... | 3 |
| Total Credits | 15 |

Second Year ..... Fall
Arts and Letters requirement ${ }^{R}$. ..... 3
CST 280 Co-op Ed: Construction D,G ..... 3
DRF 142 Graphic Concepts ..... 2
DRF 167 CAD 1 * ..... 4
Directed electives (see list below). ..... 3
Total Credits ..... 15
Winter
CST 280 Co-op Ed: Construction D,G ..... 3
DRF 208 Residential Buildings * ..... 4
Science or Computer Science course ${ }^{\mathrm{R}}$ ..... 3
Directed electives (see list below) ..... 6
Total Credits ..... 16
CST 280 Co-op Ed: Construction D,G
Spring ..... 3
Directed electives (see list below)
Choice of: ..... 3
Arts/Letters, Science or Computer Science course, Social Science/Human Relations requirement ${ }^{R}$Total Credits15
Directed Electives (18 credits required for AAS degree)
Apprenticeship Courses
APPR 101 Trade Skills Fundamentals ..... 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 170 CAD 3D * ..... 4
DRF 205 Drafting: Structures * ..... 4
DRF 207 Drafting: Strength of Materials * ..... 4
Skill Development Courses
LAT 131 Landscape Construction ..... 3
LAT 141 Principles of Nursery Operations ..... 2
LAT 155 Landscape Plants 1 ..... 4
LAT 156 Landscape Plants 2 ..... 4
LAT 157 Landscape Plants 3 ..... 4
WLD 121 Shielded Metal Arc Welding 1 * ..... 4
WLD 122 Shielded Metal Arc Welding 2 * ..... 4
Mathematics Courses, Choice of: MTH 070 Introductory Algebra * ..... 5
MTH 086 Applied Algebra for Technicians * ..... 4
MTH 095 Intermediate Algebra or higher * ..... 5
One-Year Certificate of CompletionFall
CST 118 Building Construction *,D,G ..... 5
CST 110 Blueprint Reading $1^{*}$, D,G ..... 3
CST 111 Construction Orientation and Environment *, $, 1, \mathrm{D}, \mathrm{G}$ ..... 2
MTH 076 Applied Geometry forTechnicians*,D,G,M or higher mathematics ..... 4
CIS 101 Computer Fundamentals ..... 3
Total Credits ..... 17
Winter
CST 118 Building Construction *,D,G ..... 5
CST 122 Construction Codes D,G ..... 2
CST 211 Blueprint Reading 2 *, D,G ..... 3
PE/Health elective D ..... 3
WR 121 English Composition: Exposition and Introduction to Argument *, D,W ..... 4

|  | Spring |
| :---: | :---: |
| CST 116 Construction Estimating D,G .............................. |  |
| CST 118 Building Construction *,D,G ................................ | 5 |
| CST 119 Building Construction Surveying D,G ................... | 3 |
| Human Relations requirement ${ }^{\mathrm{H}}$.............. | 3 |

1 Corequisite requirement is CST 110 Blueprint Reading 1.

## Culinary Arts and Food Service Management

Offered by Culinary Arts and Hospitality Management<br>Two-Year Associate of Applied Science Degree<br>Career Pathway Certificate of Completion, Baking and Pastry

Career Pathway Certificate of Completion, Food Preparation and Production

Purpose To transform student passion for food and cooking into careers as future chefs, restaurant owners, food and beverage managers, and more. The program is accredited by the American Culinary Federation and focuses on classical culinary principles and techniques. Coursework is sequenced in building blocks of knowledge and skills with an emphasis on learning by doing.

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 essential baking and pastry knowledge and skills.
- perform mathematical functions related to food service operations.
- gain hands-on experience planning and preparing large events in the Center for Meeting and Learning.

Employment Trends Statewide, 385 annual openings first-line supervisors/manager of food preparation and serving workers are projected in Oregon, and 33 openings are projected annually in Lane County; statewide, 65 annual openings for chefs and head cooks are projected in Oregon, and 4 openings are projected annually in Lane County; and statewide, 615 annual openings for restaurant cooks are projected in Oregon, and 54 openings are projected annually in Lane County.
Wages Graduates qualify as first-line supervisors/manager of food preparation and serving workers with an annual average hourly rate of $\$ 14.94$ or an average annual salary of $\$ 30,192$; chefs' and head cooks' wages with an annual average hourly
rate of $\$ 17.29$ or an annual salary of $\$ 35,958$; and restaurant cooks' wages with an annual average hourly of $\$ 10.77$ or an annual average salary of $\$ 22,407$ (all statewide figures).

Costs in Addition to Tuition (2-year program estimate)*
Program fee (non-refundable)
Books, class fees, college fees, etc. .......................... \$5,085
Differential tuition.
\$2,900
Total estimate \$8,310
Some courses in this program have differential fees. See the online credit class schedule for current course fees.

* Subject to change without notice.

Licensing and Other Certification Exams Required During the course of the program, students earn a Lane County Food Handlers Card and Serv-Safe National Certification. Students may be eligible to take National Restaurant Association Education Foundation (NRAEF) certificate examinations for various courses.

Prerequisites Students can enter the Culinary Arts sequence in fall term only. Complete college placement tests with the following minimum scores: writing-64, reading-68 and readiness for MTH 025 - taking Math Placement Test Parts A, B and C - 7 out of 10 in each part, and attach copies of test score sheets to application. Students with prior college credit may attach a copy of transcript(s). Math must be current within one year or a placement test will need to be taken.
Admission Deadline Student applications are accepted beginning March 1 and are reviewed and interviews are held spring and summer terms for fall admission. Steps to be completed for entry into the Culinary Arts program include the following:

1. Complete an application for admission to Lane Community College, available in Enrollment and Student Financial Services or online at lanecc.edu/es/admissions.html.
2. Complete an application for admission to the Culinary Arts program, available from the Culinary Arts and Hospitality Management office or online at lanecc.edu/culinary.
3. Submit the completed Culinary Arts application with supporting documentation to the Culinary Arts and Hospitality Management office. Applications are accepted March 1-June 30. Late applications accepted through August 30, if spaces are available.

Number of New Students Admitted Annually Facilities limit the number of students admitted to this program. Approximately 70 students enter the program in the fall.
Criteria Used for Admission Students are selected based on timely application to the program and a point allocation system. Students may be called for interviews.

Cooperative Education (Co-op) Students earn credit for on-thejob 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, Hospitality Cooperative Education Coordinator, Bldg. 19, Rm. 210, (541) 463-3516.

[^16][^17]Program Advisor Betty Svarverud, (541) 463-5378
Program Counselor Carolyn Litty, (541) 463-5236
Program Contact Denise Elder, (541) 463-3503
Note All CA, FN, and HRTM courses required for this program must be taken for a grade, not pass/no pass, and must be passed with a grade of C- or better. MTH 025 or higher required for program.

| Two-Year Associate of Applied Science Degree |  |
| :---: | :---: |
| First Year | Fall |
| CA 160 Introduction to Cooking Theories $1^{*}$, D, G. | 5 |
| CA 175 Foodservice Sanitation and Safety ........ | 2 |
| CG 203 Human Relations at Work H | 3 |
| HRTM 105 Restaurant Operations D,G |  |
| MTH 025 Basic Mathematics Applications or higher *,D,M | 3 |
| Total Credits | 16 |
|  | Winter |
| CA 162 Introduction to Cooking Theories 2 *, D, G . | 6 |
| CA 184 Dining Room and Kitchen Lab 1 *, D, G | 3 |
| FN 105 Nutrition for Foodservice Professionals D,G........... | 3 |
| Program Electives ........................................................ | 2-3 |
|  | 3 |
| Total Credits | 17-18 |
|  | Spring |
| CA 163 Introduction to Cooking Theories 3 *,D,G ............... | 6 |
| CA 185 Dining Room and Kitchen Lab 2 *,D,G .................. | 4 |
| CA 200 Restaurant and Menu Management D,G ................ | 3 |
| WR 115W Introduction to College Writing: |  |
| Workplace Emphasis or higher W.................................. | 3 |
| Total Credits | 16 |


| CA 280 Co-op Ed: Culinary Arts, Second Year D,G | Summer |
| :---: | :---: |
|  | 6 |
| Total Credits | - 6 |
| Second Year | Fall |
| CA 186 Dining Room and Kitchen Lab 3 *, D,G ................... | 4 |
| CA 279 Buffet and Banquet Planning *, D,G . | . 2 |
| CA 292 Advanced Cooking Theories 1 <br> (Garde Manger) *,D,G | - 3 |
| HRTM 265 Hospitality Financials 1 D,G | 3 |
| Program Electives............................................. | 2-5 |
|  | - 14-17 |
|  | Winter |
| CA 176 Concepts of Taste and Flavor *,D,G ....................... | 2 |
| CA 187 Dining Room and Kitchen Supervision *,D,G .......... | 4 |
| CA 279 Buffet and Banquet Planning *,D,G. | - 2 |
| CA 293 Advanced Cooking Theories <br> (International Cuisine) *, D,G. $\qquad$ | - 3 |
| HRTM 275 Hospitality Financials 2 *,D,G | - 3 |
| Program Electives........ | . 2-3 |
| Science/Math/Computer Science requirement ${ }^{\text {R }}$............... | . |

[^18]CA 279 Buffet and Banquet Planning *,D,G
Spring
2CA 294 Advanced Cooking Theories 3
(American Regional) *,D,G ..... 3
CA 297 Culinary Leadership *,D,G ..... 3
HE 252 First Aid D,P ..... 3
Program Electives ..... 2-6
Choice of: ..... 3
Arts and Letters requirement ${ }^{R}$
Science/Math/Computer Science requirement ${ }^{R}$
Total Credits ..... 16-20
Elective Offerings
CA 110 Culinary Adventuring:
Local Guest Chef Series D, G ..... 2
CA 130 Culinary Adventuring: Oregon Wine Country D, G ..... 2
CA 120A Culinary Adventuring:
Seasonal Baking and Pastry/Autumn D, G ..... 2
CA 120B Culinary Adventuring:
Seasonal Baking and Pastry/Spring D, G ..... 2
CA 121 Culinary Adventuring: ..... 2
CA 122 Culinary Adventuring: Artisan
Breads D, G ..... 2
CA 199 Culinary Adventuring new classes D, G ..... 1-8
CA 277 Culinary Competition Lab D, G ..... 2
CA 225 Catering Lab D, G ..... 2
CA 123 International Baking and Pastry ..... 2
HRTM 281 Restaurant Ownership ..... 3
HRTM 286 Fundamentals of Wine, Beer and Spirits D, G. ..... 3
CA 160A Food Preparation and Production ..... 3
CA 163A Beginning Baking and Pastry ..... 3
CA 163B Intermediate Baking and Pastry ..... 3
CA 163C Advanced Baking and Pastry ..... 3
HRTM 150 At Your Service ..... 2
FN 255 Introduction to Medical Nutrition Therapy * ..... 3
Baking and Pastry
Career Pathway Certificate of Completion
CA 163A Beginning Baking and Pastry D, G ..... 3Fall
CA 175 Foodservice Safety and Sanitation D, G ..... 2
Seasonal Baking and Pastry/Autumn D, G ..... 2
Total Credits ..... 7
Winter
CA 163B Intermediate Baking and Pastry D,G ..... 3
MTH 025 Basic Mathematics*, D, M ..... 3
CA 123 International Baking D, G ..... 2
Spring
CA 163C Advanced Baking and Pastry D, G ..... 3
CA 121 Composition of Cake D, G ..... 2
CA 120B Culinary Adventuring:
Seasonal Baking and Pastry/Spring D, G ..... 2

## Food Preparation and Production

| Career Pathway Certificate of Completion |  |
| :---: | :---: |
| CA 160 A Food Preparation and Production D, G................ | 3 |
| CA 175 Foodservice Sanitation and Safety D, G............. | 2 |
| HRTM 105 Restaurant Operations D, G..... | 3 |
| Total Credits | 8 |
|  | Winter |
| Program Elective D, G. | 2 |
| Program Elective D, G. | 2 |
| CG 203 Human Relations at Work ${ }^{\text {H }}$............... | 3 |

Check current class schedule for terms offered or go to:
lanecc.edu/culinary/culinary adventuring.
Students may take Cooperative Education any term approved by the coordinator.

Students interested in transferring to a four-year institution should:

1. Substitute WR 121 classes for WR 115 W .
2. Add MTH 111 and MTH 112.
3. Add a speech course.
4. Add WR 122 and WR 123

## Dance

Offered by Music, Dance and Theatre Arts

## Suggested Course of Study: Major in Dance

This curriculum is designed for the student who intends to complete requirements for a two-year associate of arts Oregon transfer degree and transfer to a four-year college or university as a major in dance. A suggested course of study is not the same as a state-approved vocational program in which a student earns a degree or certificate issued by the Lane Board of Education.

To prepare for transfer, students work toward the goal of achieving technical proficiency in dance equivalent to that of a third-year (junior) student, while completing the requirements for an AAOT degree. Though the following course of study is a general curriculum designed for the full-time student, part-time students may also use it as a guide. Individual technical progress will vary, but it is recommended that a student take a full year of Modern and Ballet at an appropriate level before moving up to a higher level. Group requirements vary with degree goals and college. Students interested in pursuing an associate's or bachelor's degree should see Music, Dance and Theatre Arts advisor Tim Blood as well as dance program director Bonnie Simoa Reid, for information and advice.
Beginning ..... Fall
D 185 Ballet 1 ..... 2
D184 Hip Hop 1 ..... 2
Choice of:. ..... 2
D 152 Dance Basics
D180 Modern Dance 1
Choice of: ..... 2
D 183 Body Mind Stretch and Relaxation
D172 Dancing the Fluid Body
D 153 Pilates Mat Work 1 or
D 154 Pilates Mat Work 2
Group requirements ..... 9
D 185 Ballet 1 .................................................................... Winter 2
D184 Hip Hop 1 ..... 2
D180 Modern Dance 1 ..... 2
Choice of: ..... 2
D 183 Body/Mind Stretch and Relaxation
D 153 Pilates Mat Work 1 or
D 154 Pilates Mat Work 2
D172 Dancing the Fluid Body
Group requirements ..... 9
Total Credits
Spring
D 185 Ballet 1 ..... 2
D 184 Hip-Hop 1 ..... 2
Group requirements ..... 9
Choice of: ..... 2
D 183 Body Mind Stretch and Relaxation
D 153 Pilates Mat Work 1 or
D 154 Pilates Mat Work 2
D 176 FluidYoga ${ }^{3}$
Total Credits ..... 19
Intermediate ..... Fall
D 186 Ballet 2 ..... 2
D 182 Modern Dance 2 ..... 2
D 189 Jazz Dance 2 ..... 2
D 257 Dance Improvisation ${ }^{3}$ ..... 3
D 256 Body Fundamentals/Body as Knowledge 1,2,3. ..... 4
Group requirements ..... 6
Total Credits ..... 19
D 186 Ballet 2 ..... 2
D 190 Jazz Dance 3 ..... 2
D 251 Looking at Dance ${ }^{2}$ ..... 4
D 153 Pilates Mat Work 1 or
D 154 Pilates Mat Work 2
D 172 Dancing the Fluid Bod
Group requirements ..... 6
Total Credits ..... 19

[^19][^20]

## Dental Assisting

## Offered by Health Professions Division

One-Year Certificate of Completion
For additional information, see lanecc.edu/fhc/dental/da.htm
Purpose To prepare graduates for employment in the dental setting, with emphasis on current concepts of clinical chairside assisting. Included classes also offer some cross-training and pathways to receptionist-bookkeeper, office manager or laboratory technician.

Learning Outcomes The graduate will:

- demonstrate knowledge and skills required to collect diagnostic data systematically.
- demonstrate knowledge and skills required to perform a variety of clinical supportive treatments.
- demonstrate knowledge and skill required to accurately expose, develop and mount diagnostic radiographs
- demonstrate knowledge and skills required for business office procedures.
- demonstrate knowledge and skills required to access information via dental journals and web sites.
- demonstrate knowledge and skills needed to compute mixing amounts for impression materials, cements, and disinfecting/sterilizing solutions, as well as calculate plaque indexing and inverse square law.

Employment Trends About 96 percent of graduates find employment in the Eugene/Springfield area. The remaining four percent are able to find employment in other parts of the state. The state economist projects 22 positions available annually in Lane County, and 265 openings annually statewide. It is estimated that positions available in Oregon will increase by 1,316 between 2006 and 2016.

Wages Starting salary in the Eugene/Springfield area ranges from \$12.50-13.50 hourly or \$26,000-28,080 annually. Average 2008 wages in Lane County were $\$ 17.23$, hourly, or $\$ 35,696$, annually. Statewide average 2008 wages were $\$ 17.30$ hourly, or $\$ 35,976$, annually.

## Tuition (estimate)*

* Subject to change without notice. Miscellaneous costs could be up to $\$ 2500$, including national and state exams. The faculty strives to minimize costs for additional materials in classes.

Program Accreditation American Dental Association's Commission on Dental Accreditation, a specialized accrediting board recognized by the U.S. Department of Education.
Licensing or Other Certification Exams Required Certificate of Radiological Proficiency, with proficiency examination administered by the Dental Assisting National Board. Students complete three National Board examinations each year and are also eligible to receive all state required credentials.

Prerequisites Dental Assisting is a concentrated program that requires good reading and study skills. Students are encouraged to take DA 110 Health Sciences and DA 103 Dental Law and Ethics prior to entry into the program. Evidence of a physical examination (within the previous nine months) must be submitted prior to admission to the program.

## First Day Enrollment requirements

MTH 025 Basic Math Applications (or higher) *,M ..... 3 credits
Human Relations requirement ${ }^{\mathrm{G}, \mathrm{R}}$.
3 credits
Choice of:
3-4 credits
WR 115 Introduction to College Writing G,W
WR 121 English Composition: Exposition and Introduction to Argument ${ }^{\mathrm{G}, \mathrm{W}}$
Computer competency by successful completion of one of the following courses or demonstrated proficiency to the program coordinator prior to fall term:
CIS 101 Computer Fundamentals or
CS 120 Concepts of Computing: Information Processing
Admission Deadline See application packet for detailed information.

Admission Information Beginning fall term, application packets with admission information are available at lanecc.edu/fhc/dentalassisting. An applicant must be an Oregon resident with a high school diploma or a GED certificate. The admissions process includes screening examinations and submission of transcripts. Enrollment in this program is limited to 30 students per year. Students who have been accepted into the Dental Assisting program may arrange to complete the program over a two-year period.

Continuing Education The employed dental assistant may register for any course offered by contacting the Interim Program Coordinator, Leslie Greer (541) 463-5616. Expanded functions are taught during Advanced Clinical Experiences in the spring term. This class is open to qualified working chairside assistants if space permits and if the working assistant meets state credentialing qualifications.

Cooperative Education (Co-op) Co-op is a required class for students enrolled in the Dental Assisting Program. Through Co-op, students spend a minimum of 24 hours a week during spring term working in at least two different professional dental offices. Co-op offers students the opportunity to gain skills, connect theory and practice, and make contacts for employment. Contact the Dental Assisting Co-op Coordinator, Leslie Greer (541) 463-5638.

Program Advisor Rosa Lopez, Bldg. 1, (541) 463-5660, lopezr@lanecc.edu

Program Counselor Leslie Soriano, Blg 1 (541) 463-5512
soriano-cervantesl@lanecc.edu


1 To be taken first year if program extended over two years.
2 Must be enrolled in Dental Assisting Program
3 Degree or certificate requirement. Must be passed with a grade of $75 \%$ or better to remain in the Dental Assisting program.
4 online class only

## Standard footnotes:

* Prerequisite required

A Meets Arts/Letters requirement
B Must be passed with grade of " $\mathrm{B}-$ " or better to use as a prerequisite
D Degree or certificate requirement; must be passed with grade of "C-" or better
G Must be taken for a grade, not P/NP; major requirement

## Dental Hygiene

## Offered by Health Professions Division

## Two-Year Associate of Applied Science Degree

See lanecc.edu/fhc/dental/dh.htm for additional information and the admission packet.

Purpose To prepare graduates for careers as licensed clinical dental hygienists providing preventive, therapeutic, and educational methods for the control of oral disease and promoting health services for optimal oral health.

Learning Outcomes The graduate will:

- discern and manage ethics, values, knowledge and skills using critical thinking and problem solving in the provision of evidence based dental hygiene practice.
- provide planned educational and clinical services using appropriate interpersonal communication, instrumentation skills, and educational strategies.
- initiate and assume responsibility for health promotion and disease prevention activities.
- use assessment, planning, implementation and evaluation in the provision of dental hygiene care for the general dental patient and special needs populations.
- use electronic data bases to retrieve evidence-based literature for application to patient care and community dental program planning
- use mathematical and statistical concepts to calculate dosages and assess dental research/literature for application to clinical and preventive dental care strategies.

Employment Trends Job prospects in Eugene and surrounding counties are competitive. Statewide, projected annual openings are 122 , with 28 openings annually in the Mid-Willamette region. This occupation is expected to grow much faster than the statewide average.

Wages Mid-Willamette region averages between \$32-\$37 hourly with up to $\$ 77,000$ annually.

Estimated Program Costs tuition, differential fees, program course fees and instrument issue.* See the online credit class schedule for current course fees.

* Subject to change without notice.

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 Required National Dental Hygiene Board and the Western Regional Examining Board for Local Anesthesia, Restorative Dentistry and Clinical Dental Hygiene. Examination fees estimated at $\$ 2,000$ are paid in January of the second year of the curriculum. At program completion application for licensure with the Oregon Board of Dentistry (oregondentistry.org) includes a criminal background check.

[^21]Admission Information and Deadline Application information is available online at lanecc.edu/fhc/dental or at Counseling and Advising.

Number of New Students Admitted Annually Twenty on the main campus, with class size dependent on college budgetary and clinical facility considerations. Oregon distance learning clinical sites will have 5-6 students. Start-up of distance learning sites are sponsored by Northwest Partnerships for Dental Hygiene Solutions from a Department of Labor Employment and Training Administration "President's Community Based Job Training Grant".

Criteria Used for Admission The admission packet is found on the program website at lanecc.edu/dental.
Selection to the program is by a point system from a pool of qualified applicants. Information on the point allocations system is available from the program website. Advanced placement information is available through the program coordinator. Oregon residents only may apply. Distance site openings for Oregon will be posted on the program web site when available. Admission to these sites will be available to applicants from sponsoring partner college regions. Out of state distance clinical sites and admission information will be posted on partner college web sites. International student applications are not accepted. In the admission process, completion of non-dental hygiene numbered courses is weighted heavily.

Prerequisites In order to apply for entry all applicants must complete the following minimum prerequisites with a grade of C or better. Other specialized program requirements will be described in acceptance materials.

The following courses or their equivalent are required in order to apply to the program.
BI 112 Cell Biology for Health Occupations *,G,S ................. 3
CH 112 Chemistry for Health Occupations ${ }^{*}, \mathrm{G}, \mathrm{S}$................... 3
WR 121 English Composition: Exposition and Introduction to Argument *, $\mathrm{G}, \mathrm{W}$ $\qquad$
BI 231 Human Anatomy and Physiology 1 *,D,G,S ............... 4
BI 232 Human Anatomy and Physiology 2 *,D,G,S ............... 4
FN 225 Nutrition 1,D,G
Choice of:
SOC 204 Introduction to Sociology G, H
SOC 205 Social Stratification and Systems G,H
SOC 206 Institutions and Social Change G, H
MTH 052 Math for Introductory Physical Sciences *, G,M or higher mathematics
Choice of:............................................................................. 4
SP 100 Basic Communication A,D,G
SP 111 Fundamentals of Public Speaking A,D,G
Choice of:
PSY 201, 202, 203 General Psychology ${ }^{\text {G }}$
Total Credits
Admission Information including a point allocation chart can be found at lanecc.edu/dental.

Cooperative Education (Co-op) Co-op offers students college credit and a grade for on-the-job work experience related to their educational and career goals. Through Co-op, students connect theory and practice, develop skills, expand career knowledge, and make contacts for the future. Work schedules
and work sites vary. Only students who have received their official program acceptance letter or who are currently enrolled in the dental hygiene program may take Dental Hygiene Co-op. Contact Leslie Greer, Dental Hygiene Co-op Coordinator, (541) 463-5638.

Program Advisor Rosa Lopez, Bldg. 1, Rm. 103
(541) 463-5660, lopezr@lanecc.edu

Program Counselor Leslie Soriano, Bldg. 1, (541) 463-5802, soriano-cervantes@lanecc.edu

First Year

DH 107 Dental Infection Control and Safety 1,2,G
DH 113 Dental Anatomy and Histology *, $1,2, \mathrm{G}$.2
DH 118A Clinical Dental Hygiene 1 *, 1,2,G. ..... 4
DH 118B Clinical Dental Hygiene 1 Lab*,1,2,G. ..... 2
DH 228 Oral Biology 1 *, $1,2, \mathrm{G}$ ..... 4
DH 243A Oral Roentgenology 1 *,1,2,G ..... 2
DH 243B Oral Roentgenology 1 Lab *,1,2,G ..... 1
Total Credits ..... 16
Winter
DH 119A Clinical Dental Hygiene 2 *,1,2,G ..... 3
DH 119B Clinical Dental Hygiene 2 Lab *,1,2,G ..... 4
DH 139 Special Needs Dental Patient $1,2, \mathrm{G}$ ..... 2
DH 229 Oral Pathology for the Dental Hygienist *,1,2,G ..... 3
DH 244A Oral Roentgenology 2 *, 1,2,G ..... 1
DH 244B Oral Roentgenology 2 Lab *,1,2,G ..... 1
Total Credits ..... 14
Spring
BI 233 Human Anatomy and Physiology 3 *,2,G,S ..... 4
BI 234 Introductory Microbiology *,2,G,S ..... 4
DH 120A Clinical Dental Hygiene 3 *, 1,2,G ..... 3
DH 120B Clinical Dental Hygiene 3 Lab *, $1,2, \mathrm{G}$ ..... 4
DH 132 Dental Materials for the Dental Hygienist *,1,2,G ..... 2
DH 254 Pharmacology *,1,2,G ..... 3
Total Credits ..... 20
Summer
DH 280 Co-op Ed: Dental Hygiene (optional) ..... (3)
Second Year ..... Fall
DH 220A Clinical Dental Hygiene 4 *,1,2,G ..... 2
DH 220B Clinical Dental Hygiene 4 Lab *,1,2,G ..... 5
DH 233 Local Anesthesia *,2,G ..... 3
DH 270 Periodontology $1 *, 1,2, \mathrm{G}$ ..... 2
DH 275 Dental Hygiene Restorative Functions 1 *, 2, G ..... 24WR 123 Composition: Research *,A,2,,WR 227 Technical Writing ${ }^{*}, \mathrm{~A}, 2, \mathrm{G}$
Total Credits ..... 18
Winter
2
DH 221B Clinical Dental Hygiene 5 Lab ${ }^{*}, 1,2, \mathrm{G}$ ..... 6
DH 237 Community Dental Health 1,2,G ..... 3
DH 271 Periodontology 2 *,1,2,G ..... 1
DH 276 Dental Hygiene Restorative Functions 2 *, 2, G. ..... 1
Total Credits ..... 13

|  | Spring |
| :---: | :---: |
| DH 222A Clinical Dental Hygiene 6 *,1,2,G ........................ | 2 |
| DH 222B Clinical Dental Hygiene 6 Lab*,1,2,G ................... | 5 |
| DH 234 Trends and Issues in Dental Hygiene *,1,2,G........... | 2 |
| DH 238 Community Dental Health *,1,2,G .......................... | 1 |
| Total Credits | 10 |

2 Must be passed with a grade of "C" or better

## Diesel Technology

## Offered by the Advanced Technology Division

Two-Year Associate of Applied Science Degree Lift Truck/Material Handling Equipment Technician Option

## Two-Year Certificate of Completion

Purpose To prepare the graduate for employment in occupations such as heavy equipment technician, highway truck technician, and lift truck and material handling technician. Possible job opportunities are available with truck fleets, logging fleets, heavy construction companies, OEM dealerships, road construction contractors, parts sales and service, and general heavy equipment repair shops.

Learning Outcomes The graduate will:

- be able to explain and identify various technologies used in the repair of on- and off-highway vehicles.
- use lab station simulators to diagnose and troubleshoot system components.
- demonstrate checks and adjustments on heavy equipment chassis and power trains, including on highway automatic transmissions.
- demonstrate diesel engine overhaul procedures using industry standard tooling and equipment including disassembly, failure analysis, assembly, and operation of engine on a dynamometer.
- demonstrate industry troubleshooting procedures to diagnose electrical systems including starting, charging, air conditioning, electronic control systems and lighting.
- demonstrate industry troubleshooting procedures to diagnose hydraulic systems used on off- and on-highway vehicles including forklifts, crawlers, excavators, backhoes, skidsteers, and powershift transmissions.
- demonstrate and use industry safety standards.
- access library, computing, and communications services and obtain information and data from regional and national networks.
- demonstrate basic math skills using formulas to find force, pressure, area, and volume.

The lift-truck material handling option graduate will also:

- demonstrate general maintenance, diagnosis, and testing of hydraulic systems on forklifts, loaders, and equipment with hydraulic assist transmissions.

Employment Trends Statewide,164 annual openings for diesel technicians are projected in Oregon and 17 openings are projected annually in Lane County. Those with an associate degree have a competitive advantage in this labor market.

Wages Statewide average, $\$ 20$ hourly, $\$ 40,000$ annually ( $\$ 50,000+$ with experience). Lane County average, $\$ 20$ hourly, $\$ 41,000$ annually.

## Costs in Addition to Tuition and Registration Fees (estimates)*



Program Accreditation Association of Equipment Distributors Foundation (AEDF). Membership: Northwest Diesel Industry Council (NDIC).

Prerequisites Minimum placement score- of 68 in Reading OR completion of RD 080 OR prior college. A high school diploma or equivalent is recommended for all applicants to this program.
Note: See counselor or advisor to learn what entry-level skills are suggested for successful completion of this program.

Criteria Used for Admission Students may enter this program fall, winter, or spring term. For consent to enroll in major courses, students must attend a program orientation for fall terms (dates available in Counseling or Enrollment and Student Financial Services) or contact advisor/counselor in winter and spring terms.

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. 8, Rm. 111, (541) 463-3158.

Program Advisor Betty Svarverud, Bldg. 12, Rm. 203, (541) 463-5378, svarverudb@lanecc.edu

Program Counselor Carolyn Litty, Bldg. 12, Rm. 202, (541) 463-5236, littyc@lanecc.edu

Two-Year Associate of Applied Science Degree First Year Fall
DS 155 Heavy Equipment Hydraulics *,D,G......................... 12
MTH 060 Beginning Algebra*,D,G,M
or higher mathematics..................................................... 4
Total Credits $\quad 16$
DS 154 Heavy Duty Braking Systems *,D,G......................... $\begin{array}{r}\text { Winter } \\ 12\end{array}$
WLD 121 Shielded Metal Arc Welding $1^{*}$........................... 4
PE/Health requirement $D, R$................................................. 3
Total Credits
19

[^22][^23]|  | Spring |
| :---: | :---: |
| DS 158 Heavy Equipment Chassis and PowerTrains *,D,G. | 12 |
| Human Relations requirement ${ }^{\text {R }}$ | 3 |
| WR 115W Introduction to College Writing: Workplace |  |
| Emphasis D,W or higher writing..................................... | 3 |
| Total Credits | 18 |
| Second Year | Fall |
| DS 256 Diesel and Auxiliary Fuel Systems *,D,G | 12 |
| MTH 076 Applied Geometry for Technicians *,S or higher mathematics. | 4 |
| Choice of:.................. | 3-4 |
| MFG 197 Manufacturing Technology *, D, G |  |
| WLD 122 Shielded Metal Arc Welding 2 * |  |
| Total Credits | 19-20 |
|  | Winter |
| DS 257 Diesel Electrical Systems *,D,G | 12 |
| CS 120 Concepts of Computing: Information Processing S or higher computer science $\qquad$ | 4 |
| WLD 143 Wire Drive Welding $1^{*}$...................................... | 4 |
| Total Credits | 20 |
|  | Spring |
| DS 259 Diesel Engines and Engine Overhaul *,D,G ............ | 12 |
| Arts and Letters requirement ${ }^{\mathrm{R}}$. | 3 |
| Total Credits | 15 |
| Elective DS 280 Co-op Ed: Diesel (optional) |  |
| Two-Year Certificate of Completion |  |
| First Year | Fall |
| DS 155 Heavy Equipment Hydraulics *,D,G . | 12 |
| MTH 060 Beginning Algebra or MTH 076 Applied Geometr Technicians *,D,G,M or higher mathematics. | y for <br> 4 |
| Total Credits | 16 |
|  | Winter |
| DS 154 Heavy Duty Braking Systems *,D,G | 12 |
| WLD 121 Shielded Metal Arc Welding 1 * ........................ | 4 |
| Total Credits | 16 |
|  | Spring |
| DS 158 Heavy Equipment Chassis and PowerTrains *,D,G . | 12 |
| Human Relations requirement ${ }^{\text {H }}$..................................... | 3 |
| WR 115W Introduction to College Writing: Workplace Emphasis D,W or higher writing. $\qquad$ | 3 |
| Total Credits | 18 |
| Second Year | Fall |
| DS 256 Diesel and Auxiliary Fuel Systems *,D,G ................ | 12 |
| Choice of:. | 3-4 |
| MFG 197 Manufacturing Technology *,D,G |  |
| WLD 122 Shielded Metal Arc Welding 2 * |  |
| Total Credits | 15-16 |
|  | Winter |
| DS 257 Diesel Electrical Systems *,D,G | 12 |
| WLD 143 Wire Drive Welding 1 *..................................... | 4 |
| Total Credits | 16 |
|  | Spring |
| DS 259 Diesel Engines and Engine Overhaul *,D,G ............ | 12 |
| PE/Health elective ${ }^{\text {D }}$ | 3 |
| Total Credits | 15 |

Human Relations requirement ${ }^{R}$...........................................
WR 115W Introduction to College Writing: Workplace
Emphasis $\mathrm{D}, \mathrm{W}$ or higher writing

Second Year

Choice of:......................................................
MFG 197 Manufacturing Technology *,D,G
WLD 122 Shielded Metal Arc Welding 2 *

DS 257 Diesel Electrical Systems *,D,G nter

CS 120 Concepts of Computing: Information Processing S or higher computer science
WLD 143 Wire Drive Welding $1^{*}$
Total Credits

DS 259 Diesel Engines and Engine Overhaul *,D,G

Arts and Letters requirement $R$
Total Credits
15
Elective DS 280 Co-op Ed: Diesel (optional)
Two-Year Certificate of Completion

DS 155 Heavy Equipment Hydraulics *,D,G Applied Geometry for

Total Credits

DS 154 Heavy Duty Braking Systems *, D,G *.

Total Credits

## Diesel Technology: Lift Truck/Material Handling Equipment Technician Option

## Two-Year Associate of Applied Science Degree

First Year ..... Fall
DS 155 Heavy Equipment Hydraulics *, D,G ..... 12
MTH 060 Beginning Algebra*,D,G,Mor higher mathematics.4
Total Credits ..... 16
DS 257 Diesel Electrical Systems *,D,G ..... 12
WLD 121 Shielded Metal Arc Welding 1* ..... 4
PE/Health requirement $\mathrm{D}, \mathrm{R}$ ..... 3
Total Credits ..... 19
DS 259 Diesel Engines and Engine Overhaul ${ }^{*}, \mathrm{D}, \mathrm{G}$ ..... 8
DS 260 Lift Truck/Material Handling Equipment
(Electric) D,G ..... 4
Human Relations requirement ${ }^{R}$ ..... 3
WR 115W Introduction to College Writing: Workplace Emphasis D,W or higher writing. ..... 3
Total Credits ..... 18
Second Year ..... Fall
DS 260 Lift Truck/Material Handling Equipment (Mast/Upright) D,G ..... 6
DS 256 Diesel and Auxiliary Fuel Systems *,D,G ..... 6
MTH 076 Applied Geometry for Technicians *,S or higher mathematics ..... 4
Choice of: ..... 3-4
WLD 122 Shielded Metal Arc Welding 2 *MFG 197 Manufacturing Technology ${ }^{*}$,D,G
Total Credits ..... 19-20
Winter
AM 244 Engine Performance *,D,G ..... 4
CS 120 Concepts of Computing: Information Processing S ..... 4
DS 260 Lift Truck/Material Handling Equipment (Electric) D,G ..... 5
DS 154 Heavy Duty Braking Systems *, D,G ..... 3
WLD 143 Wire Drive Welding $1^{*}$ ..... 4
Total Credits ..... 20
Spring
DS 260 Lift Truck/Material Handling Equipment (Electric/ Maintenance/Schematics) D,G ..... 9
DS 158 Heavy Equipment Chassis and Power Trains *,D,G. ..... 3
Arts and Letters requirement ${ }^{R}$ ..... 3
Elective DS 280 Co-op Ed: Diesel (optional)

## Drafting

Offered by the Advanced Technology Division
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.

Employment Trends Statewide, 267 annual openings for drafters are projected in Oregon and 23 openings are projected annually in Lane County. Those with an associate degree have a competitive advantage in this labor market.
Wages Statewide average, $\$ 22$ hourly (one-year certificate, \$912, hourly), \$42,000 annually. Lane County average, \$19 hourly, \$39,000 annually. Typical entry-level wages are between $\$ 9-15$ hourly. (This information is based on published data from the Oregon Department of Labor, 2008.)

| Costs in Addition to Tuition and Registration Fees (estimates)* |  |
| :---: | :---: |
| Books | \$1,250 |
| Tools | \$ 25 |
| Total | \$1,275 |
| Subject |  |

Prerequisites Minimum placement score- of 68 in Reading OR completion of RD 080 OR prior college. A high school diploma or equivalent is recommended for all applicants to this program. Basic computer literacy skills are a prerequisite to any CAD course.

Criteria Used for Admission Normal program entry is fall term. A program orientation is held for new students for fall term (dates available in Counseling or Enrollment and Student Financial Services). Contact advisor/counselor for assistance for winter and spring term entry.

Cooperative Education (Co-op) Co-op offers drafting students college credit and a grade for on-the-job work experience related to their educational and career goals. Through Co-op students connect theory and practice, develop skills, expand career knowledge, and make contacts for the future. Work schedules and work sites vary. Contact Tamara Pinkas, Drafting Co-op Coordinator, Bldg. 19, Rm. 231D, (541) 463-5011, pinkast@lanecc.edu.

Program Advisor Betty Svarverud, Bldg. 12, Rm. 203, (541) 463-5378, svarverudb@lanecc.edu

Program Counselor Carolyn Litty, Bldg. 12, Rm. 202, (541) 463-5236, littyc@lanecc.edu

## Two-Year Associate of Applied Science Degree

| First Year | Fall |
| :---: | :---: |
| DRF 142 Graphic Concepts *,D,G . | 2 |
| DRF 167 CAD $1{ }^{*}$, D,G . | 4 |
| CS 120 Concepts of Computing: Information Processing or higher computer science, $s$ $\qquad$ | 4 |
| MTH 076 Applied Geometry for Technicians*,D,G,M or higher mathematics | 4 |
| Total Credits | 14 |
|  | Winter |
| CST 122 Construction Codes $\mathrm{D}, \mathrm{G}$.. | 2 |
| DRF 168 CAD 2 *, D,G. | 4 |
| DRF 208 Residential Buildings *,D,G. | 4 |
| Human Relations Requirement ${ }^{\text {a }}$. | 3 |
| MTH 086 Applied Algebra for Technicians ${ }^{*}$, S or higher ..... | 4 |
| Total Credits | 17 |
|  | Spring |
| DRF 121 Mechanical Drafting ${ }^{*}$, D,G .. | 4 |
| DRF 137 Architectural Drafting - Plans *,D,G. | 4 |
| DRF 206 Co-op Ed: Drafting Seminar D. | 2 |
| DRF 245 Solid Modeling *,D,G . | 3 |
| WR 121 English Composition: Exposition and Introduction to Argument *,D,W | 4 |

DRF 142 Graphic Concepts *,D,G2
DRF 167 CAD 1 *, D,G. ..... 4
or higher computer science, s ..... 4
or higher mathematics. ..... 4
CST 122 Construction Codes D,G ..... 2
DRF 208 Residential Buildings *,D,G4
Human Relations Requirement ${ }^{R}$ ..... 3
MTH 086 Applied Algebra for Technicians ${ }^{*}$,S or higher. ..... 4
Spring
DRF 121 Mechanical Drafting *,D,G ..... 4
DRF 206 Co-op Ed: Drafting Seminar D ..... 2
WR 121 English Composition: Exposition and Introduction to Argument *, D,W ..... 4

| Second Year | Fall |
| :---: | :---: |
| DRF 205 Drafting: Structures *,D,G .................................. | 4 |
| DRF 210 Commercial Buildings *,D,G. | 4 |
| DRF 232 Mechanical Design ${ }^{*}$, D,G | 4 |
| DS 155 Heavy Equipment Hydraulics*,D,G. | 1 |
|  | 3 |
| Total Credits | 16 |
|  | Winter |
| DRF 207 Drafting: Strength of Materials ${ }^{*}$,D,G | 4 |
| DRF 220 Building Information Modelling*,D,G................... | 4 |
| DRF 233 Geometric Tolerancing *,D,G ............................... | 4 |
| WR 227 Technical Writing *,A. | 4 |
| Total Credits | 16 |
|  | Spring |
| DRF 211 Mechanical Systems and |  |
| Environmental Design *,D,G.......................................... | 4 |
| DRF 234 PowerTrains ${ }^{*}$, D, G . | 4 |
| ET 121 Shop Practices*,D,G. | 2 |
| ENGR 280D Co-op Ed: Drafting D,G.................................. | 3 |
| Total Credits | 13 |
| One-Year Certificate of Completion |  |
|  | Fall |
| DRF 142 Graphic Concepts *,D,G . | 2 |
| DRF 167 CAD 1 *,D,G......... | 4 |
| Choice of: | 3-4 |
| CIS 101 Computer Fundamentals |  |
| CS 120 Concepts of Computing: Information Processing MTH 076 Applied Geometry forTechnicians*, D,G,M |  |
| or higher mathematics................................................ | 4 |
| Total Credits | 13-14 |
|  | Winter |
| CST 122 Construction Codes D,G . | 2 |
| DRF 168 CAD 2 *,D,G.... | 4 |
| DRF 208 Residential Buildings *,D,G. | 4 |
| Human Relations Requirement D,H. | 3 |
| MTH 086 Applied Algebra for Technicians* or higher mathematics* | 4 |
| Total Credits | 17 |
|  | Spring |
| DRF 121 Mechanical Drafting *,D,G .................................. | 4 |
| DRF 137 Architectural Drafting-Plans*,D,G . | 4 |
| DRF 206 Co-op Ed: Drafting Seminar D...... | 2 |
| DRF 245 Solid Modeling*, D, G ... | 3 |
| WR 121 English Composition: Exposition and |  |
| Introduction to Argument *,D,W or higher writing ............ | 4 |

## Early Childhood Education

## Offered by the Child and Family Education Department

Two-Year Associate of Applied Science Degree

## One-Year Certificate of Completion

Purpose To prepare students for successful careers as childcare professionals in a variety of settings such as for-profit and not-for-profit childcare centers, on-site childcare centers in the business community, university and community college laboratory programs, government sponsored programs such as Head Start and Even Start, and in a family childcare business operated from their own home.

Learning Outcomes The graduate will:

- plan and carry out developmentally appropriate curriculum activities for children, ages infants through kindergarten.
- choose age appropriate guidance methods to enhance the child's development of self-worth, self-esteem, problemsolving skills and abilities for day-to-day life.
- design and effectively use environments that maximize children's abilities to make choices, explore personal power, develop empathy and caring behaviors, learn responsible roles for the classroom and appropriate relationships with others.
- assist parents with skill-building in the areas of guidance, nutrition, and appropriate activity choices, and work effectively in a variety of roles with children and families.
- facilitate the operation of childcare programs ranging from working with children and families to administration and management.
- develop research skills and confidence to access information using print and computer resources, specifical ly 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.

Employment Trends Childcare is a growth field due in part to the large number of working parents seeking out-of-home childcare. Individuals who have the appropriate training usually find immediate employment.
Wages The statewide average hourly wage varies from \$9-\$15. Early childhood administrative directors typically earn \$13-\$21 hourly.

Costs in Addition to Tuition (estimates)* Students must buy books as well as have transportation to school. There are minimal program fees to cover required documentation for lab entry ( $\$ 100-125$ ) as well as a supply fee for lab projects ( $\$ 20-25$ ).

* Subject to change without notice.

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 Deadline Early Childhood Education is an openentry, open-exit program. New students are admitted fall, winter and spring terms. The program coordinator does individual academic advising each term as well as scheduling of students.

Number of New Students Admitted Annually Approximately 50-
70 students are enrolled in the program each term.
Criteria Used for Admission Lane placement tests in math, reading, and writing are required. Students must pass a State of Oregon criminal records check and have medical clearance, food handlers card, CPR card, and first aid card.

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.

Cooperative Education (Co-op) Co-op offers sixth term Early Childhood Education students college credit and a grade for on-the-job work experience related to their educational and career goals. Through Co-op, students connect theory and practice, develop skills, expand career knowledge, and make contacts for the future. Work schedules and work sites vary. Students are required to do one term of Co-op for five credits to earn the AAS degree and are eligible to enroll after they have reached sixth-term standing in the program. Contact Julianne Stermer, Co-op Coordinator, Bldg. 27, Rm. 413, (541) 463-5527. Visit the web for detailed information about the program and lab school.

Program Advisor Deb Hupcey, Bldg. 1, Counseling Department, (541) 463-5894; huрсеуd@lanecc.edu

Program Counselor Marva Solomon, Bldg. 1, Counseling Department, (541) 463-5802, solomonm@lanecc.edu

## Two-Year Associate of Applied Science Degree

First Year ..... Fall

ECE 120 Intro to Early Childhood Education D,G ................. 2
ECE 130 Child Care and Guidance D,G
ECE 140 Theory and Supervised Teaching 1 D,G $\qquad$ 3
HDFS 226 Child Development D,G $\qquad$
WR 115W Introduction to College Writing:
Workplace Emphasis ${ }^{D, W}$ or other AAS equivalent ${ }^{R}$.

| Total Credits | 14 |
| :---: | :---: |
|  | Winter |
| ECE 110 Observing Children's Behavior D,G...................... | 1 |
| ECE 150 Creative Activities for Children D,G...................... | 3 |
| ECE 170 Infants and Toddlers D,G..................................... | 4 |
| ECE 140 Theory and Supervised Teaching 1 *, D,G .............. | 3 |
| MTH 025 Basic Math Applications G,M or higher level mathematics ${ }^{R}$ $\qquad$ | 3 |
|  | 3 |

Total Credits
ECE 160 Exploring Early Childhood Curriculum D,G
Spring
4ECE 240 Theory and Supervised Teaching 2 *,D,G
FN 230 Family, Food and Nutrition D,G ..... 3
Choice of: ..... 3-4
ANTH 103 Cultural Anthropology D,G,HCG 203 Human Relations at Work D,G,H
Total Credits ..... 14-15
Second Year ..... Fall
ECE 210 Applying Early Childhood Curriculum *, D,G ..... 4
ECE 240 Theory and Supervised Teaching 2 *, D,G ..... 4
Program elective (refer to list below) ${ }^{1}$ ..... 3
Science/ Math/ Computer Science requirement ${ }^{R}$ ..... 4
Total Credits ..... 15

| ECE 230 Parent-School-Community Relations D,G | Winter 3 |
| :---: | :---: |
| HDFS 227Children Under Stress *, D,G ..................... | 3 |
| ECE 240 Theory and Supervised Teaching 2 *, D,G .............. | 4 |
| General Education requirement, choice of:. | 3-4 |
| Arts/Letters ${ }^{\text {R }}$ |  |
| Social Science ${ }^{\text {R }}$ |  |
| Science/ Math/ Computer Science ${ }^{\text {R }}$ |  |
| Total Credits | 13-14 |
|  | Spring |
| ECE 260 Administration of Child Care Centers D,G | 4 |
| ED 280EC Co-op Ed: Early Childhood Ed D,G... | 5 |
| Arts/Letters requirement R.. | 3 |
| ECE 250 Infant and Toddler Environments *, D,G | 3 |
| Choice of... | 3 |
| Health requirement ${ }^{R}$ |  |

ECE 160 Exploring Early Childhood Curriculum D,GSpring
ECE 240 Theory and Supervised Teaching 2 D,G4
FN 230 Family, Food and Nutrition D,G4
Choice of: ..... 3-4ANTH 103 Cultural Anthropology D,G,HCG 203 Human Relations at Work D,G,H
Total Credits ..... 14-15
Program electives may be selected from the following list or be approved
by the ECE Program Coordinator in advance:
CG 191 Issues in Cultural Diversity
CG 204 Eliminating Self-Defeating Behavior
CG 205 Introduction to Assertive Behavior
CG 206 Coping with Stress and Depression
CG 212 Dreikursian Principles of Child Guidance 2
ED 209 Seminar Education Foundations Part 1
ED 210 Seminar Education Foundations Part 2
ED 225 Creative Dance for Children
ENG 100 Children's Literature
HDFS 228 Exceptional Child
HDFS 229 Middle Childhood
HDFS 233 Parenting
HDFS 298 IS: Child Development
HS 207 The Dysfunctional Family

## Electronic Technology

## Offered by the Advanced Technology Division

## Two-Year Associate of Applied Science Degree

Purpose To provide graduates with the basic principles of electronic theory and the associated lab skills needed for successful work in the electronics industry. A graduate qualifies for entry-level employment as an electronic engineering technician, electronic production technician, electronic instrument technician, industrial electronic technician, or for employment in the military.

Learning Outcomes The graduate will:

- learn the systematic methods of problem solving
- demonstrate the ability to operate electronic test equipment such as digital oscilloscopes, DMM, power supplies and function generators
- demonstrate the ability to generate and read schematic drawings and apply that knowledge to understand the operation of a physical circuit.
- construct, modify, and test operational multistage digital or analog circuits.
- examine defective circuits, investigate possible causes of the defect, and determine how to troubleshoot and repair the circuit.
- follow the flow of an automated manufacturing process, recognize the transducers used to monitor a process and, using programmable controllers (PLCs), ladder logic, and robotics, create, test and troubleshoot an automated process.
- demonstrate the ability to use a microcontroller and PBASIC software to control electronic circuits
- assemble and troubleshoot a personal computer.
- access library, computing, and communications services and obtain information and data from regional, national, and international networks.

Employment Trends Statewide, 82 annual openings for electronic technicians are projected in Oregon and 3 openings are projected annually in Lane County. Workers must have postsecondary training to gain the necessary skills for this occupation. Those with an associate degree have a competitive advantage in this labor market.

Wages Statewide average, $\$ 23$ hourly, $\$ 47,500$ annually ( $\$ 50,000+$ with experience). Lane County, $\$ 26$ hourly, $\$ 53,500$ annually.

## Costs in Addition to Tuition and Registration Fees (estimate)*

Books .................................................................................. \$2,250
Tools.................................................................................... \$ 200
Fees.................................................................................... \$ 350
Total ..................................................................................... \$1,650
See the online class schedule for program fees.

* Subject to change without notice.

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. Recommend MTH 060 Beginning Algebra skills prior to entry into the program.

Criteria Used for Admission The courses are offered in sequence beginning with the fall term. For those that cannot begin in the fall term, many of the first year courses are offered as computer based training night courses throughout the school year. A program orientation is held for new students for fall term (dates available in Counseling or Enrollment and Student Financial Services). Contact advisor/counselor for assistance for winter and spring term entry.

Cooperative Education (Co-op) Co-op offers students college credit and a grade for on-the-job work experience related to their educational and career goals. Through Co-op, students connect theory and practice, develop skills, expand career knowledge, and make contacts for the future. Work schedules and work sites vary. Contact Marv Clemons, Electronics
Co-op Coordinator, Bldg. 8, Rm. 111, (541) 463-3158.
Program Advisor Betty Svarverud, Bldg. 12, Rm. 203, (541) 463-5378, svarverudb@lanecc.edu

Program Counselor Carolyn Litty, Bldg. 12, Rm. 202, (541) 463 -
5236, littyc@lanecc.edu
First Year Fall
DRF 167 CAD 1
ET 129 Electrical Theory $1^{*}$, D,G 4
MTH 065 Elementary Algebra *,D,G,M or higher
level mathematics
Choice of:
CS 120 Concepts of Computing: Info Processing S
CS 133 Beginning Programming ${ }^{*}$,S or higher computer science
Total Credits
16
Winter
ET 130 Electrical Theory 2 *,D,G
ET 145 Semiconductor Devices 1 *,D,G................................. 4
ET 151 Digital Electronics $1^{*, D, G}$..................................................... 4
MTH 095 Intermediate Algebra *,D,S or higher
level mathematics .......................................................................... 5

| DS 155 Heavy Equipment Hydraulics*, D,G. | Spring |
| :---: | :---: |
| ET 121 Shop Practices ${ }^{*}$, D,G.................. | 2 |
| ET 146 Semiconductor Devices 2 *,D,G.. | 4 |
| ET 152 Digital Electronics 2 *,D,G | 4 |
| WR 121 English Composition: Exposition and Introduction to Argument *, D,W $\qquad$ | 4 |
| Total Credits | 16 |
| Second Year | Fall |
| ET 229 Motors*,D,G... | 4 |
| ET 234 Programmable Controllers ${ }^{*}$, D,G | 4 |
| ET 239 Microprocessor Applications *,D,G | 4 |
| WR 227 Technical Writing *,A | 4 |
| Total Credits | 16 |
|  | Winter |
| ET 232 Process Control Systems *,D,G.............................. | 4 |
| ET 241 Electro-Mechanical Troubleshooting*,D,G............... | 4 |
| ENGR 280E Cooperative Education: |  |
| Electronic Technology D,G ............................................. | 3 |
| Human Relations requirement ${ }^{R}$ | 3 |
| Total Credits | 14 |
|  | Spring |
| ET 201 Industrial Instrumentation *,D,G. | 4 |
| ET 281 Radiotelephone and Communications Equipment ${ }^{*}$, D,G | 4 |
| ET 287 Microcomputer Hardware*,D,G . | 4 |
| PE/Health requirement D,R | 3 |
| Total Credits | 15 |

## Electrician Apprenticeship Technologies

Offered by the Apprenticeship Program
Associate of Applied Science Degree, Electrician
Apprenticeship Technologies
Certificate of Completion, Limited Electrician Apprenticeship Technologies

## Certificate of Completion, Electrician Apprenticeship Technologies

Purpose To provide a structured system of training leading to certification in the electrician trade or occupation. Only apprentices registered with Bureau of Labor and Industries may enroll in Electrician Apprenticeship Technologies courses. Individual employers sponsor students while they learn technical and theoretical aspects of the electrician trade. By working cooperatively with the employer to complete all related training classes and following the joint apprenticeship and training committee rules and policies, a student may achieve journey-level status. 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 in Operations Management degree. The Electrician Apprenticeship Technologies 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.

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 NEC and OSC for Inside 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.

Employment Trends Demand for licensed electricians continues to be strong and steady. The Oregon Employment Department predicts that the statewide demand for electricians will grow by $12 \%$ and Oregon employers will need to fill 2,320 electrician positions between 2006 and 2016.
Wages Journey-level electrician wages range regionally from $\$ 18.00 / \mathrm{hr}$ for Limited Energy Technicians License B to $\$ 28.39 /$ hr for Inside Electricians. 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 fivepercent raise every six months if training and school performance is satisfactory. Check the Bureau of Labor and Industries website: www.boli.state.or.us

Costs in Addition to Tuition (estimate) Estimated costs of books and tools for the required general education courses total approximately $\$ 850-1,000$ over a four-year period. Costs of books and tools for the related training classes in the electrician programs vary with each individual trade/ occupation.

[^24][^25]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.

Licensing or Other Certification Exams Electrician trades require successful completion of trade-specific licensure examinations through the Oregon Building Codes Division.

Admission Deadline Varies; some joint apprenticeship and training committees only accept applications once a year.

Pre-requisites Minimum placement scores - Reading 68, Writing 64, and Math parts A, B, C with $7 / 10$ score. Note: See the counselor or advisor to obtain the suggested entry-level skills for successful completion of these programs.

Criteria Used for Admission Students must be registered apprentices with the State of Oregon Bureau of Labor and Industries and accepted by a Joint Apprenticeship Training Committee. Selection to the program is by a point system from a pool of qualified applicants. Information on the point system is available at the Oregon Bureau of Labor and Industries website: www.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).
Program Advisor Colleen Cairney, Bldg. 15, Rm. 201 (541) $463-$ 5843, cairneyc@lanecc.edu

Program Counselor Carolyn Litty, Bldg. 12, Rm. 202 (541) 4635236, littyc@lanecc.edu

## Electrician Apprenticeship Technologies

## Associate of Applied Science

To earn the degree, a student must:

- complete 4000-8000 hours State of Oregon-approved on-thejob training and provide a State of Oregon Apprenticeship Training Journey-level card or BOLI-ATD Certificate of Completion
- demonstrate an equivalency of 90 credit hours, with a minimum of 24 credits at Lane, including the last term at Lane
- complete all requirements for an AAS degree as listed below
- earn a cumulative grade point average above 2.0 at Lane or transfer credits earned at other regionally accredited colleges or universities
AAS requirements Credits


## General Education

 WR 115W Intro to College Writing: Workplace Emphasis ${ }^{\mathrm{D}}$ or higher-level writing .........Choice of:3Arts and Letters requirement ${ }^{R}$Human Relations/Social Science requirement ${ }^{R}$Science/Math/Computer Science requirement ${ }^{R}$Journey-level card from Oregon Bureau ofLabor and Industries Apprenticeship and Training
Division, prior certification credits22
Electrician Core-Related Training D
(Choice of one of the following trades) ..... 22-45
Limited Maintenance Electrician ..... 26
Limited Energy Technician License B ..... 27
Limited Energy Technician License A ..... 36
Manufacturing Plant Electrician ..... 39
Inside Wire Electrician ..... 45
Program Electives to complete 90 credits for degree: ..... 2-25
APR 101 Trade Skills Fundamentals
APR 105 Residential Wiring
ET 129 Electrical Theory 1
CS 120 Concepts of Computing
CST 110 Blueprint Reading
CST 111 Construction Orientation and Environment
CST 118 Building Construction
DRF 167 CAD 1
HE 252 First Aid
MTH 076 Applied Geometry for Technicians
MTH111 College Algebra
MTH 112 Trigonometry
WLD 121 Shielded Metal Arc Welding
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 NEC and OSC code for Limited Energy Technician-License B, and/or Limited Maintenance Electrician


## To earn the certificate, student must:

complete 4000 hours State of Oregon-approved on-the-job training and provide a State of Oregon Apprenticeship Training Journey-level card or BOLI-ATD Certificate of Completion complete core related training-22-24 cr
Core Related Training requirements
Complete with a 'C' or better in all courses
(Choice of one of the following trades)
Limited Maintenance Electrician ( 26 credits)
ET 129 Electrical Theory 1
ET 130 Electrical Theory 2
ET 229 Motors
ET 241 Electro-Mechanical Troubleshooting
APR 220 Electrical Code and Exam Prep or
APR 228 Apprenticeship Blueprint Reading
Limited Energy Technician License B ( 27 credits)
APR 101 Trade Skills Fundamentals
APR 140 Electrical System Installation Methods
APR 141 Limited Voltage Electrical Circuits
APR 142 Testing Equipment and Specialized Applications
APR 143 Limited Voltage Cabling
APR 144 System Planning and Maintenance
APR 220 Electrical Code and Exam Prep

## Electrician Apprenticeship Technologies

## Certificate of Completion

Students may earn a Certificate of Completion in Electrician Apprenticeship Technologies by successfully completing 45-54 core related training credits with a ' C ' or better in all courses, and completing related instruction in communications, computation, and human relations.

Learning outcomes Graduates will:

- Apply theory to electrical wiring
- Repair and install electrical wire devices according to licensure regulations to meet NEC and OSC for Inside Electrician, Limited Energy Technician-License A, and/or Manufacturing Plant Electrician

To earn the certificate, student must:

- complete State of Oregon-approved on-the-job training and provide a State of Oregon Apprenticeship Training Journeylevel card or BOLI-ATD Certificate of Completion
- 6000-Hour BOLI-ATD Trade: Limited Energy TechnicianLicense A
- 8000-Hour BOLI-ATD Trade: Inside Wire Electrician
- 8000-Hour BOLI-ATDTrade: Manufacturing Plant Electrician
- Complete related instruction (communication, computation, human relations). $\qquad$
- complete core-related training . - credis

Total Credits $45-54 \mathrm{cr}$
Core Related Training requirements (Choice of one of the following trades)
Limited Energy Technician License A (0 credits)
APR 101 Trade Skills Fundamentals
APR 140 Electrical System Installation Methods
APR 141 Limited Voltage Electrical Circuits
APR 142 Testing Equipment and Specialized Applications
APR 143 Limited Voltage Cabling
APR 144 System Planning and Maintenance
APR 220 Electrical Code and Exam Prep
APR 240 Alarm Systems
APR 241 Audio and Signaling Systems
APR 242 Limited Voltage System Integration
Manufacturing Plant Electrician Related Training requirements
(39 credits)
APR 220 Electrical Code and Exam Prep
APR 228 Apprenticeship Blueprint Reading
ET 129 Electrical Theory 1
ET 130 Electrical Theory 2
ET 229 Motors
ET 232 Process Control Systems
ET 234 Programmable Logic Controller
ET 241 Electro-Mechanical Troubleshooting
WLD 121 Shielded Metal Arc Welding
Inside Wire Electrician ( 45 credits)
APR 130 Electrical Principles
APR 131 Electrical Principles/Residential Wiring
APR 132 Electrical Residential Wiring Lab
APR 133 Electrical Generators, Transformers, and Motors I
APR 134 Electrical Generators, Transformers, and Motors II
APR 135 Electrical Generators, Transformers, and Motors Lab
APR 220 Electrical Code and Exam Prep
APR 225 Electrical Motor Controls
APR 226 Electrical Grounding/Bonding and Blueprint Reading
APR 227 Electrical System Troubleshooting

## Emergency Medical Technology Paramedic

## Offered by the Health Professions Department

Two-Year Associate of Applied Science Degree

## One-Year Certificate of Completion-Emergency Medical Technician

EMT-Basic
See the EMT web pages at lanecc.edu/hp/emt for additional information.

Purpose To produce competent, entry level EMT-Basic and EMT-Paramedics to serve in career and volunteer EMS positions:

Two-Year Associate of Applied Science Degree graduates are qualified to apply for the Oregon EMT-Paramedic certification exam. Coursework includes lecture, lab, clinical time in the hospital and an internship on a 911 ambulance. All first year courses must be successfully completed with a minimum of a C-grade to qualify to apply into the second year of the AAS/EMT-P program.

EMT-Basic students seeking EMT-Basic certification need only take EMT 151 and EMT 152. Students who successfully complete are eligible to apply for the Oregon EMT-Basic certification exam. Admission is by application only. Please see the EMT-Basic application for details. lanecc.edu/hp/emt
Certificate of Completion was created as a statewide transfer tool. Some Oregon schools offer only the first year of the two year degree. The certificate of completion qualifies a student to participate in the process for entry into the second year (the "paramedic year") of the AAS/EMT-P offered throughout the state. Not all Oregon EMT schools participate in the Certificate of Completion transferability. Those planning to take the first year at Lane, then transfer to another college, should check with the EMT program coordinator for guidance.
Learning Outcomes The graduate will:

- acquire the skills needed to be a safe and effective pre-hospital emergency medical provider
- work as a member of a 911 emergency medical response team
- transport sick and injured persons to medical facilities
- administer basic and advanced life support care
- document patient information, treatment plan, and patient progress
- understand and apply laws and rules relevant to emergency responders

Employment Trends Employment in this occupation is estimated to be at about the statewide average. Growth is projected to be somewhat faster than average, with $23 \%$ growth in Lane County and 22 new Lane County openings. Reasonable employment opportunities exist for competitively trained workers.

Wages EMT-Paramedic average wages in Lane County are $\$ 19.95$ hourly or $\$ 41,497$ annually.

[^26][^27]Costs in Addition to Tuition (estimate)*

| Lab fees per year | \$200 |
| :---: | :---: |
| Uniform | \$150 |
| Books .. | \$450 |
| CPR mask. | \$ 10 |
| Criminal Background Check | \$ 35 |
| Personal Health Insurance | varies |
|  | 845 |

See the online credit class schedule for current course fees.
Students are advised to inquire about additional charges. Parking fees may be required at clinical facilities.

* Subject to change without notice.

Program Coursework Approval by Department of Human Services, Emergency Medical Services and Trauma Systems, meeting the requirements of OAR 333-265-0010(2).

Licensing or Other Certification Exams Required Oregon State and/or National Registry EMT-Basic and EMT-Paramedic exams.

Prerequisite requirements Students must be 18 years of age to take EMT courses. Students must also have High School Diploma, GED or college degree. Students enrolled in EMT programs are required to have a tuberculin test, measles and rubella vaccinations, and hepatitis $B$ vaccinations. Tuberculin tests must be current through three terms (fall, winter, spring). Once admitted into the program, students are required to carry their own health insurance. Applicants for the second year must have current, valid Oregon EMT-Basic or Oregon EMTIntermediate certification, and maintain good standing with the Department of Human Services, EMS and Trauma Systems Section. EMT students will be submitting to a criminal background check.

Admission Deadline The EMT-Basic courses have their own application process. EMT Paramedic second year applications are screened in the summer preceding fall term enrollment. All required application materials must be presented to the Health Professions Division, Bldg. 4, (see instructions on the application) by the deadline date indicated in the packet.

There is no application process required to take any first year AAS/EMT-P courses except EMT-Basic: EMT 151 and EMT 152.

Students transferring into the associate degree program from another school must apply during the published application cycle.

Number of New Students Admitted Annually The number of applicants accepted will be based on state requirements, college budgetary and clinical and internship facility considerations.
Criteria Used for Admission EMT-Basic: Program admission is based on first applied and qualified, first admitted. The class size is limited. There will be designated alternates. An alternate is allowed to enter the program if an admitted student declines. Remaining alternates are given admission priority the following year.

EMT-Paramedic: Program admission is based on a point allocation system which includes an interview process. Points are awarded for grades earned in the first year AAS/EMT-P required courses. Please see EMT-Paramedic application for details: lanecc.edu/hp/emt

Program Advisor Rosa Lopez, Bldg. 1, Rm. 103, (541) 463-5660, LopezR@lanecc.edu

Program Counselor Leslie Soriano, Bldg. 1, Rm 103, (541) 4635512, Soriano-CervantesL@lanecc.edu

## Emergency Medical Technology Paramedic

## Two-Year Associate of Applied Science Degree

## First Year

BI 231 Human Anatomy and Physiology $1^{*}, 2, \mathrm{D}, \mathrm{G}, \mathrm{S}$.............. 4
EMT 151 Emergency Medical Technician Basic Part 1 D,G....... 5
EMT 175 Introduction to Emergency Medical Services D,G 3
HO 100 Medical Terminology 1 D,G ...................................... 3
WR 121 English Composition: Exposition and
Introduction to Argument *,G,W ....................................... 4
Total Credits 19
Winter
BI 232 Human Anatomy and Physiology 2 *,D,G................. 4
EMT 152 Emergency Medical Technician Basic Part 2 D,G .. 5
EMT 196 Crisis Intervention D,G3

MTH 095 Intermediate Algebra 1,G,M.................................... 5
Total Credits
17

BI 233 Human Anatomy and Physiology 3*,D,G, S,............... Spring 4
EMT 169 EMT Rescue *,D,G.................................................. 3
EMT 170 Emergency Response
Communication/Documentation *,D,G ............................... 2
EMT 171 Emergency Response Patient Transportation*,D,G 2
PSY 110 Exploring Psychology G,H ...................................... 3
Total Credits $\quad 14$
Second Year Fall
CIS 101 Computer Fundamentals G.................................... 3
EMT 270 EMT-Paramedic Part 1*,D,G..................................... 10
EMT 271 EMT-Paramedic Part 1 Clinical *,D........................ 1
SP 111 Fundamentals of Public Speaking
or higher Speech course A,G........................................... 4
Total Credits
18
Winter
EMT 272 EMT-Paramedic 2 *,D,G .......................................... 10
EMT 273 EMT-Paramedic Clinical 2 *,D................................. 3
Social Science/Human Relations elective G.............................. 3
Total Credits $\quad 16$

## Spring

EMT 274 EMT-Paramedic 3 *,D,G .......................................... 4
EMT 275 EMT-Paramedic CInical 3*,D,G............................... 5
EMT 280P1 Co-op Ed: EMT Internship Part1 *,D,G............... 3
HE 275 Lifetime Health and Fitness G,P................................... 3
Total Credits $\quad 15$

## Summer

EMT 280P2 Co-op Ed: EMT Internship Part 2 *, D,G . 5

## Emergency Medical Technician

| One-Year Certificate of Completion |  |
| :---: | :---: |
| First Year | Fall |
| BI 231 Human Anatomy and Physiology 1*,2,D,G. | 4 |
| EMT 151 Emergency Medical Technician Basic Part 1 D,G .. | 5 |
| EMT 175 Introduction to Emergency Medical Services D,G | 3 |
| HO 100 Medical Terminology 1 D,G | 3 |
| WR 121 English Composition: Exposition and Introduction to Argument *,G,W | 4 |
| Total Credits | 19 |
|  | Winter |
| BI 232 Human Anatomy and Physiology 2 *, D, G. | 4 |
| EMT 152 Emergency Medical Technician Basic Part 2 D,G .. | 5 |
| EMT 196 Crisis Intervention D,G... | 3 |
| MTH 095 Intermediate Algebra 1,G,M. | 5 |
| Total Credits | 17 |
|  | Spring |
| BI 233 Human Anatomy and Physiology 3*,D,G, | 4 |
| EMT 169 EMT Rescue *,D,G.. | 3 |
| EMT 170 Emergency Response |  |
| Communication/Documentation ${ }^{\text {* }}$, D,G . | 2 |
| EMT 171 Emergency Response Patient Transportation*, D,G | 2 |
| PSY 110 Exploring Psychology G,H ................................... | 3 |
| Total Credits | 14 |
| 1. Students pursuing a bachelor's degree need to complete a college level transferable math course |  |
| 2. See BI 231 course description for required prer |  |

## Energy Management Technician

Offered by the Science Division
Two-Year Associate of Applied Science Degree
Two-Year Associate of Applied Science Option, Renewable Energy Technician

Purpose To prepare students for careers in the Energy Management field, and optionally as Renewable Energy Systems Installers.

Learning Outcomes The graduate will:

- evaluate the energy use patterns for residential and commercial buildings and recommend energy efficiency and alternative energy solutions for high-energy consuming buildings.
- understand the interaction between energy consuming building systems and make recommendations based on that understanding.
- construct energy evaluation technical reports and make presentations for potential project implementation.
- use appropriate library and information resources to research professional issues and support lifelong learning.
- access library, computing and communications services, and obtain information and data from regional, national and international networks.
- collect and display data as lists, tables and plots using appropriate technology (e.g., graphing calculators, computer software).
- develop and evaluate inferences and predictions that are based on data.
- determine an appropriate scale for representing an object in a scale drawing.

A Meets Arts/Letters requirement
B Must be passed with grade of " B -" or better to use as a prerequisite
D Degree or certificate requirement; must be passed with grade of "C-" or better
G Must be taken for a grade, not P/NP; major requirement

- interpret the concepts of a problem-solving task, and translate them into mathematics.

The graduate of the Renewable Energy Technician Option also will:

- appropriately size and recommend renewable energy system types for particular situations.
- understand and put into practice the installation protocol for Photovoltaic and Solar Domestic Hot Water Systems.

Employment Trends Employment opportunities in the Energy Management Industry are excellent. Students must consider the entire Western United States when seeking employment, as those willing to relocate will have greater employment opportunities.
Wages Energy Management, \$38,000-45,000 annually. Renewable Energy Technician, \$25,000-35,000 annually, depending on the area.
Costs in Addition to Tuition (estimate)*
Total

* Subject to change without notice.

This is a limited enrollment program. Students must apply to the program by completing an Energy Program application form.

Criteria Used for Admission into Program Complete a program application and have completed MTH 070. Students are required to attend an Orientation Meeting the first week of August prior to attending the program in the fall. The Orientation is required and non-attendance may result in being dropped from the Program. Must complete MTH 095 by the end of the first year.

Admission Information Science Department, Bldg. 16, Rm. 252/253, youngg@lanecc.edu, ebbager@lanecc.edu or advisor, lukacss@lanecc.edu, or counselor, ganserd@lanecc.edu

Cooperative Education (Co-op) Co-op is a required and important part of the Energy Management program. It provides relevant field experience that integrates theory and practice while providing opportunities to develop skills, explore career options, and network with professionals and employers in the field. Students must complete six Co-op credits for the AAS degree. Students may use up to eighteen Co-op credits toward the degree requirements. Contact Larry Scott, Energy Management Co-op Coordinator, Bldg. 19,
Rm. 154, (541) 463-5458.
Program Director/Advisor Roger Ebbage, Science 253, (541) 463-3977, ebbager@lanecc.edu

Program Counselor Debby Ganser, ganserd@lanecc.edu
Program Advisor Shirley Lukacs, lukacss@lanecc.edu

| First Year | Fall |
| :---: | :---: |
| BT 114 MS Excel for Business *,D,G | 4 |
| NRG 102 Blueprint Reading: Residential and Commercial 1,D,G | 3 |
| MTH 095 Intermediate Algebra *,2,M ................................ | 5 |
| NRG 101 Introduction to Energy Management 1,D,G. | 3 |
| NRG 103 Sustainability in the Built Environment 1,D,G....... | 3 |
| Total Credits | 18 |
|  | Winter |
| NRG 111 Residential/Light Commercial Energy |  |
| Analysis *,1,3,D,G. | 3 |
| NRG 154 Alternative Energy Technologies 1,D,G ................ | 3 |
| WATR 101 Introduction to Water Resources ${ }^{1, \mathrm{D}, \mathrm{G}}$.. | 3 |
| NRG 206 Co-op Ed: |  |
| Energy Management Seminar ..................................... | 1 |
| PH 101 Fundamentals of Physics *,1,S | 4 |
| WR 121 English Composition: Exposition and Introduction to Argument ${ }^{*}, 5,6, \mathrm{~W}$. | 4 |
| Total Credits | 18 |
|  | Spring |
| NRG 121 Air Conditioning Systems Analysis *,1,D,G ........... | 3 |
| NRG 124 Energy Efficient Methods *,1,D,G. | 3 |
| NRG 131 Lighting Fundamentals *,1,D,G | 3 |
| PH 102 Fundamentals of Physics *,1,S.. | 4 |
| CG 203 Human Relations at Work 5,R. | 3 |
| Total Credits | 16 |
| Second Year | Fall |
| NRG 122 Commercial Air Conditioning |  |
| Systems Analysis *,1,D,G | 3 |
| NRG 132 Lighting Applications *,1,D,G.. | 3 |
| NRG 141 Energy Investment Analysis *,1,3,D,G. | 3 |
| WR 227 Technical Writing *,5,6,A | 4 |
| Restricted electives 5. | 3 |
| Total Credits | 16 |
|  | Winter |
| NRG 112 Commercial Energy Use Analysis *,1,D,G ............. | 4 |
| NRG 123 Energy Control Strategies *,1,D,G | 4 |
| NRG 206 Co-op Ed: Energy Management Seminar D | 1 |
| Choice of: $4,5,6, \mathrm{R}$. | 3 |
| Physical Education Activity requirement |  |
| Restricted electives ${ }^{5}$................................................... | 3 |
| Total Credits | 15 |
|  | Spring |
| NRG 113 Building Energy Simulations *,1,D,G ................... | 4 |
| NRG 142 Energy Accounting *,1,3,D,G. | 3 |
| NRG 280 Co-op Ed: Energy Management D,G ................... | 6 |
| Total Credits | 13 |
| Renewable Energy Technician Opti |  |
| First Year | Fall |
| BT 114 MS Excel for Business *,D,G. | 4 |
| NRG 102 Blueprint Reading: Residential and Commercial *,1,D,G | 3 |
| MTH 095 Intermediate Algebra *,2,M | 5 |
| NRG 101 Introduction to Energy Management 1,D,G.......... | 3 |
| NRG 103 Sustainability in the Built Environment 1,D,G....... | 3 |
| Total Credits | 18 |


ercial EnergyNRG 154 Alternative Energy Technologies *,1,D,G3
WATR 101 Introduction to Water Resources 1,D,G ..... 3
Seminar ${ }^{D}$ ..... 1WR 121 English Composition: Exposition andIntroduction to Argument *,5,6,W4
SpringNRG 124 Energy Efficient Methods *, 1,D,G3
s ..... 3Human Relations requirement 5,3
Second Year ..... Fall
4NRG 141 Energy Investment Analysis *,1,3,D,G
NRG 155 Photovoltaic Design and Installation 1 *,1,D,G ..... 4WR 227 Technical Writing *,5,6,A4Winter
ET 130 Electrical Theory 2 *,D,G ..... 4
NRG 158 Solar Thermal Design and Installation $1^{*}, 1, \mathrm{D}, \mathrm{G}$ ..... 4
Management Seminar D ..... 1Physical Education Activity requirementHealth requirement
16
Spring4
and Installation *,1,3,D,G ..... 46

1 Instructor permission required
2 Must be completed by the end of the first year
3 Contains computation instruction to meet industry
4 PE Activity requirement credits must be taken in at least two terms to satisfy degree requirement.
5 Can be taken any term
Restricted Electives are arranged with the program director/advisor and must be taken for a grade.

## Engineering Transfer

## Offered by Mathematics and Science Divisions

## Suggested Course of Study

This suggested course of study is for students interested in pursuing a bachelor's degree in engineering. A suggested course of study is not the same as a state-approved vocational program in which a student earns a degree or certificate issued by the Lane Board of Education.

Lane Community College offers the first two years of college core science, engineering, and general education courses needed for most engineering major disciplines. The AAOT course of study shown below includes lower division general education requirements needed for a degree in at state university in Oregon. Certain engineering disciplines may require additional courses that are not offered at Lane. If your particular area of study has course requirements not available at Lane, then Linn-Benton Community College might offer the necessary courses. See one of Lane's Engineering advisors for more information.

Most Lane engineering students transfer to Oregon State University (OSU), but many have continued successfully at other well-known professional schools. Students who wish to complete all of the lower division general education requirements for OSU before they transfer may wish to consider earning an Associate of Science (AS) degree while at Lane. In addition to the OSU general education and engineering core requirements, only three additional credits are required to earn the AS degree from Lane. See the suggested program of study at the end of this listing.

At the earliest opportunity, an interested student should meet with one of Lane's Engineering advisors. Most engineering courses at Lane are offered only once each academic year, and they must be taken in sequence. A well-planned course of study at Lane is essential to ensure a smooth transition to a university. In addition, it is very important for a transfer student to consult the engineering advisor at the specific intended transfer university.

Students who need mathematics preparation before beginning calculus must complete preparatory course work (such as the One-Year Preparatory Curriculum listed below) before enrolling in most of the courses listed in the Two-Year Curriculum.

See the mathematics and science division counselors or advisors for assistance in term-by-term schedule planning and for answers to questions about transfer requirements of various universities.

## One-Year Preparatory Curriculum - for students needing pre-calculus mathematics

This option allows the student to complete many of the general education requirements and the required freshman chemistry courses prior to beginning the Two-year Core Curriculum.

|  | Fall |
| :---: | :---: |
| MTH 111 College Algebra *. | 5 |
| WR 121 English Composition: Exposition and Introduction to Argument *,1,G | 4 |
| General Education requirements 3 and required electives $\qquad$ | 6-8 |
|  | 15-17 |
|  | Winter |
| MTH 097 Geometry * .................................................... | 4 |
| CH 221 General Chemistry $1^{*, 1, G}$. $\qquad$ <br> General Education requirements 3 and required electives $\qquad$ | 5 |
|  | 6-8 |
|  | 15-17 |
|  | Spring |
| MTH 112 Trigonometry * ............................................... | 4 |
| CH 222 General Chemistry 2 *,1,2,G.................................. | 5 |
| General Education requirements ${ }^{3}$ or required electives $\qquad$ | 3 |
| Choice of:................................................................... | 4 |
| SP 111 Fundamentals of Public Speaking 1,G SP 112 Persuasive Speech 1 ,G |  |
| Total Credits | 16 |

Two-Year Curriculum - for students ready to begin the
Engineering studies with calculusFirst Year
MTH 251 Calculus 1 *,1,G ...................................................... Fall
5
5
CH 221 General Chemistry $1^{*, 1, G}$ ..... 5
ENGR 101 Engineering Orientation *,2,G ..... 3
WR 121 English Composition: Exposition and Introduction to Argument ${ }^{*}, 1, \mathrm{G}$. ..... 4
Total Credits17
Winter
MTH 252 Calculus 2 *,1,G ..... 5
CH 222 General Chemistry 2 *, 2, G ..... 5
ENGR 102 (199) Engineering Orientation 2 *,1,G ..... 3
PH 211 General Physics w/Calculus *,1,G ..... 5
Total Credits ..... 18
Spring
MTH 253 Calculus 3 *, 1,G ..... 4
MTH 261 Linear Algebra *,1,G ..... 2
PH 212 General Physics w/Calculus *,1,G ..... 5
ENGR 115 Engineering Graphics *,1,2,G. ..... 3
Total Credits ..... 14
Second Year ..... Fall
MTH 254 Vector Calculus 1 *,1,G ..... 4
ENGR 211 Statics *,1,G ..... 4
PH 213 General Physics w/Calculus *,1,G ..... 5Total Credits13

[^28][^29]|  | Winter |
| :---: | :---: |
| ENGR 221 Electrical Fundamentals *,1,G ........................... |  |
| WR 227 Technical Writing ${ }^{*}$, $2, \mathrm{G}$ |  |
| MTH 265 Statistics for Scientists and Engineers *,2,G ........ |  |
| Choice of: $\qquad$ MTH 255 Vector Calculus 2 *, 2 ,G ENGR 213 Strength of Materials *,1,2,G |  |
|  |  |
|  |  |
| Total Credits | 19 |
|  | Spring |
| MTH 256 Differential Equations *,1, G ................................... |  |
| ENGR 212 Dynamics *,1,2,G..................................................... |  |
| Choice of: $\qquad$ SP 111 Fundamentals of Public Speaking 1,G SP 112 Persuasive Speech 1,G |  |
|  |  |
|  |  |
| General Education requirements 3 or required electives $\qquad$ 3-4 |  |
| Total Credits | 15-16 |
| * Prerequisite required |  |
| 1 Will be used to meet requirements for OSU Engineering Core GPA. Must earn a grade of " C " or better, not P/NP. ("C-" will not be accepted.) |  |
| 2 Required for graduation in specific engineering majors. Must earn a grade of "C" or better, not P/NP. ("C-" will not be accepted.) |  |
| 3 See Math/Science academic adviso |  |

## Associate of Science degree - with Core Engineering courses included

The following three-year plan for Engineering students satisfies the requirements for an Associate of Science degree from Lane Community College, including all required engineering courses and all necessary general education courses. Additionally, these general education courses will satisfy all of the lower division general education requirements for graduating from Oregon State University. See one of Lane's Engineering advisors for assistance in choosing these specific courses to ensure that they meet both Lane and OSU requirements.

| Suggested Course of Study for Engineering students who want to earn an Associate of Science degree at Lane |  |
| :---: | :---: |
| First Year | Fall |
| MTH 111 College Algebra *. | 5 |
| WR 121 English Composition: Exposition and Introduction to Argument ${ }^{*}, 1, \mathrm{G}$. | 4 |
| HE 275 Lifetime Health and Fitness . | 3 |
| Arts and Letters Elective (A.S. degree) ${ }^{3}$...................... | 3-4 |
| Total Credits | 16 |


| MTH 097 Geometry * |  | Winter |
| :---: | :---: | :---: |
| CH 221 General Chemistry $1^{\text {*,1,G................................... }}$ |  | 5 |
| Social Science Elective (A.S. degree) ${ }^{3}$ |  | 3-4 |
|  | Total Credits | 12-13 |
| MTH 112 Trigonometry * |  | Spring |
| CH 222 General Chemistry 2 *,2,G . |  | 5 |
| WR 227 Technical Writing *,1,G... |  | 4 |
| ENGR 115 Engineering Graphics *,1,2,G |  | 3 |
|  | Total Credits | 16 |

## Ethnic Studies

Offered by Social Science Division
Suggested Course of Study
The National Association for Ethnic Studies defines the discipline as "an interdisciplinary voice for the continuing focused study of race and ethnicity." Ethnic Studies is concerned with how all ethnic and racial groups interact, but focuses primarily on those groups that have been largely ignored as having contributed to the creation and shaping of this country.

Ethnic Studies at Lane Community College was created over 35 years ago. The discipline strives to provide for the interdisciplinary study of the histories and experiences of the four major racial minority groups in the United States: Americans of African and Asian descent, Chicanas/os and Latinas/os, and the indigenous peoples of the Americas, Caribbean, and Pacific Islands. In addition, Ethnic Studies provides space for students to critically analyze the intersections of race and ethnicity with other variables such as: gender identity, sexuality, disability, class, nationalism, and globalization.

As active scholars, the affiliated faculty members of Ethnic Studies at Lane are dedicated to an academic discipline that assists in the intellectual and humanistic development of students by helping them to combine critical thinking skills, with an ability to understand and value difference from a social justice perspective. Because of the skills learned in class, students with a foundation in Ethnic Studies can be found pursuing a wide variety of occupational interests.

The following is a list of Ethnic Studies courses at Lane. For those students interested in pursuing degrees with a focus in Ethnic Studies, there are many courses offered in alternative years from which to choose from. All Ethnic Studies course offerings fulfill both the Social Sciences Category of the AAOT, and the Ethnic/Gender/Cultural Diversity graduation requirements. A suggested course of study is not the same as a state-approved vocational program in which a student earns a degree or certificate with a vocational major issued by the Lane Board of Education, nor is it an Associate of Arts degree. For further information, contact Michael Sámano, Coordinator of Ethnic Studies at (541) 463-5186 or samanom@lanecc.edu.

Cooperative Education (Co-op) Ethnic Studies co-op is an important field placement opportunity that allows students to hone their cultural competency skills. Co-op students are encouraged to work with local service agencies that serve underrepresented minority communities, or organizations with a social justice perspective. Placement provides opportunities for students to explore their career options while gaining practical experience in the field. Students may participate on a full- or part-time basis.

A Meets Arts/Letters requirement
B Must be passed with grade of " $\mathrm{B}-$ " or better to use as a prerequisite
D Degree or certificate requirement; must be passed with grade of "C-" or better
G Must be taken for a grade, not P/NP; major requirement

This is a suggested course of study which is not the same as a state-approved vocational program leading to a degree from the Lane Board of Education. Rather, the courses below are appropriate electives for students interested in Ethnic Studies.
First Year ..... Fall
ES 101 Introduction to Ethnic Studies 1 ..... 4
ES 221 African American Experience. ..... 4
Winter
ES 102 Introduction to Ethnic Studies 2 ..... 4
ES 222 African American Experience. ..... 4
ES 223 African American Experience. ..... 4
Second Year ..... Fall
ES 211 Chicano/Latino Experience ..... 4
ES 241 Native American Experience. ..... 4
ES 280 Co-op Ed: Ethnic Studies. ..... 3
ES 212 Chicano/Latino Experience.
Winter ..... 4
ES 242 Native American Experience.
ES 280 Co-op Ed: Ethnic Studies. ..... 4
3
Spring
ES 213 Chicano/Latino Experience. ..... 4
ES 243 Native American Experience, ..... 4
ES 250 Class/Race/Gender in U.S. Economy. ..... 4
ES 280 Co-op Ed: Ethnic Studies ..... 3

## Exercise and Movement Science

## Offered by the Health, Physical Education and Athletics Division

Two-Year Associate of Applied Science Degree (Exercise and Movement Science)

## Two-Year Certificate of Completion (Fitness Specialist)

One-Year Certificate of Completion (Fitness Technician)
Purpose To prepare students as fitness professionals for various careers in the fitness industry.

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.
- administer various fitness assessments including the measurement of cardiovascular endurance, body composition, flexibility, muscular strength and endurance.
- design and demonstrate safe and effective exercise programs for individuals, groups, and special populations 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.

Employment Trends Statewide, 95 openings are projected, with ten of those in Lane County. According to the U.S. Department of Labor, "Employment of fitness workers is expected to increase much faster than the average for all occupations through 2014. An increasing number of people spend more time and money on fitness, and more businesses are recognizing the benefits of health and fitness programs and other services such as wellness programs for their employees. Aging baby boomers are concerned with staying healthy, physically fit, and independent. They have become the largest demographic group of health club members. The reduction of physical education programs in schools, combined with parents' growing concern about childhood obesity, has resulted in rapid increases in children's health club membership. Health club membership among young adults also has grown steadily, driven by concern with physical fitness and by rising incomes. As health clubs strive to provide more personalized service to keep their members motivated, they will continue to offer personal training and a wide variety of group exercise classes."

Individuals with formal training or experience will have the best chances to get these jobs.

Wages The statewide average is $\$ 17.17$ hourly, for an average annual salary of $\$ 35,720$.

Costs in Addition to Tuition (estimate) Textbooks and minimal lab fees are required for most program core courses.

Program Certification The American College of Sports Medicine (ACSM) endorses Lane Community College's Professional Fitness Training Program as providing training for the knowledge, skills and abilities as specified for ACSM certification. ACSM states: "The American College of Sports Medicine has endorsed the curriculum for Lane Community College's Associate of Applied Science program. This curriculum covers the knowledge, skills, and abilities expected of an ACSM Health/Fitness Instructor®. This curriculum has been reviewed for the educational content and has been endorsed by ACSM. This does not reflect ACSM endorsement of the college or its other academic programs."

Admission Deadline Please check with the Health and PE department for specific dates.

Number of New Students Admitted Annually 30 students maximum are admitted each academic year.

Criteria Used for Admission Applicants must meet the following minimum qualifications:

- Complete application for admission to the college (new students only) and separate program application (all students). Only complete applications will be considered. Please see the Health and PE department for an application.
- Have a high school or college GPA of 2.5, or a 500 average standard score on the GED certificate. If a student has earned 12 or more college graded credits, the college GPA will be used to determine eligibility.
- Complete admission placement tests in Reading, Writing, and Mathematics meeting the minimum scores, or successfully complete qualifying classes as outlined in the program application packet.

Selection to the program is by a point allocation system from a pool of qualified applicants. Information about the point allocation system is available within the application packet (see below). All applicants will be notified of program selection status.

Admission Information Program information sheets and application packets are available in the Division of Health, Physical Education and Athletics, Bldg. 5, Rm. 205 and the Counseling and Advising Center, Bldg. 1, Rm. 103.

Program requirements In addition to completing all required coursework, accepted students must meet the following criteria for program completion:

- attendance at a mandatory program orientation before fall term and advisee meetings with program advisor each term
- earned letter grade of C or higher AND earned accumulative G.P.A. of 3.0 or higher in all program core courses
- minimum of four total Cooperative Education credit hours as a student intern in the Fitness Education Center and the Therapeutic Exercise and Rehabilitation Program, with at least two credits in both areas (additional credits of Cooperative Education in other areas are also required).
- Knowledge, Skills, and Abilities Competency List
- acceptable evaluations from the instructors of professional core courses
- acceptable Cooperative Education work experience supervisor evaluations
- exit interview with program advisor

Cooperative Education (Co-op) Co-op internships provide jobrelated experiences and are an integral component of the program. Students will complete on-campus internships in both the Fitness Education Center and the Therapeutic Exercise and Rehabilitation Center. Students will then have the opportunity to apply for off-campus intern experiences or additional oncampus opportunities. For information, contact Sue
Thompson, Bldg. 5, Rm. 227 (541) 463-5735,
thompsons@lanecc.edu; or Shannon Gaul, Bldg. 5, Rm. 103, (541) 463-5556, gauls@lanecc.edu.

Program Advisor Marisa Hastie, Bldg. 5, Rm. 221,
(541) 463-5552, hastiem@lanecc.edu

## Exercise and Movement Science

Associate of Applied Science Degree
Fitness Specialist
Two-Year Certificate of Completion

First Year

HE 275 Lifetime Health and Fitness D,P
3
Choice of:.
PE 183A Conditioning
PE 183F Fitness Education: Introduction
PE 194F Professional Activity: Fitness Assessment and
Exercise Prescription: Field Tech. *,1........................................ 2
PE 194S Professional Activity: Strength Training and
PE 196 Applied Anatomy and Kinesiology *,1 ..................... 3
Choice of:...................................................................................... 1
PE 280F Co-op Ed: Fitness ${ }^{\text {G }}$
PE 280RT Co-op Ed: Rehabilitation Therapies ${ }^{\text {G }}$
Choice of:..
WR 115 Introduction to College Writing *,W
WR 121 English Comp: Exposition and Intro to Argument *,W

|  | Winter |
| :---: | :---: |
| PE 194T Professional Activity: Techniques of Leadership |  |
| Training *,1 | 2 |
| PE 295 Injury Prevention and Management *,1. | 3 |
| PE 280F Co-op Ed: Fitness ${ }^{\text {G }}$ | 1 |
| PE 280 RT Co-op Ed: Rehabilitation Therapies ${ }^{\text {G }}$ | 1 |
| Physical Education Strength Training class ${ }^{2}$ | 1 |
| Choice of: | 4-6 |
| BI 102D General Biology - Survey of Biology |  |
| BI 102l General Biology - Human Biology |  |
| BI 112 and CH 112 (co requisites) Bio-Bonds Learning Community ( 3 credits each) ${ }^{s}$ |  |
| CH 104 Introductory Chemistry ${ }^{\text {S }}$ |  |
| CH 110 Chemistry in Everyday Life |  |
| Choice of: | 4-5 |
| MTH 070 Introductory Algebra (or equivalent) M |  |
| MTH 095 Intermediate Algebra M,R |  |
| MTH 105 Intro to Contemporary Mathematics M MTH 111 College Algebra M |  |
|  |  |
| Total Credits | 16-19 |
|  | Spring |
| Human Relations requirement ${ }^{R}$ | 3 |
| FN 225 Nutrition | 4 |
| PE 135 Applied Exercise Physiology 1 *,1 | 3 |
| Choice of:. | 1 |
| PE 280F Co-op Ed: Fitness ${ }^{\text {G }}$ |  |
| PE 280RT Co-op Ed: Rehabilitation Therapies ${ }^{\text {G }}$ |  |
| Choice of: | 4 |
| SP 100 Basic Communication ${ }^{\text {A }}$ |  |
| SP 105 Listening and Critical Thinking A |  |
| SP 111 Fundamentals of Public Speaking A |  |
| SP 115 Introduction to Intercultural Communications |  |
| SP 218 Interpersonal Communication A |  |
| HE 252 First Aid D | 3 |
| Total Credits | 18 |
| Second Year | Fall |
| Ethnic/Gender/Cultural Diversity elective <br> (from AA/OT requirement list in catalog) $\qquad$ |  |
| General electives | 3 |
| PE 235 Applied Exercise Physiology 2 *,1 | 3 |
| Choice of: | 1 |
| PE 280F Co-op Ed: Fitness ${ }^{\text {G }}$ |  |
| PE 280RT Co-op Ed: Rehabilitation Therapies |  |
| 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 |  |
| Physical Education Activity elective ${ }^{2}$............................... 1 |  |
| Choice of:...................................................................... 3 |  |
| HE 125 Workplace Health and Safety |  |
| HE 152 Drugs, Society and Behavior |  |
| HE 199 Special Studies |  |
| HE 209 Human Sexuality |  |
| HE 250 Personal Health |  |
| HE 255 Global Health |  |
| Total Credits | 14 |
|  | Winter |
| PE 194L Professional Activity: Fitness Assessment and Exercise |  |
| Prescription: Lab Techniques*,1 .................................... | 2 |
| 199 Special Topics: Fitness *,1 .......................................... | 1 |
|  | 1 |
| Choice of:. | 2 |

[^30]PE 280F Co-op Ed: Fitness ${ }^{\text {G }}$PE 280RT Co-op Ed: Rehabilitation Therapies ${ }^{\text {G }}$
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
Directed Electives ${ }^{3}$

Total Credits12
Spring
PE 294 Foundations of Fitness Management *, ..... 2
Directed Electives ${ }^{3}$ ..... 6
Choice of: ..... 2
PE 280F Co-op Ed: Fitness G
PE 280RT Co-op Ed: Rehabilitation Therapies ${ }^{\text {G }}$PE 280 Co-op Ed: Physical EducationPE 280AR Co-op Ed: Aerobics
PE 280W Co-op Ed: Wellness
PE 280M Co-op Ed: Fitness ManagementPE 280AT Co-op Ed: Athletic TrainingChoice of:4
WR 121 English Composition: Exposition and
Introduction to Argument *,A
WR 122 English Comp: Style and Argument *,A
WR 123 Composition: Research *,A
Total Credits ..... 14
Fitness Technician
One-Year Certificate of Completion
HE 275 Lifetime Health and Fitness D,P. ..... Fall ..... 3
Choice of:. ..... 1
PE 183A ConditioningPE 183F Fitness Education: Introduction
PE 194F Professional Activity: Fitness Assessment and Exercise Prescription: FieldTech. *,1 ..... 2
PE 194S Professional Activity: Strength Training and Conditioning *, 1 ..... 2
PE 196 Applied Anatomy and Kinesiology *,1 ..... 3
Choice of: ..... 1
PE 280F Co-op Ed: Fitness ${ }^{\text {G }}$
PE 280RT Co-op Ed: Rehabilitation Therapies ${ }^{\text {G }}$4
WR 115 Introduction to College Writing *, W
WR 121 English Comp: Exposition and Intro to Argument *,W


BI 232 Human Anatomy and Physiology 2 BI 232 Human Anatomy and Physiology 3
CG 140 Career and Life Planning
CG 202 Life Transitions
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
CIS 101 Computer Fundamentals
CS 120 Concepts of Computing: Information Processing
EL 115 Effective Learning
EL 115H Effective Learning: Health Science Majors
FN 230 Family, Food, and Nutrition
FN 199SS Sports Nutrition
HE 125 Workplace Health and Safety
HE 152 Drugs, Society and Behavior
HE 199 Special Studies
HE 209 Human Sexuality
HE 250 Personal Health
HE 255 Global Health
HO 100 Medical Terminology
HS 107 Gerontology and Aging
HS 200 Understanding Addictive Behaviors
MTH 111 College Algebra
MTH 112 Trigonometry
PH 101 Fundamentals of Physics PH 102 Fundamentals of Physics
PH 103 Fundamentals of Physics PH 201 General Physics
PSY 110 Exploring Psychology
PSY 201 General Psychology
PSY 202 General Psychology
PSY 215 Lifespan Developmental Psychology
PSY 218 Multicultural Psychology
PSY 239 Introduction to Abnormal Psychology
SOC 204 Introduction to Sociology
SOC 207 Women and Work
SOC 208 Sport and Society
SP 105 Listening and Critical Thinking
SP 111 Fundamentals of Public Speaking
SP 112 Persuasive Speech
SP 115 Introduction to Intercultural Communication
SP 130 Business and Professional Speech
SP 218 Interpersonal Communication
SPAN 101 Spanish, First Year
SPAN 102 Spanish, First Year
SPAN 103 Spanish, First Year
WR 122 Composition: Style and Argument
WR 123 Composition: Research
WR 227 Technical Writing

## Fabrication/Welding Technology

## Offered by the Advanced Technology Division

## Two-Year Associate of Applied Science Degree Fabrication/Welding Technology

## One-Year Certificate of Completion

 Fabrication/Welding TechnologyOne-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 typically begins work in light or heavy metal fabrication as welders and/or fabricators. Training and experience can lead to careers in technical sales, supervision, estimating, quality control, inspection, specialty welding, and
teaching. The fabrication/welding certificate program (the first year of the two-year degree) prepares graduates for employment as welders/ fabricators. The welding processes certificate program prepares graduates for employment as welder-trainees or welders.

Learning Outcomes The graduate 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.
- develop manufacturing plans for commercially viable metal products.
- demonstrate advanced fabrication techniques and welding processes and application including GTAW, programmable, plasma cutting, structural and pipe fitting, metallurgy, quality control procedures, and business operation.
- demonstrate and use industry safety standards.
- use appropriate library and information resources to research professional issues and support lifelong learning.
- use mathematical formulas to calculate area, volume, and weight of metal objects.

Employment Trends Statewide, 210 annual openings for welders/fabricators are projected in Oregon and 28 openings are projected annually in Lane County. Competitively trained workers should find reasonable employment opportunities. Those with an associate degree will have a competitive advantage in this labor market.
Wages Statewide average $\$ 16$ hourly, $\$ 33,000$ average annually ( $\$ 45,000$ annually for fabricators). Lane County average, $\$ 14$ hourly, \$30,000 annually.

Differential fees are being considered for some courses in this program. See the online credit class schedule for current course fees.

* Subject to change without notice.

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.

Criteria Used for Admission Normal program entry is fall term. A program orientation is held for new students for fall term (dates available in Counseling or Enrollment and Student Financial Services). Contact advisor/counselor for assistance for winter and spring term entry.
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. 8, Rm. 111, (541) 463-3158.

Program Advisor Betty Svarverud, Bldg. 12, Rm. 203, (541) 463-5378, svarverudb@lanecc.edu

Program Counselor Carolyn Litty, Bldg. 12, Rm. 202, (541) 463-5236, littyc@lanecc.edu

## Fabrication/Welding

## Two-Year Associate of Applied Science Degree



[^31][^32]| Fabrication Welding |  |
| :---: | :---: |
| One-Year Certificate of Completion |  |
|  | Fall |
| WLD 112 Fabrication/Welding $1^{*}$, D,G MTH 076 Applied Geometry forTechnicians *,D,G,M or higher mathematics $\qquad$ | 12 |
|  | 4 |
| Total Credits | 16 |
|  | Winter |
|  | 12 |
| WR 115W Introduction to College Writing: Workplace Emphasis W or higher writing. |  |
|  | 3 |
| Total Credits | 15 |
|  | Spring |
|  | 12 |
| WLD 114 Fabrication/Welding 3 *,D,G CG 203 Human Relations at Work H. | 3 |
| Total Credits | 15 |
| Welding Processes |  |
| One-Year Certificate of Completion |  |
|  | Fall |
| MTH 076 Applied Geometry for Technicians *,D,G,M or higher mathematics $\qquad$ <br> WLD 121 Shielded Metal Arc Welding 1 *, D,G $\qquad$ <br> WLD 143 Wire Drive Welding 1 *,D,G. $\qquad$ | 4 |
|  | 4 |
|  | 4 |
| Total Credits | 12 |
|  | Winter |
| CG 203 Human Relations at Work H WLD 122 Shielded Metal Arc Welding 2 *, D,G WLD 154 Wire Drive Welding 2 *,D,G. | 3 |
|  | 4 |
|  | 4 |
| Total Credits | 11 |
|  | Spring |
|  | 4 |
|  | 4 |
| WR 115W Introduction to College Writing: Workplace Emphasis W or higher writing. $\qquad$ |  |
|  | 3 |
| Total Credits | 11 |
|  | Fall |
| WLD 111 Blueprint Reading for Welders *,D,G $\qquad$ <br> WLD 165 Industrial Welding Practices *,D,G $\qquad$ <br> WLD 242 GasTungsten Arc Welding 1 *,D,G $\qquad$ | 3 |
|  | 3 |
|  | 3 |
| Total Credits | 9 |
| WLD 256 Gas Tungsten Arc Welding 2 *, D,G <br> WLD 257 Gas Tungsten Arc Welding 3*,D,G | Winter |
|  | 3 |
|  | 3 |
| Total Credits | 6 |
| Welding Elective Courses: |  |
| ENGR 280W Co-op Ed: Welding $\qquad$ WLD 123 Fabrication/Welding of Metal Art and Crafts * | 3 credits |
|  | 3 credits |
| WLD 139 Welding Lab * [Available only as pass/no pass] $\qquad$ 1-3 credits |  |
| WLD 140 Welder Qualification (Certification): Wire Drive *3 credits |  |
| WLD 141 Welder Qualification (Certification): SMAW * .... 3 credits |  |
| WLD 142 Pipe Welding Lab: Carbon Steel *..................... 3 | 3 credits |

## Fitness - see Exercise and Movement

 Science
## Flight Technology

## Offered by the Lane Aviation Academy

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.

Employment Trends Industry leaders are in general agreement that the industry is postured for substantial growth: through the year 2012, and the civil aviation industry is projected to grow by more than fifty-percent. Moreover, trends indicate the industry loses about twenty-percent of its senior pilots every seven years primarily due to retirement.
Wages Flight instructors earn from $\$ 15,000-45,000$. Entry-level commercial pilots earn $\$ 25,000$ through their probationary period. Air carrier line pilots earn $\$ 45,000-250,000$ annually.

## Costs in Addition to Tuition (estimates)*

Certificates, flight lab and instruction fees up to $\$ 40,000$
FAA Knowledge Exams (five required for degree) $\$ 500$

FAA Physical............................................................ $\$ 100$
Books ...................................................................... $\$ 1800$
Supplies ................................................................. $\$ 300$
Total
\$42,700

* Subject to change without notice.

Program Accreditation All FAA certification courses are approved by the Federal Aviation Administration.
Licensing and Other Certification Exams Required All FAA
certificates require certification testing.

Number of New Students Admitted Annually New students are admitted in the fall term and the spring term. Typically 40 students maximum are admitted in each of the two terms.

Criteria Used for Admission Current Lane Community College Admissions Information application on file and a Flight Technology Department application on file. Acceptance priority is based on application dates.

Admission Information An information packet may be requested by calling or visiting the Flight Technology Department at 28715 Airport, Eugene, Oregon 97402, (541) 463-4195 or visiting our website at lanecc.edu/flight.htm.

Cooperative Education (Co-op) Co-op offers students college credit and a grade for on-the-job experience related to their educational and career goals. Through Co-op, students connect theory and practice, develop skills, expand career knowledge, and make contacts for the future. Work schedules and work sites vary. Contact Marv Clemons, Flight Technology Co-op Coordinator, Bldg. 8, Rm. 111, (541) 463-3158.

Program Advisor Betty Svarverud, Bldg. 12, Rm. 203, (541) 463-5378, svarverudb@lanecc.edu

Program Counselor Carolyn Litty, Bldg. 12, Rm. 202, (541) 463-5236, littyc@lanecc.edu

Note For FT 239 Professional Pilot Flight Lab a student must have a total of 39 Flight Lab credits to fulfill the AAS Degree requirement.

Prerequisites An applicant should complete the following courses prior to program entry.
Arts and Letters requirement ${ }^{R}$.
Human Relations requirement ${ }^{R}$.......................................... 3
WR 121 English Composition: Exposition and
Introduction to Argument or higher writing ${ }^{*}$,D,W
Total Credits
First Year
FT 102 General Aviation Careers ${ }^{\text {D }}$
FT 103 Aircraft Development*, D,G
FT 130 Primary Flight Briefing *, D,G3
FT 239 Professional Pilot Flight Lab *, D ..... 6
FT 250 Private Pilot Ground School D,G

Total Credits

FT 239 Professional Pilot Flight Lab *,D
GS 109 Meteorology D,G,S.5

## Choice of:

MTH 095 Intermediate Algebra or higher mathematics *,D,M
Total Credits $\quad 16$


- 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.

Employment Trends Employment is estimated to be larger than the statewide average. This occupation is expected to grow at about the statewide average. Total job openings are projected to be somewhat higher than the statewide average.

Reasonable employment opportunities exist for trained workers. Statewide, 73 job openings are projected annually with 8 of those in Lane County.

Wages Statewide average $\$ 21.34$ hourly and $\$ 44,385$ annually. Lane County average $\$ 18.03$ hourly and $\$ 37,493$ annually.

## Costs in Addition to Tuition (estimate)*

Average costs. \$1,500

* Subject to change without notice.

Admission Deadline Open admission for first year. Limited admission for second year. Second year admission dates: Transcripts, essay, and application are due the first Monday of May. Portfolios are due the third Friday of May. See Art and Applied Design Department for specific dates and information.

Number of New Students Admitted Annually First year unlimited. Second year, approximately 25-30.

Criteria Used for Admission Scores from three areas are weighted as follows: portfolio 60 percent, essay 20 percent, GPA 20 percent. Admission criteria are subject to change.

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 are required for completion of the graphic design program. Contact Rick Simms, Graphic Design Cooperative Education Coordinator, Bldg. 17, Rm. 107, (541) 463-5472.
Program Coordinator Rick Simms, Bldg. 17, Rm. 107, (541) 463-5472, simmsr@lanecc.edu

Program Advisors: Rick Simms, Bldg 17, Rm. 107,
(541)463-5472 and Susan Lowdermilk, Bldg 11, Rm. 112, (541)

463-5413, lowdermilks@lanecc.edu
Program Counselor Tim Blood, Bldg. 1, Rm. 110, (541) 463-5243

Note Students must earn a grade of "B-" or better in all prerequisites and "C" or better in major requirements.

## Two-Year Associate of Applied Science Degree

First Year ..... Fall
ART 131 Introduction to Drawing A,G ..... 3
ART 261 Photography 1 G ..... 3
CG 203 Human Relations at Work H ..... 3
CIS 140B Operating Environments: Macintosh ..... 1
Choice of: ..... 4
ART 115GD Basic Design Fundamentals A,G (4 credits)or ART 115 Basic Design: Fundamentals A,G (3 credits) and GD 110 Introduction to Graphic Design ${ }^{G}$ ( 1 credit)
Total Credits14
Winter
ART 119 Typography 1 *,G ..... 3
ART 200 Graphic Design History $G$ ..... 3
ART 216 Digital Design Tools *. ..... 4
Science/Math/Computer Science requirement ${ }^{\mathrm{R}}$. ..... 4
Total Credits ..... 14
Spring
ART 116 Basic Design: Color ${ }^{G}$ ..... 3
ART 231 Drawing: Intermediate *,G ..... 3
CIS 125H Software Applications: HTML ..... 3
MUL 212 Digital Imaging *,G ..... 3
Written Communications requirement ${ }^{R}$ ..... 3Total Credits
Second Year
ART 218 Printing Technology ${ }^{G}$ART 221 Graphic Design 1 *,GART 225 Digital Illustration *,G
ART 225 Grap il Dustration................
Choice of:15ART 280GD Co-op Ed: Graphic Design *,GApproved elective ${ }^{G}$
Total Credits ..... 17

ART 222 Graphic Design 2 *,G

ART 228 Graphic Design Production 2*,G

ART 280GD Co-op Ed: Graphic Design *,G

ART 289 Web Production *,G

Choice of:

Physical Education Activity requirement $1, R$

Health requirement ${ }^{R}$

Total Credits

## 17

Spring

ART 223 Graphic Design $3^{*, G} \ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~$
ART 229 Graphic Design Production $3^{*, G} \ldots . . . . . . . . . . . . . . . . . . . . . . . ~$

ART 280GD Co-op Ed: Graphic Design *,G .......................... 3

ART 290 Design Concepts for the Web *,G.

Math requirement ${ }^{R}$
Two-Year Certificate of Completion
First YearFall
ART 131 Introduction to Drawing A,G ..... 3
ART 261 Photography 1 G3
CIS 140B Operating Environments: Macintosh ..... 1
Choice of4ART 115GD Basic Design Fundamentals A,G (4 credits) orART 115 Basic Design: Fundamentals A,G (3 credits) andGD 110 Introduction to Graphic Design G (1 credit)

|  | Winter |
| :---: | :---: |
| ART 231 Drawing: Intermediate *,G ................................. | 3 |
| ART 119 Typography ${ }^{*}$, | 3 |
| ART 216 Digital Design Tools *,G. | 4 |
| Total Credits | 10 |
|  | Spring |
| ART 116 Basic Design: Color G. | 3 |
| MUL 212 Digital Imaging *,G. | 3 |
| CIS 125H Software Applications: HTML G. | 3 |
| CG 203 Human Relations at Work H | 3 |
| Written Communications requirement ${ }^{\text {R .......................... } \text {. }}$ | 3 |
| Total Credits | 15 |
| Second Year | Fall |
| ART 218 Printing Technology G | 2 |
| ART 221 Graphic Design 1 *,G.......................................... | 4 |
| ART 227 Graphic Design Production 1 *,G ......................... | 3 |
| ART 225 Digital Illustration *,G.......................................... | 3 |
| Math requirement ${ }^{\text {R ....................................................... }{ }^{\text {. }} \text {. }}$ | 3 |
| Total Credits | 15 |
|  | Winter |
| ART 222 Graphic Design $2{ }^{*}$,G | 4 |
| ART 228 Graphic Design Production 2 *,G | 4 |
| ART 280GD Co-op Ed: Graphic Design *,G | 3 |
| ART 289 Web Production *,G .................... | 3 |
| Total Credits | 14 |
|  | Spring |
| ART 223 Graphic Design 3 *,G ......................................... | 4 |
| ART 229 Graphic Design Production 3 *,G ........................ | 4 |
| ART 280GD Co-op Ed: Graphic Design *,G ........................ | 3 |
| ART 290 Design Concepts for the Web *,G......................... | 3 |
| Total Credits | 14 |
| 1 PE Activity requirement credits must be taken in at lea terms to satisfy degree requirement. | st two |
| Approved Electives Any other Art Class |  |
| Any Multimedia Class |  |
| CS 133 JS Beginning Programming: JavaScript |  |
| CS 295 Web Development 1 |  |

## Health Education

Offered by Health, Physical Education and Athletics Division

## Suggested Course of Study

As our world becomes more connected and 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 related to personal health choices. In addition, new and emerging infectious diseases are stretching the available
resources to combat them. Thus, the achievement of optimal health remains a worldwide priority in the twenty-first century. The primary role of a health educator is to act as an "agent of change" that positively impacts both an individual's and society's ability to reach its fullest potential.

The Health Education course of study is designed for students who would like to further their career goals in any of the following health areas: Health Education, Public Health, Health Care Administration, Health Promotion, Environmental Health and Occupational Health and related fields. These fields provide career opportunities that include, but are not limited to: Teacher/Educator, Administrator, Researcher, Epidemiologist (person who studies disease), Sanitarian, Occupational Health Specialist, Environmental Toxicologist, and Public Health Specialist.

This is a suggested course of study, which is not the same as a state-approved vocational program leading to a degree with a vocational major from the Lane Board of Education. Rather the courses below are appropriate electives for students interested in Health Education.

## First Year

Fall
HE 275 Lifetime Health and Fitness
Winter
HE 252 First Aid
Spring
HE 250 Personal Health
HE 222 Consumer Health
Second Year
Fall
HE 152 Drugs Society and Behavior
HE 209 Human Sexuality
Winter
HE 125 Workplace Health and Safety
Spring
HE 255 Global Health

## Health Informatics

## Offered by the Computer Information Technology Department

## Suggested Course of Study

This suggested course of study is for students who want to earn an Associate of Arts Oregon Transfer (AAOT) degree at Lane Community College and complete courses that will be accepted in transfer to the health informatics program at Oregon Institute of Technology. A suggested course of study is not the same as a state-approved vocational program in which a student earns a degree or certificate in a vocational major issued by the Lane Board of Education. The guide below includes courses required for Oregon Institute of Technology's Bachelor of Science degree in Information Technology - Health Informatics Option, as well as necessary general education requirements for an AAOT.

Transfer institutions require additional coursework for a health informatics degree, and may change prerequisites from year-toyear. Any student interested in transfer must accept responsibility to work very closely with a Lane academic advisor, and also to be aware of changes in prerequisites for programs at potential transfer institutions.
General education courses completed within an AAOT degree satisfy lower division general education requirements for any of Oregon's public universities and will transfer intact. Courses numbered below 100 generally do not transfer. See a Lane science advisor for assistance in course selection and transfer policies.

## Suggested Course of Study:

WR 121 English Composition: Exposition and Introduction to Argument*,4 $\qquad$
WR 122 Composition: Style and Argument *,3,4 $\qquad$
WR 227 Technical Writing *,3,4
MTH 111 College Algebra *,44

AAOT Health requirement 1
SP 111 Public Speaking 3,4
SP 219 Small Group Discussion 3,44
4

AAOT Arts and Letters requirement 2,3,4.
AAOT Social Science requirement 2,3,4. $\qquad$
ECON 201 Introduction to Microeconomics *,3,4
ECON 202 Introduction to Macroeconomics *,3,4.
PSY 201 General Psychology 3,4
Science with Labs 1,3,43
12Bl 1021 Human Biology 3,4BA 211 Financial Accounting*,3,44
BT 114 MS Excel for Business*,3,4 ..... 4
CIS 140 Operating Environments: Managing Windows 3,4 ..... 4
ET 287 Computer Hardware 3,4

CIS 244 Systems Analysis*,3,4
CS 133G or CS 161 Programming 1 with C++ or Java ${ }^{3,4}$..
CS 233G or CS 162 Programming 2 with C++ or Java 3,4..
CS 275 Database Program Development 3,4
CS 279W Windows Server Administration 3,4
$\qquad$
HO 100 Medical Terminology 3,4 $\qquad$4

Total Credits 107-108

* Prerequisite required

1 See science advisor for course selection
2 One Social Science or Arts and Letters course needs to meet Cultural Diversity Requirement
3 Major requirement-see advisor for other choices
4 must be taken for a letter grade and earn a grade of a C or higher

## Health Records Technology

Offered by Health Professions Division

One-Year Certificate of Completion
Career Pathway Certificate of Completion: Medical Transcriptionist

## Career Pathway Certificate of Completion: Medical Coding

Note Health Records Technology is a Lane Community College certificate program which begins fall term. Students have the option of completing the program in one or two years.

See the Health Records Technology web pages for additional information: www.lanecc/hp/hrt

Purpose To prepare students to produce and maintain health records used in medical offices and associated health care facilities. Graduates may be employed as health information specialists, medical records clerks, and/or medical transcriptionists, by hospitals, clinics, health maintenance organizations, insurance companies, law firms, physician offices, mental health care facilities, nursing homes, consulting firms, health data organizations, and information systems vendors.

Learning Outcomes The graduate will:

- process, analyze, and distribute healthcare information.
- organize, analyze, and technically evaluate health record content for completeness and accuracy.
- prepare health data input for computer processing.
- abstract health records and assign code numbers to diagnoses and procedures for indexing health data, and processing claims for insurance reimbursement.
- answer legal, governmental, and insurance company inquiries and compile statistical data.
- consult with medical and administrative staffs to ensure the data is accurate, up-to-date, and secure.
- be involved in administration, reimbursement, quality assurance, utilization review, and risk management.
- use library resources for research and written assignments for a variety of classes.
- perform basic mathematical functions as necessary to prepare health data reports.

Employment Trends Employment projections from 2006-2016 are estimated to average 114 openings annually statewide and 16 openings annually in Lane County. Reasonable employment opportunities exist for trained workers.
Wages Statewide average wages in 2008 were $\$ 15.74$ hourly, or $\$ 32,737$ annually, usually with excellent benefits. Lane County average wages were $\$ 14.04$ hourly or $\$ 30,905$ annually.
Costs in Addition to Tuition (estimates)*
Books and supplies
\$926

* Subject to change without notice.

Prerequisite Courses Required
HO 100 Medical Terminology D,G ......................................... 3 credits
BT 120 MS Word for Business D,G 3 credits MTH 025 Basic Mathematics Application or higher D,G ..... 3 credits

Admission Information Application into the Health Records Technology Program is required. Admission and Application information is found on the web at: www.lanecc.edu/hp/hrt

Admission Deadline Application submission begins mid-May. Application submission deadline is mid-July. Applicants are accepted on basis of first applied and qualified, first admitted.

Number of New Students Admitted Annually Enrollment is limited to 40 students including Medical Coding and Medical Transcription students.

Criteria Used for Admission Submission of transcripts of previous college or high school work, completion of placement tests of basic skills in reading, writing and mathematics, and successful completion of course prerequisites (grade "C" or better).

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 Marty Pittman, Health Records Cooperative Education Coordinator, Bldg. 4, Rm. 259, (541) 463-3177.

Program Advisor Rosa Lopez, Bldg. 1, Rm. 107, (541) 463-5660
Program Counselor (541)463-3200
One-Year Certificate of Completion


A Meets Arts/Letters requirement
B Must be passed with grade of " $\mathrm{B}-$ " or better to use as a prerequisite
D Degree or certificate requirement; must be passed with grade of "C-" or better
G Must be taken for a grade, not P/NP; major requirement

| HIT 104 Clinical Terminology *, D,G. | Spring |
| :---: | :---: |
| HIT 154 Intro to Medical Science *,D,G | 3 |
| HIT 160 Medical Manager*,1,D,G. | 3 |
| WR 121 English Composition: Exposition and Introduction to Argument *, D,W $\qquad$ | 4 |
| Choice of: | 3 |
| PSY 201 General Psychology |  |
| PSY 202 General Psychology |  |
| PSY 203 General Psychology |  |
| SOC 204 Introduction to Sociology |  |
| SOC 205 Social Stratification and Social Systems |  |
| SOC 206 Institutions and Social Change |  |
| Directed Elective .......................................................... | 3 |

Total Credits $\quad 19$
1 Must be accepted into the program to register for this class. Directed Electives

| HIT 197 Medical Transcription Lab ................................. | 6 |
| :--- | :--- | ---: |
| HIT 222 Reimbursement Methodologies ........................................................................................ | 3 |
| HIT 230 Health Data Presentation....... |  |

## Medical Coding

## Career Pathway Certificate of Completion

Medical Coding continues to grow in importance as coders increasingly influence healthcare's bottom line.

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.
Beginning pay for medical coding specialists will range from \$11-\$14 per hour.

## Prerequisite Courses Required

| BT 120 MS Word for Business D,G $\qquad$ 3 credits MTH 025 Basic Mathematics Application or higher D,G ..... 3 credits |
| :---: |
|  |  |
|  |  |

Admission Information Application into the Health Records Technology Program is required. Admission and Application information is found on the web at: www.lanecc.edu/hp/hrt

Admission Deadline Application submission begins mid-May. Application submission deadline is mid-July. Applicants are accepted on basis of first applied and qualified, first admitted.

Number of New Students Admitted Annually Enrollment is limited to 40 students including Health Records Technology and Medical Transcription students.

Criteria Used for Admission Submission of transcripts of previous college or high school work, completion of placement tests of basic skills in reading, writing and mathematics, and successful completion of course prerequisites (grade "C" or better).

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 Marty Pittman, Health Records Cooperative Education Coordinator, Bldg. 4, Rm. 259, (541) 463-3177.

Program Advisor Rosa Lopez, Bldg. 1, Rm. 107, (541) 463-5660
Program Counselor (541)463-3200

|  | Fall |  |
| :--- | ---: | ---: |
| HIT 104 Clinical Terminology............................................... | 3 |  |
| HO 220 Legal and Ethical Aspects of Health Care, D,G ...... | 3 |  |
| HO 110 Administrative Medical Office Procedures D,G ...... | 3 |  |
| HO 150 Human Body Systems ${ }^{1 *}$...................................... | 3 |  |
|  | Total Credits | 15 |


|  | Winter |
| :---: | :---: |
| HO 112 Medical Insurance Procedures *, D,G ... | 3 |
| HO 152 Human Body Systems 2 *,D,G .......................... | 3 |
| Directed Elective | 3 |
| Total Credits | 9 |
|  | Spring |
| HIT 154 Intro to Medical Science *,D,G | 3 |
| HIT 222 Reimbursement Methodologies *,D,G. | 3 |
| Directed Elective: |  |
| HIT 280 Cooperative Education D,G... | 3-9 |
| HO 195 Medical Transcription 1 *,D,G. | 2 |
| Total Credits | 9 |

## Medical Transcription

## Career Pathway Certificate of Completion

On a word processor or computer, a medical transcriptionist records medical reports according to established guidelines for format, accuracy, and speed. These reports become an important part of the patient's medical record and are necessary to ensure high quality health care, for documentation of cases, for research, and other purposes. These may include office chart notes, history and physical examinations, consultations, letters, memos, admission notes, emergency department notes, operative reports, discharge summaries, and
many laboratory tests and diagnostic studies. Medical transcriptionists transcribe reports from a variety of medical specialties. Each day's work presents a unique challenge and opportunity for continuing medical education.

Medical transcriptionists care about quality patient care and are committed to excellence. Important personal and professional characteristics of the medical transcriptionist include:

- desire a professional career in medicine
- have an interest in medicine
- enjoy learning something new everyday
- have above-average skills in spelling and grammar
- enjoy typing and transcribing
- work independently
- concerned about quality and excellence
- enjoy reading for information and fun

Medical transcriptionists work in a variety of settings, including medical clinics, doctors' offices, hospitals, private transcription businesses and home offices. Some transcriptionists become supervisors, managers, and teachers, while others establish their own transcription companies. There is a shortage of qualified medical transcriptionists and they are always in great demand. Beginning pay is approximately $\$ 11$ to $\$ 12$ per hour.

| Costs in Addition to Tuition (estimate)* |  |
| :---: | :---: |
| Program Costs | \$1,000 |
| * Subject to change without notice. |  |
| Prerequisite Courses Required |  |
| HO 100 Medical Terminology D,G. BT 120 MS Word for Business D,G | 3 credits <br> 3 credits |
| MTH 025 Basic Mathematics Appl | cre |

Admission Information Application into the Health Records Technology Program is required. Admission and Application information is found on the web at: www.lanecc.edu/hp/hrt

Admission Deadline Application submission begins mid-May. Application submission deadline is mid- July. Applicants are accepted on basis of first applied and qualified, first admitted.

Number of New Students Admitted Annually Enrollment is limited to 40 students including Health Records Technology and Medical Transcriptionist students. Applicants are accepted on basis of first applied and qualified, first admitted.

Criteria Used for Admission Submission of transcripts of previous college or high school work, completion of placement tests of basic skills in reading, writing and mathematics, and successful completion of prerequisites (grade "C" or better).

Program Advisor Rosa Lopez, Bldg. 1, Rm. 107, (541) 463-5660
Program Counselor (541)463-3200
HIT 120 Introduction to Health Records*, D,G
HO 220 L..................
1
HO 220 Legal and Ethical Aspects of Health Care ${ }^{*, D, G}$....... 3
HO 150 Human Body Systems 1 *,D,G ................................. 3
HO 190 Medical Formatting*,D,G
3
HO 195 Medical Transcription 1 *, D,G
2

|  | Winter |
| :---: | :---: |
| HIT 196 Medical Transcription 2 , D,G............... | 2 |
| HO 110 Administrative Medical Office Procedures*,D,G ..... | 3 |
| HO 114 Medical Coding*,D,G | 3 |
| HO 152 Human Body Systems 2 *,D,G | 3 |
| Directed Elective | 3 |
| Total Credits | 14 |
|  | Spring |
| HIT 104 Clinical Terminology*, D,G. | 3 |
| HIT 154 Intro to Medical Science *,D,G | 3 |
| HIT 197 Medical Transcription Laboratory *,1,D,G | 6 |
| HO 112 Medical Insurance Procedures *,D,G | 3 |
| Total Credits | 15 |
| 1 The Advisory Committee for this suggested course of study stror recommends at least 6 credit hours of transcription laboratory (advanced transcription practice). Call the course advisor to di in more detail at (541) 463-5621 or (541) 463-5617. | ngly <br> uss this |

## Hospitality Management

Offered by Culinary Arts and Hospitality Management

## Two-Year Associate of Applied Science Degree

One-Year of Certificate of Completion, Food Service Management

## Career Pathway Certificate of Completion, Restaurant Ownership

Purpose The Hospitality Management curriculum focuses on the management aspects of today's exciting hospitality industry: lodging, meeting and convention management, food and beverage, travel and tourism, and recreation and leisure. Upon graduation, enter the hospitality industry working in such areas as hotel operations, inn keeping, convention and visitor associations, restaurant management or ownership, and travel and tourism organizations.

Learning Outcomes The graduate, depending on area of concentration, will:

- understand broad hospitality and food service concepts.
- be knowledgeable of the travel and tourism industry and the operation of hospitality services.
- become familiar with front desk operations including reservations, room assignments, management statistical reports, and handling financial operations.
- become acquainted with the hospitality industry through field trips to local motels, hotels, and convention centers.
- access library, computer, and communications services and obtain information and data from regional, national, and international networks.
- perform mathematical functions related to hospitality operations.
- operate equipment used in the industry-including point of sales systems, computers, and computer software.
- manage conferences, specials events, and trade shows.
- become knowledgeable of the various elements involved in restaurant management and ownership.
- supervise housekeeping operations.
- manage property in hospitality operations and resorts.
- develop strong customer service skills and practices.
- demonstrate strong communications, problem-solving, and human relations skills.

Employment Trends Statewide, 194 annual openings for hotel, motel, and resort desk clerks are projected in Oregon, and 8 openings are projected annually in Lane County; statewide, 27 annual openings for tour guides and escorts are projected in Oregon, and 7 opening is projected annually in Lane County; statewide, 5 annual openings for concierges are projected in Oregon, and 1 opening is projected annually in Lane County; and statewide, 26 annual openings for lodging managers are projected in Oregon, and 1 opening is projected annually in Lane County; statewide, 17 annual openings for meeting and convention planners are projected in Oregon, and one opening is projected annually in Lane County.

Wages Hotel, motel, and resort desk clerks range from \$9.29 an hour in Lane County to $\$ 9.65$ an hour statewide, with an average annual salary of $\$ 20,082$; tour guides and escorts range from $\$ 9.88$ an hour in Lane County to $\$ 11.68$ and hour statewide, with an average annual salary of $\$ 24,294$; concierges average hourly pay is $\$ 14.26$ an hour statewide with an average annual salary of $\$ 29,661$; lodging managers range from $\$ 21.32$ an hour statewide to $\$ 23.96$ an hour in Lane County with an average annual salary of $\$ 44,346$; and meeting and convention planners range from $\$ 16.00$ an hour in Lane County to $\$ 17.81$ an hour statewide with an average annual salary of $\$ 37,158$.

## Costs in Addition to Tuition (2-year program estimate)*

Books and Fees

* Subject to change without notice.

Licensing or Other Certification Exams Required Students completing certain classes that comply with the American Hotel and Lodging Association (AHLA) or National Restaurant Association Education Foundation (NRAEF) will receive Certificates of Completion from these recognized organizations.

Prerequisites Must be a credit-level student. Students are strongly advised to enter fall term.

Admission Deadline Student applications are reviewed monthly.
Steps to be completed for entry into the Hospitality
Management program include the following:
Complete an admission form
(https://exp.lanecc.edu/pls/lane/bwskalog.P_DispLoginNon) and receive your "L" number. Contact Enrollment and Student Financial Services at 463-3100 for admission information.

- 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 may attach a copy of transcript(s). Math must be current within one year or a placement test will need to be taken.
- Complete an application for admission to the Hospitality Management program. Including questionnaire, available from the Culinary and Hospitality office or online at lanecc.edu/culinary.


## Standard footnotes:

* Prerequisite required

A Meets Arts/Letters requirement
B Must be passed with grade of " $\mathrm{B}-$ " or better to use as a prerequisite
D Degree or certificate requirement; must be passed with grade of "C-" or better
G Must be taken for a grade, not P/NP; major requirement

[^33]- Submit Hospitality Management program application to the Culinary Arts and Hospitality Management office.

Criteria Used for Admission Students are selected based on application to the program.

Cooperative Education (Co-op) Students may earn credit for on-the-job work experience related to their educational and career goals. Through Co-op, a student can develop and practice skills, expand career knowledge, and make contacts for future employment. For more information, contact Joe McCully, Hospitality Cooperative Education Coordinator, Bldg. 19, Rm. 210, (541) 463-3516.

Program Advisor Betty Svarverud, (541) 463-5378
Program Counselor Carolyn Litty, (541) 463-5236
Program Contact Denise Elder, (541) 463-3503
Note All HRTM and CA numbered courses required for this program must be taken for a grade, not pass/no pass, and must be passed with a grade of "C-" or better.

| Two-Year Associate of Applied Science Degree |  |
| :---: | :---: |
| First Year | Fall |
| CG 203 Human Relations at Work H.. | 3 |
| HRTM 105 Restaurant Operations D,G | 3 |
| HRTM 106 Introduction to Hospitality Management D,G .... | 3 |
| HRTM 225 Hospitality Management Lab D,G .................... | 2 |
| Program Elective D,G | 2-3 |
| MTH 025 Basic Math Applications *, D,M. | 3 |
| Total Credits | 16-17 |
|  | Winter |
| CS 120 Concepts of Computing: Information Processing S | 4 |
| HRTM 110 Hospitality Sales and Marketing D,G................. | 3 |
| HRTM 120 Communications and Guest Relations D,G........ | 3 |
| HRTM 225 Hospitality Management Lab D,G............ | 2 |
| MTH 052 Math for Introductory Physical Science *,S ......... | 4 |
| Total Credits | 16 |


|  | Spring |
| :---: | :---: |
| CA 159 Kitchen Operations D,G | 3 |
| HRTM 130 Hospitality Information Systems D,G. | 3 |
| HRTM 140 Security in the Hospitality Industry ${ }^{\text {, G ....... }}$ | 3 |
| HRTM 225 Hospitality Management Lab D,G | 2 |
| BT 165 Introduction to Accounting Cycle. | 4 |
| WR 115W Introduction to College Writing: |  |
| Workplace Emphasis *,D,W................ | 3 |


|  | Summer |
| :---: | :---: |
| HRTM 280 Co-op Ed: Hospitality Management $\mathrm{D}, \mathrm{G}$ $\qquad$ |  |
|  | 7 |
| Total Credits | - 7 |
| Second Year | Fall |
| HRTM 230 Hotel Operations 1 D,G | - 3 |
| HRTM 260 Supervision in the Hospitality Industry , D,G...... | 3 |
| HRTM 265 Hospitality Financials 1 D,G ............................ | - 3 |
| HRTM 279 Buffet and Banquet Planning D,G... | 2 |
| Program Elective D,G............................... | 2-3 |

Total Credits $\overline{13-14}$
Winter
HRTM 231 Hotel Operations 2*,D,G ..... 3
HRTM 275 Hospitality Financials 2 *,D,G ..... 3
HRTM 279 Buffet and Banquet Planning ,D,G ..... 2
Program Elective D,G ..... 2-3
Arts and Letters requirement ${ }^{R}$. ..... 3
Total Credits ..... 13-14
Spring
HE 252 First Aid D,P ..... 3
HRTM 279 Buffet and Banquet Planning D,G ..... 2
HRTM 290 Hospitality Leadership *,D,G ..... 4
Program Elective D,G. ..... 3
Total Credits ..... 12
Food Service Management
One-Year Certificate of Completion
Choice of:Fall3
HRTM 105 Restaurant Operations D,G
HRTM 106 Introduction to Hospitality Management D,G
CA 175 Foodservice Safety and Sanitation D,G ..... 2
MTH 25 Basic Math Applications *D,M ..... 3
HRTM 265 Hospitality Financials 1 D,G ..... 3
HRTM 260 Supervision in the Hospitality Industry D,G ..... 3
CG 203 Human Relations at Work H ..... 3
Total Credits ..... 17
Winter
HRTM 120 Communications and Guest Relations D,G ..... 3
HRTM 275 Hospitality Financials 2 *,D,G ..... 3
FN 105 Nutrition for Foodservice Professionals D,G ..... 3
WR 115W Introduction to College Writing *, D, W ..... 3
HRTM 110 Hospitality Sales and Marketing D.G ..... 3
HRTM 280 Co-op Ed: Hospitality Management D,G or HRTM 225 Hospitality Management Lab D.G ..... 2-3
Total Credits ..... 17-8
Spring
CA 159 Kitchen Operations ${ }^{\mathrm{D}, \mathrm{G}}$ ..... 3
CA 200 Restaurant and Menu Management D, ..... 3
HRTM 286 Fundamentals of Wine, Beer and Spirits D,G ..... 3
HRTM 130 Hospitality Information Systems D,G ..... 3
HRTM 290 Hospitality Leadership *,D,G ..... 4
Total Credits ..... 18
Elective Offerings:
HRTM 150 At Your Service ..... 2
HRTM 109 Principles of Meeting and Convention Management D,G. ..... 3
HRTM 286 Fundamentals of Wine, Beer and Spirits D,G ..... 3
HRTM 104 Introduction to Travel and Tourism D,G ..... 3
CA 130 Oregon Wine Country D,G ..... 2
CA 110 Guest Chef Series D,G ..... 2
CA 175 Food Safety and Sanitation D,G ..... 2
HRTM 281 Restaurant Ownership D.G ..... 3
CA 200 Restaurant and Menu Management D,G ..... 3
GEOG 201 World Regional Geography ..... 3
Restaurant Ownership
Career Pathway Certificate of Completion
CA 175 Foodservice Safety and Sanitation D,G.
MTH 25 Basic Math Applications *,D,M ..... 2Fall
HRTM 265 Hospitality Financials 1 D,G3
HRTM 260 Supervision in the Hospitality Industry D,G ..... 3

HRTM 275 Hospitality Financials 2 D.G
HRTM 120 Communications and Guest Relations D,G. 3
Program Elective D,G $\qquad$
Total Credits
8-9
Spring
CA 159 Kitchen Operations D,G $\qquad$ 3
CA 200 Restaurant and Menu Management D,G 3
HRTM 281 Restaurant Ownership D,G $\qquad$
HRTM 286 Fundamentals of Wine, Spirits and Beer D,G . 3

HRTM 130 Hospitality Information Systems D,G $\qquad$
Total Credits
15
Check current class schedule for terms offered or go to: lanecc.edu/culinary/culinary adventuring.
Students may take Cooperative Education in any term approved by the coordinator.
Cooperative Education can be substituted for one term of HRTM 225 Hospitality Management Lab.
Students interested in transferring to a four-year institution should:

1. Complete WR 122 and WR 123 to fulfill the Arts and Letters requirements for the AAS.
2. Add MTH 111 and MTH 112 courses

## Human Services

Offered by the Social Science Department
Two-Year Associate of Applied Science Degree
Career Pathway Certificate of Completion, Adult Development and Aging

Purpose Human service workers are trained to provide a wide range of emotional and practical support services aimed at addressing the needs of people facing a variety of challenges in their lives. Human service workers are employed in diverse settings, serving children, adolescents, families, and adults. For example, human service workers can be found staffing crisis lines; supervising young juvenile offenders; working with the elderly to help them maintain their independence; arranging for services for homeless families; coordinating recreational services for people with disabilities; providing parent education; counseling and case managing individuals experiencing addiction; and advocating for victims of domestic or sexual violence. Coursework includes classes that meet basic requirements for Oregon state certification for chemical dependency counselors. Lane Community College's Human Services Program prepares students for entry-level employment in public and private non-profit agencies.

Learning Outcomes The graduate will:

- be able to communicate effectively with others.
- develop the competency required to work 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.

Employment Trends National and state employment
opportunities are excellent. The 2004-2014 growth rate for this occupation is projected to be faster than average. Total job openings are projected to be much higher than average (Oregon Employment Division; U.S. Department of Labor).

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)*

## Books

\$2,500

* Subject to change without notice.

Admission Information Social Science Division, Garry Oldham, Program Coordinator, (541) 463-5194, oldhamg@lanecc.edu

Cooperative Education (Co-op) Co-op is a significant field placement component that provides opportunities for students to explore their career options while gaining practical experience in the field. Contact Garry Oldham, Human Services Co-op Ed Coordinator, (541) 463-5194, oldhamg@lanecc.edu.

Program Advisor Cindy Lott (541) 463-5232, lottc@lanecc.edu
Program Counselor Anthony Hampton (541) 463-5275,
hamptona@lanecc.edu

| First Year | Fa |
| :---: | :---: |
| HS 201 Introduction to Human Services D,G.. | 3 |
| HS 226 Ethics and Law D,G. | 3 |
| HS150 Personal Effectiveness for Human Service Workers D,G | 3 |
| CG 280HS Co-op Ed: Human Service 2,D,G ....................... | 3 |
| WR 121 English Composition: Exposition and Introduction to Argument G,W $\qquad$ | 4 |
| Total Credits | 16 |
|  | Winter |
| HS 155 Interviewing Theory and Techniques *,D,G ............. | 3 |
| Math requirement ${ }^{R}$. | 3 |
| CG 280HS Co-op Ed: Human Service 2,D,G ....................... | 3 |
| Choice of.. | 4 |
| WR 122 Composition: Style and Argument A,G |  |
| WR 123 Composition: Research A,G |  |
| Choice of: | 4 |
| SP 100 Basic Communication |  |
| SP 111 Fundamentals of Public Speaking |  |
| SP 112 Persuasive Speech |  |
| SP 130 Business and Professional Speech |  |

Total Credits 17

A Meets Arts/Letters requirement
B Must be passed with grade of " $\mathrm{B}-$ " or better to use as a prerequisite
D Degree or certificate requirement; must be passed with grade of "C-" or better
G Must be taken for a grade, not P/NP; major requirement

[^34]

## 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)*
Books.

* Subject to change without notice.

Admission Information Social Science Division, Garry Oldham, Program Coordinator, (541) 463-5194, oldhamg@lanecc.edu

Cooperative Education (Co-op) Co-op is a significant field placement component that provides opportunities for students to explore their career options while gaining practical experience in the field. Contact Garry Oldham, Human Services Co-op Coordinator, (541) 463-5194, oldhamg@lanecc.edu.

Program Advisor Cindy Lott (541) 463-5232, lottc@lanecc.edu
Program Counselor Anthony Hampton (541) 463-5275, hamptona@lanecc.edu

| Required Courses | Credits |
| :---: | :---: |
| HS 107 Aging: A Social and Developmental Perspective D,G | G 3 |
| HS 229 Grief and Loss Across the Lifespan D,G.................. | 3 |
| HS 235 The Aging Mind D,G. | 3 |
| CG 280HS Co-op Ed: Human Service 2,D,G | 3 |

HS 107 Aging: A Social and Developmental Perspective D,G 3
HS 229 Grief and Loss Across the Lifespan D,G................... 3
HS 235 The Aging Mind D,G
3

Total Credits 12

## Human Services: Criminal Justice

## Offered by the Social Science Department

## 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.

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.

Employment Trends The market demand remains high in public safety careers in spite of the revenue problems facing most areas. A significant factor in the demand remaining high is the rate of retirement or resignation of public safety personnel. Approximately 40 percent or more of the people currently working in public safety will retire over the next five years. Employment opportunities vary in the state of Oregon. Therefore, students should also consider employment opportunities throughout the region of the western United States for potential public safety employment.

Wages Entry-level \$14-28 hourly
Costs in Addition to Tuition (estimate)* Books $\$ 3,000$

* Subject to change without notice.

Admission Information Social Science Division, John delNero, Program Coordinator, (541) 463-5286, delneroj@lanecc.edu

Cooperative Education (Co-op) Co-op provides opportunities for field placements with various local public safety agencies including local police, sheriffs, corrections, court services, and commercial security organizations. Students may participate on a full or part-time basis. Contact John del Nero, Criminal Justice Co-op Coordinator, (541) 463-5286.

Program Advisor Cindy Lott (541) 463-5232, lottc@lanecc.edu
Program Counselor Anthony Hampton (541) 463-5275, hamptona@lanecc.edu
First Year ..... Fall
CJA 100 Introduction to Criminal Justice 1 D,G ..... 3Directed elective 2,3
SOC 204 Introduction to Sociology G,H ..... 3
SP 105 Listening and Critical Thinking A ..... 4
WR 121 English Composition: Exposition and Introduction to Argument *,G,W ..... 4
Total Credits ..... 17
Winter
Arts and Letters elective 1 ..... 3
CJA 110 Introduction to Criminal Justice 2, D,G ..... 3
SOC 205 Social Stratification and SystemsG,H ..... 3
SP 100 Basic Communication A ..... 4
Choice of: ..... 4
WR 122 Composition: Style and Argument A,G
WR 123 Composition: Research A,G

| Total Credits | 17 |
| :---: | :---: |
|  | Spring |
| CJA 101 Introduction to Criminology D,G. | 3 |
| SOC 206 Institutions and Social Change G,H ................... | 3 |
| Choice of... | 4 |
| CS 120 Concepts of Computing: Info Process S |  |
| CIS 131 Introduction to Computers: Info Process |  |
| Choice of:. | 3 |
| HE 250 Personal Health P |  |
| HE 252 First Aid P |  |
| HE 275 Lifetime Health and Fitness P |  |

Total Credits ..... 13
Second Year ..... Fall
Biological or Physical Science requirement 1,4,S ..... 3-4
CJA 213 Interviewing and Interrogation D,G ..... 3
CJA 220 Introduction to Criminal Law D,G ..... 3
PS 201 American Government and Politics ..... 3
Choice of: ..... 4
PHL 201 Introduction to Philosophy: Ethics HANTH 103 Cultural Anthropology H16-17
Winter
Biological or Physical Science elective 1,3. ..... 3-4
CJA 222 Criminal Law: Procedural IssuesD,G ..... 3
CJA 280 Co-op Ed: Criminal Justice *,D,G ..... 3
Directed Criminal Justice elective 2,3 ..... 3
PS 202 American Government and Politics ..... 3

MTH 095 Intermediate Algebra or higher M

CJA 280 Co-op Ed: Criminal Justice D,G
5

PS 203American Government.
3

PSY 203 General Psychology G
3

Arts and Letters elective 1
$\qquad$
3

Total Credits $\quad 17$

1 Courses that satisfy transfer general education requirements are recommended: BI, BOT, Z, CH, G, GS, PH
2 Directed electives (choose 6 credits total)
CJA 232 Correctional Casework D,G. .3 credits
CJA 210 Criminal Investigation 1 D,G 3 credits
CJA 214 Introduction to Forensic Science D, G, S 4 credits
CJA 243 Narcotics and Dangerous Drugs D,G .3 credits
SOC 211 Social Deviance D,G .3 credits
CJA 201 Juvenile Delinquency D,G. 3 credits
3 CJA 214 Introduction to Forensic Science can be used to meet Directed Elective or Biological/Physical Science Elective.
4 CH 114 Forensic Chemistry can satisfy the Biological or Physical Science requirement

## Human Services: Juvenile Corrections

## Offered by the Social Science Department

One-Year Certificate of Completion
Purpose To train individuals to work directly with juvenile offenders in various settings, including Oregon Youth Authority, as well as other public, private, and non-profit agencies/programs.
Learning Outcomes The graduate will:

- provide supervision for juvenile offenders.
- facilitate in the treatment process and crisis intervention.
- provide social and life skills training.
- maintain records and documentation.
- engage in support services.
- monitor and ensure a secure environment.
- use appropriate library and information resources to research professional issues and support lifelong learning.
- formulate questions that can be addressed with data and collect, organize and display relevant data to answer them.

Employment Trends There had been a decline in juvenile crime during the late 1990's, but that trend tends to be shifting. The resurgence of youth gangs since the year 2000 has reflected an increase in gang homicides and other criminal activity. Nearly all juvenile correction facilities are filled to capacity necessitating more correctional facilities and the demand for more juvenile corrections personnel. This certificate meets the minimum level pre-employment requirement for the Oregon Youth Authority (OYA).

Wages Beginning wage for an OYA Group Life Coordinator II is approximately $\$ 2,464-\$ 3,400$ monthly, but salary and benefit packages vary greatly depending up the employing agency and geographical location.

[^35]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.

Program Advisor Cindy Lott (541) 463-5232, lottc@lanecc.edu
Program Counselor Anthony Hampton (541) 463-5275, hamptona@lanecc.edu

CJA 101 Introduction to Criminology D,G .......................... 3
HS 206 Counseling the Criminal Addict D,G...................... 3
MTH 060 Beginning Algebra 1,M
PSY 201 General Psychology D,G3
SOC 225 Social Problems D,G,H. ..... 3
Total Credits ..... 16
CJA 201 Juvenile Delinquency D,G.
Winter ..... 3
CS 120 Concepts of Computing: Information Processing..
HS 205 Youth Addiction D,G ..... 3
PSY 202 General Psychology D,G ..... 3
PSY 235 Human Development 1 D,G. ..... 3
WR 121 English Composition: Exposition and Introduction to Argument *,W ..... 4
Total Credits ..... 20
Spring
3
CJA 280 Co-op Ed: Juvenile Corrections D,G ..... 3
HS 209 Crisis Intervention and Prevention D,G ..... 3
PSY 203 General Psychology D,G ..... 3
PSY 239 Introduction to Abnormal Psychology D,G ..... 3
Total Credits ..... 15

1 Recommend MTH 095 or higher if going on to complete 2-year Criminal Justice program

## Legal Assistant

## Two-Year Associate of Applied Science Degree, Legal Assistant

Note This program is no longer offered. Students interested in this field of study should consider the Two-Year Administrative Assistant program with Legal directed electives, or the Legal Office Skills Career Pathway Certificate of Completion (see Administrative Assistant program), or the Legal Assistant Certificate or Paralegal Studies AAS offered in partnership with Umpqua Community College (see details below). For additional information, contact Deb Hupcey in the Counseling Department, (541) 463-5635, or Kirsa Whedon in the Business Department, (541) 463-5534.

## Legal Assistant and Paralegal Studies

## A collaboration between Umpqua Community College and Lane Community College

Lane now partners with Umpqua so that students may take classes at both institutions to become eligible for the One-Year Legal Assistant Certificate or the AAS Degree in Paralegal Studies through Umpqua Community College.

Lane students should complete most of the required courses at Lane. Since all of Umpqua's Paralegal courses are offered online and the practicum is arranged locally, students are able to complete a certificate or an AAS degree from Umpqua without the need to travel out of the Lane County area.

A student enrolled continuously at Lane or Umpqua or enrolled continuously in a combination of courses alternating between the colleges will be able to use the requirements in place when the student entered the program. Umpqua's fiveyear interruption clause will apply. Please see Umpqua Community College's catalog for graduation requirements.
It is recommended you contact the UCC Paralegal
Coordinator, Crystal Sullivan, at (541) 440-4663 to assist you with program planning.
Umpqua's Legal Assistant Certificate Program The 45 credit certificate program includes the following courses (All courses, except Co-op/CWE, are available online. All courses must be taken for a letter grade and passed with a grade of " C " or better)

## Lane Courses

MTH 065 Beginning Algebra................................................ 4
WR 121 English Composition
LGL 201 Legal Procedures I

BT 180 Business Proofreading \& Editing........................................................................ 4
CS 120 Concepts of Comp: Info Processing........................ 4
LGL 202 Legal Procedures II4

BA 211 Financial Accounting .................................................... 4
LGL 203 Legal Procedures III
3
BA 214 Business Communications ...................................... 4
BA 280L Co-op Ed: Legal Assistant 3
Choice of:
SP 105 Listening and CriticalThinking
SP 218 Interpersonal Communication.

## Or Equivalent Umpqua Courses:

MTH 065 Beginning Algebra
WR 121 English Composition
LA 100 Legal Procedures I.
OA 128 Editing for Business
CIS 120 Intro to CIS 3

LA 101 Intro to Paralegal
BA 211 Principles of Accounting
LA 105 Civil Procedure
BA 214 Business Communications
LA 280 Cooperative Work Experience
(See Umpqua's catalog for a complete list)

## Additional Required Umpqua Courses for Certificate:

OA 240 Legal Terminology
LA 128 Legal Procedures II ..... 4
LA 132 Ethics for the Professional ..... 3

## Umpqua's Paralegal Studies

AAS Program In addition to the Legal Assistant Certificate, the following courses are required for Umpqua's Associate of Applied Science Degree, Paralegal Studies (All courses are available online and must be passed with a grade of "C" or better):
Lane Courses
BA 101 Introduction to Business ......................................... 4
BA 226 Business Law .......................................................... 4
BA 280L Co-op Ed: Legal Assistant ..................................... 3
Electives or Co-op (Need 6 Credits)
BA 213 Managerial Accounting............................................ 4
BA 218 Personal Finance ...................................................... 4
BT 017 Keyboard Skillbuilding 3 ........................................... 3
(If needed to reach 45 wpm )
BT 114 MS EXCEL for Business ............................................ 4
CIS 125D Software Tools 1: Databases.
4
CJA 220 Introduction to Criminal Law................................. 3
CJA 201 Juvenile Delinquency
3
SP 111 Fundamentals of Public Speaking
4
WR 122 English Comp: Style \& Argument.......................... 4
WR 227 Technical Writing
Or Equivalent Umpqua Courses:
BA 101 Introduction to Business ......................................... 4
BA 226 Business Law .......................................................... 4
LA 280 Cooperative Work Experience................................. 2
Electives from Approved List or CWE (Need 6 Credits)
BA 213 Principles of Accounting ..................................... 3
BA 218 Personal Finance ..................................................... 3
OA 110 or 124 Keyboarding .................................................. 3
(If needed to reach 45 wpm )
CIS 125S Spreadsheets
3
CIS 125D Database ................................................................ 3
CJ 105 Concepts of Criminal Law ........................................ 3
CJ 230 Intro to Juvenile Justice System ............................. 3
SP 111 Fundamentals of Public Speaking............................ 3
WR 122 English Comp - Style/Argument............................ 3
WR 227 Technical Report Writing .......................................... 3
(See Umpqua's catalog for a complete list of electives)
Additional Required Umpqua Courses for AAS:
LA 208 Family Law
LA 210 Wills Probate and Estates .............................................................................................................
LA 204 Legal Research and Writing...................................... 3
LA 226 Criminal Law for Paralegals ..................................... 3
LA 217 Real Estate Law ......................................................... 3
LA 224 Torts-Pleadings and Practice..................................... 4
LA 222 Contract Law ............................................................. 3
LA 230 Elder Law................................................................. 3
BA 231 microcomputers in Business................................... 4

Standard footnotes:

* Prerequisite required

A Meets Arts/Letters requirement
B Must be passed with grade of " $\mathrm{B}-$ " or better to use as a prerequisite
D Degree or certificate requirement; must be passed with grade of "C-" or better
G Must be taken for a grade, not P/NP; major requirement

[^36]
## Manufacturing Technology

Offered by the Advanced Technology Division

## Two-Year Associate of Applied Science Degree

## Two-Year Associate of Applied Science Degree Option:

 Computer Numerical Control Technician
## Two-Year Certificate of Completion

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.

Employment Trends Statewide, 115 annual openings for machinists are projected in Oregon and 11 openings are projected annually in Lane County. Competitively trained workers should find reasonable employment opportunities. Those with an associate degree will have a competitive advantage in this labor market.
Wages Statewide average, $\$ 19$ hourly, $\$ 40,000$ annually (\$50,000+ with experience). Lane County average, $\$ 18$ hourly, $\$ 38,000$ annually.

Costs in Addition to Tuition and Registration Fees (estimates)*


See online class schedule for program differential fees and other course fees.

* Subject to change without notice.

Prerequisites Minimum placement score- of 68 in Reading OR completion of RD 080 OR prior college. A high school diploma or equivalent is recommended for all applicants to this program.
Note See a counselor or advisor to learn what entry-level skills are suggested for successful completion of this program.

Criteria Used for Admission For consent to enroll in major courses, students must attend a program orientation for fall terms (dates available in Counseling or Enrollment and Student Financial Services) or contact advisor/counselor in winter and spring terms.

Cooperative Education (Co-op) Co-op offers students college credit and a grade for on-the-job work experience related to their educational and career goals. Through Co-op, students connect theory and practice, develop skills, expand career knowledge, and make contacts for the future. Work schedules and work sites vary. Under the supervision of the Manufacturing Technology Co-op Coordinator and with instructor consent, a maximum of 18 Co-op credits may be earned in lieu of required Manufacturing Technology course credits. Contact Marv Clemons, Manufacturing Technology Co-op Coordinator, Bldg. 8, Rm. 111, (541) 463-3158.

Program Advisor Betty Svarverud, Bldg. 12, Rm. 203, (541) 463-5378, svarverudb@lanecc.edu

Program Counselor Carolyn Litty, Bldg. 12, Rm. 202, (541) 463-5236, littyc@lanecc.edu

Two-Year Associate of Applied Science Degree
First Year ..... Fall
MFG 197 Manufacturing Technology *, D,G. ..... 12
MTH 060 Beginning Algebra*,D,G,Mor higher mathematics4
WLD 151 Fundamentals of Metallurgy * ..... 3
Total Credits ..... 19
MFG 197 Manufacturing Technology ${ }^{*}$,D,G. ..... 12
Choice of: ..... 4
CS 120 Concepts of Computing: Information Processing S CS 133 Beginning Programming ${ }^{*, S}$ or higher $P E /$ Health requirement $D, R$. ..... 3
Total Credits ..... 19
MFG 197 Manufacturing Technology ${ }^{*}, \mathrm{D}, \mathrm{G}$.
Spring
WR 115W Introduction to College Writing: Workplace Emphasis ${ }^{\mathrm{D}, \mathrm{W}}$ or higher writing. ..... 3
Total Credits ..... 15
Second Year ..... Fall
MFG 197 Manufacturing Technology *,D,G. ..... 12
DRF 167 CAD 1 * ..... 4
MTH 076 Applied Geometry for Technicians *,S or higher mathematics. ..... 4
Total Credits ..... 20
MFG 197 Manufacturing Technology *,D,G. ..... 6
Arts/Letters requirement ${ }^{R}$ ..... 3
Choice of: ..... 6
MFG 201 CNC MILL *,D,G
MFG 202 CNC Lathe *,D,G


- develop therapeutic relationships that support health and wellbeing
- collect and use client information to determine the appropriateness of massage therapy
- develop a treatment plan
- implement the treatment plan
- evaluate the effectiveness of the treatment plan
- maintain documentation
- influence the advancement of the Massage Therapy profession
- promote the benefits of Massage Therapy to the public

Employment Trends This occupation is expected to grow much faster than the statewide average. Total job openings are projected to be at about the statewide average. Reasonable, but limited, employment opportunities exist. Most Licensed Massage Therapists are self-employed.
Wages Average hourly wages statewide are $\$ 25.58$, or $\$ 53,197$ annually for full-time work.
Program costs Cost of tuition and fees to complete the program is $\$ 5,900$ (Academic Year 2009-10).

## Costs in addition to tuition and fees (estimated)

Textbooks............................................................................ \$500
Personal liability insurance - required .................................. \$65
Three professional massages............................................. \$150
Miscellaneous supplies.
\$75
Licensing or other certification exams Upon completion of the required courses, students to apply for Oregon Board of Massage Therapists Licensing Exams.
Prerequisites Students must be at least 18 years of age.
Admission deadline None
Criteria used for admission High school diploma or GED
Program contact (541) 463-5911, e-mail: calisek@lanecc.edu
Core Pre-licensing Program Contact Hours

## Term 1

XLMT 5972 Introduction to Palpation ................................. 39
XLMT 5979 Anatomy/Physiology 1 ..................................... 33
XLMT 5986 Communication from the Heart 1 .................... 15

## Term 2

XLMT 5980 Anatomy/Physiology/Pathology 2.................. 33
XLMT 5973 Massage 1................................................. 39
XLMT 5988 Basic Energy Awareness.............................. 20

## Term 3

XLMT 5989 Anatomy/Physiology/Pathology 3.................. 33
XLMT 5974 Massage 2................................................. 39
XLMT 5976 Hydrotherapy

## Term 4

XLMT 5990 Anatomy/Physiology/Pathology 4.................. 33
XLMT 5975 Massage 3................................................. 39
XLMT 5977 Kinesiology-Lower Body............................... 30
XLMT 5981 Law/Ethics.................................................... 20

## Term 5

XLMT 5991 Anatomy/Physiology/Pathology 5.................. 33
XLMT 5983 Massage 4................................................... 39
XLMT 5977 Kinesiology-Upper Body............................... 30
XLMT 5981 Professional Practices.................................. 20

## Term 6

XLMT 5985 Massage Techniques Lab............................... 30
XLMT 5984 Community Student Clinic............................... 40
XLMT 5987 Communication from the Heart 2.................. 15
Total Contact Hours in program ......................................... 610

## Electives

XLMT 5971 Student Practice Lab .

## Medical Office Assistant

## Offered by the Health Professions Division

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 ${ }^{\circledR}$ ). The Certified Medical Assistant ${ }^{\circledR}$ 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, performing medical transcription, bookkeeping procedures, and processing insurance claims.
- be able to use library resources for research and written assignments for a variety of classes.
- be able to perform mathematic equations associated with medication dosages as well as basic mathematics to process medical insurance claims

Employment Trends Job prospects statewide are excellent. Approximately 90 percent of the graduates of Lane's MOA program are initially employed in Lane County.

Wages \$11-14 hourly, $\$ 23,000-40,000$ annually
Costs in Addition to Tuition (estimate)*
Books, fees, uniform, exam fee, etc. ................................. \$1,400

* Subject to change without notice.

Program Accreditation The Lane Medical Office Assistant Program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP), on recommendation of the Curriculum Review Board of the American Association of Medical Assistants Endowment. CAAHEP is a specialized accrediting board recognized by the Council on Higher Education Accreditation. Commission on Accreditation of Allied Health Education Programs, 1361 Park Street, Clearwater, Florida, 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. $\circledR$ For detailed information, contact the AAMA.

Prerequisites A successful applicant must be a high school graduate or have a GED and possess a minimum 2.5 GPA.

Admission Deadline: Program admission is based on first applied and qualified, first admitted. Program on-line application submissions begin mid-January and closes midMay.

Number of New Students Admitted Annually Enrollment in this program is limited to 45 .

Criteria Used for Admission The admission process includes screening examinations for reading comprehension, mathematics competency, and keyboard proficiency. The student must submit evidence of a physical examination (within the previous nine months) and receive several vaccinations before classes begin in September. Students are required to hold a Health Care Provider CPR card and have First Aid training (both must remain current through July of the year of graduation from the program).

Admission Information Application information packet is online at www.lanecc.edu/hp/moa

Cooperative Education (Co-op) During the required unpaid Coop in spring term, Co-op students rotate through local medical offices and clinics in both clinical and administrative settings to earn college credit and gain actual work experience. Students also receive instruction in the identification and proper use of other medical equipment and valuable on-the-job training. A required weekly seminar during spring term includes resume writing instruction, interviewing techniques, and other jobsearch skills.

Contact Marty Pittman, Medical Office Assistant Cooperative Education Coordinator, Bldg. 4, Rm. 259, (541) 463-3177.

Program Advisor Rosa Lopez, Bldg. 1, Rm. 207, (541) 463-5660
Program Counselor Leslie Seriano-Cervantes, Bldg. 1, Counseling Department (541) 463-5512

Courses Required Prior to Beginning of Program
CG 203 Human Relations at Work ${ }^{\text {H }}$.................................. 3
HO 100 Medical Terminology 1 D,G ...................................... 3
Math 020 Math Renewal ......................................................
WR 115W Intro to College Writing: Workplace Emphasis D or higher-level writing $\qquad$
Total Credits
12

## Suggested: <br> Summer

HO 190 Medical Formatting3

BT 120 MS Word for Business *
Total Credits $\quad 7$

HO 110 Administrative Medical Office Procedures 3
HO 150 Human Body Systems 1 *, D,G,S 3
HO 190 Medical Formatting D,G
MA 110 Clinical Assistant 1 *, $1, \mathrm{D}, \mathrm{G}$
MTH 052 Math for Introductory Physical Science ............. 4
Total Credits 16

|  | Winter |
| :---: | :---: |
| BT 165 Introduction to the Accounting Cycle*, ${ }^{\text {, }}$, ............. | 3 |
| HO 114 Medical Coding Procedures *,D,G.......................... | 3 |
| HO 152 Human Body Systems 2 *,1, , , G ........................... | 3 |
| HO 220 Legal and Ethical Aspects of Healthcare *,D,G....... | 3 |
| MA 120 Clinical Assistant 2 *,1,D,G | 3 |
| MA 150 Laboratory Orientation *,1,D,G ............................. | 3 |
| Total Credits | 18 |
|  | Spring |
| HIT160 Medical Manager *,1,D,G ....................................... | 3 |
| HO 112 Medical Insurance Procedures *,D,G ...................... | 3 |
| MA 130 Clinical Assistant 3 *,1,D,G .................................... | 3 |
| MA 280 Co-op Ed: Medical Office Assistant ${ }^{*}, 1$ D,G ........... | 6 |
| PSY 110 Exploring Psychology *,D, G,H.............................. | 3 |
| Total Credits | 18 |

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.

Note: Students must earn a grade of "B." or better in all prerequisite (s) and "C" or better in major requirements.

Program Advisors Rick Simms, Bldg. 17, Rm. 107; Teresa Hughes, Bldg. 17, Rm. 106
Program Counselor Timothy Blood, Bldg. 1, Rm. 110
Program Coordinator Rick Simms, Bldg. 17, Rm. 107
Two-Year Associate of Applied Science Degree


Introduction to Argument ${ }^{*}$ B, $\mathrm{G}, \mathrm{W}$...................
Total Credits $\quad 18$


Cotal Credits

Science, Math, Computer Science Requirement *,B,G,S .
Spring
FA 231 Multimedia Authoring ${ }^{*, B, G . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~} 3$
VP 151 Video Production 1 / Camera *,B,G .......................... 3
ART 151A Media Graphics *,B,G ................................................ 3
Directed Elective B,G ........................................................... 3-4
Total Credits
16-17

## Second Year

ART 115 Basic Design: Fundamentals $B, G$. 3
ART 245 Drawing for Media
MUS 118 Music Technology MIDI/Audio 1

4
VP 152 Video Production 2: Editing *,B,G.................................... 3
Directed Elective B,G
3-4
Total Credits
17-18

## Winter

ART 289 Web Production
3
CG 203 Human Relations at Work B,G,H
3
MDP 246 Multimedia Production 1 *,B,G
MDP 280 Co-op Ed: Multimedia ${ }^{*}$ S, G
PE/Health requirement ${ }^{R}$ $\qquad$
MDP 280 Co-op Ed: Multimedia *,D,G ..... 3
MDP 247 Multimedia Production 2 *,B,G ..... 4
PE/Health requirement ${ }^{R}$ ..... 1
Directed elective *,B,G ..... 6-8
Total Credits ..... 14-16
Directed Electives
Contact the Art and Applied Design Department for additionalchoices.
Software
CS 120 Concepts of Computing ..... 4
CS 125G SWTools 1: Game Development ..... 4
CS 133G Beginning C++ Programming for Games ..... 4
CS 133JS Beginning Programming: JavaScript ..... 4
CS 195 Web Development 1 ..... 4
Design
ART 116 Basic Design: Color. ..... 3
ART 119 Typography. ..... 3
ART 216 Digital Design Tools ..... 4
ART 225 Digital Illustration ..... 3
ART 231 Intermediate Drawing ..... 3
ART 234 Figure Drawing ..... 3
ART 288 Introduction to Web Design ..... 2
ART 290 Design Concepts for the Web ..... 3
Media
ART 210 The Photographic Vision. ..... 3
ART 262 Photography 2 ..... 3
FA 221 Computer Animation ..... 3
FA 222 Computer Animation 2 ..... 3
FA 254 Lighting: Video. ..... 3
FA 255 Understanding Movies: American Cinema. ..... 3
FA 256 Lighting: 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
One-Year Certificate of Completion
ART 115 Basic Design: Fundamentals ..... 3Fall
ART 131 Introduction to Drawing B,G ..... 3
ART 261 Photography 1 B,G
FA 250 Concepts of Visual Literacy B,G ..... 3
WR 121 English Composition: Exposition and Introduction to Argument *,B,G,W ..... 4
Total Credits ..... 16
AUD 120 Audio Production ${ }^{*}$,B,G ..... 4
FA 261 Writing and Interactive Design *,B,G. ..... 3
MTH 060 Beginning Algebra or higher mathematics *,B,G,M ..... 4
MUL 210 Multimedia Design *,B,G ..... 3
MUL 212 Digital Imaging *,B,G ..... 3
Total Credits ..... 17
Spring
ART 151A Media Graphics *,B,G ..... 3
CG 203 Human Relations at Work B,G,H ..... 3
FA 231 Multimedia Authoring ${ }^{\text {*,B,G }}$ ..... 3
VP 151 Video Production 1 / Camera *,B,G ..... 3
Science, Math, Computer Science course ${ }^{*, B, G}$. ..... 4

## New Media Journalism

## Offered by the Arts Division

## Suggested Course of Study

## Divisional Recognition Award

This suggested course of study is for students considering entrylevel positions in new media industries and careers in journalism, web design and production, photography, videography, public relations, advertising or publishing. A suggested course of study is not the same as a state-approved vocational program in which a student earns a degree or certificate issued by the Lane Board of Education, nor is it an Associate of Arts degree. The guide below includes recommended journalism and multimedia courses, as well as recommended general education courses.

Transfer institutions require additional coursework for a degree, and may change requirements from year-to-year. Any student interested in transfer must accept responsibility to work very closely with a Lane academic advisor, and also to be aware of changes in prerequisites for programs at potential transfer institutions.

Courses numbered below 100 generally do not transfer, and career technical courses may only have limited transferability to four-year institutions. See a Lane arts counselor or advisor for assistance in course selection and transfer policies.

Learning Outcomes Students completing this suggested course of study will:

- develop proficiency in multiple forms of media practices such as writing, reporting, visual communication and web design and production.
- 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 reportage for print, television and the web.
- understand the concepts of media and its effect on society, and how to use media ethically.
- use appropriate library and information resources to research topics and media issues.

Counselor Timothy Blood, Bldg. 1, Rm. 110
Coordinator Rick Simms, Bldg. 17, Rm. 107
First Year
(New Course1) Web 2.0 CIT Social Networks, Blogs
FA 250 Concepts of Visual Literacy B,G
J 134 Photojournalism $\qquad$4
$\qquad$
WR 121 English Composition: Exploration and ${ }^{*}, \mathrm{~B}, \mathrm{G}, \mathrm{W}$ Introduction to Argument $\qquad$
Total Credits

## Winter

ART 115 Basic Design: Fundamentals $B, G$ $\qquad$
ART 131 Introduction to Drawing A,B,G
CG 203 Human Relations at Work B,G,H $\qquad$ 3

J 216 Newswriting ${ }^{1}$
(New Course1) Writing for the Web $\qquad$

|  | Spring |
| :---: | :---: |
| ART 288 Introduction to Web Design.............................. | 2 |
| ART 119 Typography..................................................... | 3 |
| J 234 Photojournalism 2. | 4 |
| (New Course ${ }^{1}$ ) Intermediate Reporting ........................... | 3 |
| Science/Math/Computer Science ${ }^{\text {R }}$................................. | 3 |
| Total Credits | 15 |
| Second Year | Fall |
| ART 256 Lighting: Photography ..................................... | 3 |
| AUD 120 Audio Production *,B,G. | 4 |
| (New Course ${ }^{1}$ ) Feature Writing. | 3 |
| J 201 Mass Media and Society ... | 3 |
| VP 151 Video Production 1/ Camera *,B,G. | 3 |
| Total Credits | 16 |
|  | Winter |
| ART 289 Web Production Tools. | 3 |
| (New Course1) Publication Design.. | 3 |
| MTH 060 Beginning Algebra or higher B,G,M,R | 4 |
| $\mathrm{PE} /$ Health ${ }^{R}$. | 3 |
| Directed Elective ${ }^{\text {B,G }}$ | 3 |
| Total Credits | 16 |
|  | Spring |
| ART 290 Information Architecture................................... | 3 |
| (New Course ${ }^{1}$ ) Media Law and Ethics | 3 |
| (New Course ${ }^{1}$ ) Capstone Course.................................... | 3 |
| J 280 Co-op Ed: Journalism.......................................... | 3 |
| Directed Elective B,G ..................................................... | 3 |
| Total Credits | 15 |

## Directed Electives

Contact the Art and Applied Design Department for additional choices.
Computer Science
CS 120 Concepts of Computing
CS 125G SWTools 1: Game Development
CS 133G Beginning C++ Programming for Games
CS 133JS Beginning Programming: JavaScript
CS 195 Web Development 1
Design
ART 116 Basic Design: Color
ART 216 Digital DesignTools
ART 225 Digital Illustration
ART 231 Drawing: Intermediate
ART 234 Drawing: Figure
Media
ART 210 The Photographic Vision
ART 262 Photography 2
FA 221 Computer Animation
FA 222 Computer Animation 2
FA 254 Lighting: Video
FA 255 Understanding Movies: American Cinema
FA 256 Lighting: Photography
MDP 248 Multimedia Production 3
MUL 214 Digital Photography
MUS 119 Music Technology MIDI/Audio 2
MUS 298 IS: Music Technology

* Prerequisite required

1 See Art department or advisors for new course information
A Arts/Letters general education course
B Must be passed with grade of " $B$-" or better to use as a prerequisite
G Must be taken for a grade, not P/NP
H Human Relations/Social Science general education course
M Mathematics general education course
P PE/Health
R Use AAS degree lists
S Science/Math/Computer Science general education course
W Written Communications / English Composition course

## Nursing

## Offered by the Health Professions Division

## Two-Year Associate of Applied Science Degree

Purpose To prepare the graduate to be qualified to eligible to take the National Council Licensure Examination (NCLEX)RN and to practice as an associate degree registered nurse

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 OCNE (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 within, utilizes and contributes to the broader healthcare system.
- practices relationship-centered care
- communicates effectively
- makes sound clinical judgments
- uses the best available evidence

Employment Trends In the next ten years, annual new openings for RNs are projected to increase by 24 percent.

Wages Average Oregon statewide wage in 2005 was $\$ 27.15$ hourly, $\$ 56,455$ annually for fulltime RN employment. These earnings do not account for overtime and shift differentials, which could increase the figures. (Oregon Employment Department)

## Costs in Addition to Tuition (estimate)*

Lab equipment fees and course fees for both years ..... \$440 Uniform, shoes, stethoscope (minimum of one), etc..... \$250
Books: first year + second year ....................................... \$900+\$400
Personal Health Insurance-required .............................. varies
Criminal background check-required ............................ \$40
Physical and Immunizations varies
Standard Testing for both years.
\$220
RN Licensure exam second year ..................................... \$300
In addition to tuition, nursing students pay a differential fee for some courses. See the online credit class schedulefor current course fees.
Nursing students assume responsibility for their own uniforms, books, room and board, parking and transportation to and from clinical facilities.

* Subject to change without notice.

Program Approval Evaluated and fully approved through 2012 by Oregon State Board of Nursing.

## Program Affiliation with the Oregon Consortium of Nursing

Education In Fall 2007 the nursing program began a new curriculum, as Lane Nursing joins with six other community college programs and all campuses of the Oregon Health and Science University (OHSU) in a unified approach to nursing education developed by the Oregon Consortium for Nursing

Education (OCNE). Lane and other OCNE programs have the same prerequisites and comparable application processes for students. Students completing the AAS curriculum at the end of the second year of the Lane nursing program will meet the educational requirements to be eligible to take the RNlicensure examination (NCLEX). They will additionally have the opportunity to continue three or four additional terms of full-time study to earn the Bachelor of Science degree through OHSU. Students would remain on the Lane campus to complete the BS degree. Tuition and crediting will be through OHSU.

Licensing or Other Certification Exams Graduates are eligible to take the National Council Licensure Examination (NCLEX) RN licensing exam.

Prerequisites An applicant must complete a Nursing Program application. For the most current information regarding the new curriculum, prerequisites, admission standards and procedures is available at lanecc.edu/hp/nursing.

Number of New Students Admitted Annually The number of applicants accepted is based on college budgetary and clinical facility considerations, usually 72 to 81 students
Criteria Used for Admission Selection to the program is by a point system from a pool of qualified applicants. Information on the point allocation system and transfer students is available in the Counseling and Advising Center and the nursing website. Students are encouraged to consult the program advisor or counselor before applying for admission. Application is limited to Oregon residents.
Admission Information Please consult lanecc.edu/hp/nursing.
Cooperative Education (Co-op) Through Co-op, enrolled nursing students connect classroom learning with field experience, gain skills, and make contacts for the future through additional clinical experience.. Co-op may be taken as an optional elective any of the last five terms of the program. Contact the Cooperative Education Division for the Nursing Co-op Coordinator at (541) 463-3273.

Program Advisor (541) 463-3200
Program Counselor Jessica Alvarado, Bldg. 1, Counseling
Center nursingprogram@lanecc.edu
The most current information regarding curriculum, admission standards and prerequisites is available at lanecc.edu/hp/nursing.



1 Program occupation specific course work must be graded unless course is offered as P/NP only.

## Physical Education

## Offered by Health, Physical Education and Athletics Division

The Physical Education Department offers a variety of course offerings in fitness, strength training, aerobics, marshal arts, yoga, individual and team sports, outdoor activities, athletics and rehabilitative therapies.

Students interested in preparing to transfer to a four-year school to major in Physical Education or Exercise Science are encouraged to apply for the Exercise and Movement Science Program listed on pages xx. For more information regarding transferring to a four-year school, contact the Counseling and Advising Center, Bldg. 1, Rm. 102, (541) 463-3200.

## Physical Therapist Assistant

## Core program to begin fall 2009 pending Candidacy for Accreditation by CAPTE

Offered by the Health Professions Division
Two-Year Associate of Applied Science Degree
Purpose To prepare the graduate to be qualified to practice as an associate degree licensed physical therapist assistant (LPTA), and to qualify for the National Physical Therapy Examination administered by the Federation of State Boards of Physical Therapy.

Learning Outcomes The competencies defined by the American Physical Therapy Association and the Commission on Accreditation in Physical Therapy Education (CAPTE) are based on a view of developing knowledge and skills needed to practice as a safe and effective entry-level PTA. The competencies also recognize that effective PTA practice requires a professional competencies, and patient care competencies.
Professional competencies:

- exhibit a commitment that reflects the expectation of members of the profession and the health care services industries.
- define relationship capabilities that PTAs need to work with clients and colleagues, the knowledge and skills of practicing the discipline and competencies that encompass understanding of the broader health care system.

In all cases, the client is defined as the recipient of care, is considered active participant in care, and includes the individual, family or community. PTA competencies recognize that a competent PTA provides safe care across the lifespan directed toward the goals of helping clients (individuals, families or communities) promote health and recovery from acute or chronic neuromuscular, cardiovascular, pulmonary, orthopedic, metabolic, and sensory injury or disease.

The graduate will:

- demonstrate the knowledge and skills needed to practice as a safe and effective entry-level Physical Therapist Assistant
- use verbal and non-verbal communication strategies that demonstrate respect for the dignity, uniqueness and value of each individual
- demonstrate PTA standards of ethical practice reflective of respect for others
- demonstrate a commitment to life-long learning and to the maintenance of excellence in the practice of physical therapy
- demonstrate a commitment to service through completion of a service-learning project.
- demonstrate knowledge and skills required to collect data, document treatment response and communicate progress using correct formats and terminology
- demonstrate knowledge and skills in interpreting the established physical therapy plan of care, including seeking clarification from the supervising physical therapist when indicated
- demonstrate critical thinking skills and appropriate treatment modifications for maximizing patient safety, progress, and comfort
- demonstrate knowledge and skills required to access information and communicate with others using web-based technology
- demonstrate the knowledge and skills required to select and administer appropriate application of massage, heat, cold, light, water, electricity, compression, exercise, gait, balance, and mobility training to relieve pain, improve the condition of the muscle or skin, and promote health and recovery.
- demonstrate detailed knowledge of human anatomy, physiology, and physical therapy treatment interventions and procedures.

Employment Trends In the next ten years, annual new openings are projected to increase by 43 percent.

Wages Average Oregon statewide wages in 2006 ranged from $\$ 20.38$ hourly, $\$ 39,108$ annually to $\$ 25.16$ hourly, $\$ 48,320$ annually for fulltime PTA employment. These earnings do not account for overtime and shift differentials, which could increase earnings.

Costs in Addition to Tuition* Please consult lanecc.edu/hp/pta. See the online credit class schedule for current course fees. Physical Therapy Assistant students assume responsibility for their own uniforms, books, room and board, parking and transportation to and from clinical facilities.

* Subject to change without notice.

Program Accreditation This program has submitted an Application for Candidacy (AFC) with CAPTE of the American Physical Therapy Association (APTA). Submission of the AFC document does not assure that the program will be granted candidate for accreditation status, nor does it assure that the program will be granted initial accreditation. Candidacy for accreditation is pending. Successful applicants are eligible for admission pending candidacy determination.

Licensing or Other Certification Exams Graduates are eligible to take the National Physical Therapy Examination after successful completion of a CAPTE-accredited program.

Prerequisites An applicant must complete a PTA application. The most current information regarding the curriculum, prerequisites, admission standards and procedures is available at lanecc.edu/hp/pta

Number of New Students Admitted Annually Each year 24 applicants will be accepted into the program.

Criteria Used for Admission Selection to the program is by a point system from a pool of qualified applicants. Information on the point allocation system, transfer students, and advanced placement is available in the Counseling and Advising Center and the PTA website. Students are encouraged to consult the program advisor or counselor before applying for admission. Application is limited to Oregon residents.
Admission Information and Deadlines Please consult lanecc.edu/hp/pta.

Academic Advising/Counseling Call 463-5244 or email ptaprogram@lanecc.edu

Program Coordinator Christina Howard, MPT (541) 463-5764, howardc@lanecc.edu

## Proposed Curriculum

| Prerequisites Required to Apply: | Credits |
| :---: | :---: |
| WR 121 English Composition: Exposition* A, W and Intro to Argument $\qquad$ | 4 |
| HO 100 Medical Terminology 1. | 3 |
| HO 150 Human Body Systems 1. | 3 |
| MTH 070 Introductory Algebra *M ....................................... (or MTH 060 +MTH 065 or higher/current placement test | ng) 5 |
| PSY 201 General Psychology *H .................................. | 3 |
| Total Credits | 18 |

## Two-Year Associate of Applied Science Degree

| First Year | Fall |
| :---: | :---: |
| PTA 100 Introduction to Physical Therapy G,1................... | 3 |
| PTA 101 Introduction to Clinical Practice 1 G,1 .................. | 5 |
| PTA 101L Introduction to Clinical Practice 1 Lab G,1 ........... | 2 |
| HO 152 Human Body Systems 2. | 3 |
| MTH 095 Intermediate Algebra (or equivalent) *S, R ......... | 5 |
| Total Credits | 18 |
|  | Winter |
| PTA 103 Introduction to Clinical Practice $2^{*}$, $\mathrm{G}, 1 . . . . . . . . . . . . . . . . ~$ | 5 |
| PTA 103L Introduction to Clinical Practice 2 Lab *,G,1. | 2 |
| PTA 132 Applied Kinesiology 1 *,G,1 ................................ | 2 |
| PTA 132L Applied Kinesiology 1 Lab *,G,1......................... | 2 |
| SP 115 Introduction to Intercultural Communication *H..... | 4 |
| Total Credits | 15 |
|  | Spring |



## Summer Workshops

Second Year ..... Fall
PTA 204 PT Interventions - Neurological
Dysfunctions *, G,1. ..... 5
PTA 204L PT Interventions - Neurological Conditions Lab *,G,1 ..... 2
PTA 280A Cooperative Education: First Clinical Affiliation *,G,1 ..... 6
Total Credits ..... 13
Winter
PTA 205 PT Interventions - Complex
Medical Dysfunctions *,G,1 ..... 4
PTA 205L PT Interventions - Complex Medical Dysfunctions Lab *,G,1 ..... 2
PTA 280B Cooperative Education: Second Clinical Affiliation ${ }^{*}, \mathbf{G}, 1$ ..... 6
HO 102 Diversity Issues in Health Care ..... 3
PTA 200 Professionalism, Ethics and Exam Preparation *,G,1 ..... 4
PTA 203 Contemporary Issues in Physical Therapy ${ }^{*}$,G,1 ..... 2
PTA 280C Cooperative E
Clinical Affiliation *,G,1 ..... 6
Total Credits ..... 12

## Pre-Chiropractic

## Offered by the Science Division

Suggested Course of Study includes prerequisites for transfer

This suggested course of study is for students who want to earn an Associate of Arts Oregon Transfer (AAOT) degree at Lane Community College and complete prerequisite chiropractic courses for transfer to a chiropractic program elsewhere. A suggested course of study is not the same as a state-approved vocational program in which a student earns a degree or certificate with a vocational major issued by the Lane Board of Education. The guide below includes all pre-chiropractic courses that can be taken at a two-year institution for the professional chiropractic program at Western States Chiropractic College, as well as necessary general education requirements for an AAOT.

Transfer institutions require additional coursework for a chiropractic degree, and may change prerequisites from year-toyear. Any student interested in transfer must accept responsibility to work very closely with a Lane academic advisor, and also to be aware of changes in prerequisites for programs at potential transfer institutions.
General education courses transferred within a completed AAOT degree satisfy lower division general education requirements for any of Oregon's public universities and will transfer intact. Courses numbered below 100 generally do not transfer. See a Lane science advisor for assistance in course selection and transfer policies.

[^37]
## Pre-Occupational Therapy

Offered by the Science Division

## Suggested Course of Study includes prerequisites for transfer

This suggested course of study is for students who want to earn an Associate of Arts Oregon Transfer (AAOT) degree at Lane Community College and complete prerequisite courses for transfer to an occupational therapy program elsewhere. A suggested course of study is not the same as a state-approved vocational program in which a student earns a degree or certificate with a vocational major issued by the Lane Board of Education. The guide below includes all pre-occupational therapy courses that can be taken at a two-year institution for the professional occupational therapy program at Pacific University, as well as necessary general education requirements for an AAOT.
Transfer institutions require additional coursework for an occupational therapy degree, and may change prerequisites from year-to-year. Any student interested in transfer must accept responsibility to work very closely with a Lane academic advisor, and also to be aware of changes in prerequisites for programs at potential transfer institutions.
General education courses transferred within a completed AAOT degree satisfy lower division general education requirements for any of Oregon's public universities and will transfer intact. Courses numbered below 100 generally do not transfer. See a Lane science advisor for assistance in course selection and transfer policies.

WR 121 English Composition: Exposition
and Introduction to Argument *,3,G
WR 227 Composition:Technical Writing*,3,G ..... 4
MTH 097 Geometry ..... 4
MTH 112 Trigonometry*,G ..... 4
MTH 243 Introduction to Probability and Statistics*,3,G .. ..... 4
AAOT Speech requirement ${ }^{G}$ ..... 4
AAOT Arts and Letters requirement $1,2,3, \mathrm{G}$ ..... 3-4
AAOT Social Science requirement ${ }^{1,2,3, G}$ ..... 9
AAOT Science requirement ${ }^{1,3, G}$ ..... 8
PSY 239 Introduction to Abnormal Psychology $G$ ..... 3
3
HO Medical Terminology ${ }^{3}$ ..... 3
PH 201 General Physics*,3,G ..... 5
Electives ${ }^{1, G}$ ..... 14
Cooperative Education ${ }^{1}$ ..... 6
Total Credits ..... 98-99
1 Prerequisite required

G must be taken for a letter grade and earn a grade of a C or higher
1 See science advisor for course selection
2 One Social Science or Arts and Letters course needs to meet Cultural Diversity Requirement
3 Program prerequisite-see advisor for other choices

## Pre-Optometry

## Offered by the Science Division

## Suggested Course of Study includes prerequisites for transfer

This suggested course of study is for students who want to earn an Associate of Arts Oregon Transfer (AAOT) degree at Lane Community College and complete prerequisite courses for transfer to an optometry program elsewhere. A suggested course of study is not the same as a state-approved vocational program in which a student earns a degree or certificate with a vocational major issued by the Lane Board of Education. The guide below includes all pre-optometry courses that can be taken at a two-year institution for the professional optometry program at Pacific University, as well as the necessary general education requirements for an AAOT.
Transfer institutions require additional coursework for an optometry degree, and may change prerequisites from year-toyear. Any student interested in transfer must accept responsibility to work very closely with a Lane science advisor, and also to be aware of changes in programs at potential transfer institutions.

General education courses transferred within a completed AAOT degree satisfy lower division general education requirements for any of Oregon's public universities and will transfer intact. Courses numbered below 100 generally do not transfer. See a Lane science advisor for assistance in course selection and transfer policies.

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Suggested Course of Study:
WR 121 English Composition: Exposition
    and Introduction to Argument*,3,G4
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WR 227 Composition: Technical Writing*,3,G ..... 4
MTH 097 Geometry* ..... 4
MTH 111 College Algebra*,G ..... 5
MTH 112 Trigonometry*, , ..... 4
MTH 241 or 251 Elementary Calculus 1 or Calculus $1^{*, 3, G}$.. ..... 4-5
MTH 243 Introduction to Probability and Statistics*,3,G .... ..... 4
AAOT Speech requirement $G$ ..... 4
AAOT Health requirement 1 ..... 3-4
AAOT Arts and Letters requirement $1,2,3,6$ ..... 10
AAOT Social Science requirement $1,2,3,6$, ..... 9
PSY 201 General Psychology ${ }^{G}$ ..... 3
PSY 202 or PSY 203 General Psychology $G$ ..... 3
CH 221, 222, 223 General Chemistry ${ }^{*}, 3, \mathrm{G}$. ..... 15
CH 241, 242, 243 Organic Chemistry ${ }^{*, 3,6}$ ..... 15
BI 211 Principles of Biology ${ }^{3}$, 6 ..... 4
PH 201, 202, 203 General Physics*,3, ..... 15
Total Credits $110-112$

* Prerequisite required
G must be taken for a letter grade and earn a grade of a C or

```higher
```

1 See science advisor for course selection
2 One Social Science or Arts and Letters course needs to meet

```Cultural Diversity Requirement
```

3 Program prerequisite-see advisor for other choices

## Pre-Pharmacy

## Offered by the Science Division

## Suggested Course of Study includes prerequisites for transfer

This suggested course of study is for students who want to earn an Associate of Arts Oregon Transfer (AAOT) degree at Lane Community College and complete prerequisite courses for transfer to a pharmacy program elsewhere. A suggested course of study is not the same as a state-approved vocational program in which a student earns a degree or certificate with a vocational major issued by the Lane Board of Education. The guide below includes all pre-pharmacy courses that can be taken at a two-year institution for the professional pharmacy programs at Oregon State University and Pacific University, as well as necessary general education requirements for an AAOT.
Transfer institutions require additional coursework for a pharmacy degree, and may change prerequisites from year-toyear. Any student interested in transfer must accept responsibility to work very closely with a Lane academic advisor, and also to be aware of changes in prerequisites for programs at potential transfer institutions.
General education courses transferred within a completed AAOT degree satisfy lower division general education requirements for any of Oregon's public universities and will transfer intact. Courses numbered below 100 generally do not transfer. See a Lane science advisor for assistance in course selection and transfer policies.
Suggested Course of Study:
WR 121 English Composition: Expositionand Introduction to Argument*,, , G4
WR 122 or 123 Composition: Style and Argument or
Research*,3,G ..... 4
MTH 097 Geometry* ..... 4
MTH 111 College Algebra*,G ..... 5
MTH 112 Trigonometry ${ }^{*}, G$ ..... 4
MTH 241 or 251 Elementary Calculus 1 or Calculus1*,3,G.. ..... 4-5
MTH 243 Introduction to Probability and Statistics*,3,G ..... 4
SP 218 Interpersonal Communication 3,G ..... 4
AAOT Health requirement 1 ..... 3-4
AAOT Arts and Letters requirement $1,2,3, \mathrm{G}$ ..... 10
AAOT Social Science requirement ${ }^{1,2,3, G}$ ..... 9
PSY 201 General Psychology G ..... 3
ECON 201 or 202 Introduction to Microeconomics or Macroeconomics ${ }^{3, G}$ ..... 3
CH 221, 222, 223 General Chemistry*,3,G ..... 15
CH 241, 242, 243 Organic Chemistry ${ }^{* 3, G}$ ..... 15
BI 211, BI 212, Z 213 Principles of Biology ${ }^{3, G}$ ..... 12
PH 201, 202, 203 General Physics*,3,G ..... 15
Total Credits 119-120

* Prerequisite required
G must be taken for a letter grade and earn a grade of a $C$ orhigher

1 See science advisor for course selection
2 One Social Science or Arts and Letters course needs to meet Cultural Diversity Requirement
3 Program prerequisite-see advisor for other choices

## Pre-Physical Therapy

## Offered by the Science Division

Suggested Course of Study includes prerequisites for transfer

This suggested course of study is for students who want to earn an Associate of Arts Oregon Transfer (AAOT) degree at Lane Community College and complete prerequisite courses for transfer to a physical therapy program elsewhere. A suggested course of study is not the same as a state-approved vocational program in which a student earns a degree or certificate with a vocational major issued by the Lane Board of Education. The guide below includes all pre-physical therapy courses that can be taken at a two-year institution for the professional physical therapy programs at Pacific University, as well as necessary general education requirements for an AAOT.
Transfer institutions require additional coursework for a physical therapy degree, and may change prerequisites from year-to-year. Any student interested in transfer must accept responsibility to work very closely with a Lane academic advisor, and also to be aware of changes in prerequisites for programs at potential transfer institutions.
General education courses transferred within a completed AAOT degree satisfy lower division general education requirements for any of Oregon's public universities and will transfer intact. Courses numbered below 100 generally do not transfer. See a Lane science advisor for assistance in course selection and transfer policies.

## Suggested Course of Study:

WR 121 English Composition: Exposition and Introduction to Argument*,3,G $\qquad$
WR 122 or 123 Composition: Style and Argument or
Research*,3,G.
MTH 097 Geometry*.
MTH 111 College Algebra* ${ }^{*}$ $\qquad$4MTH 112 Trigonometry*G.
$\qquad$45
MTH 243 Introduction to Probability and Statistics*,3,G5
AAOT Speech requirement ${ }^{G}$

$\qquad$4
AAOT Health requirement ${ }^{1}$ ..... 3-4
AAOT Arts and Letters requirement 1,2,3,G ..... 12
AAOT Social Science requirement 1 ,2,3,G . ..... 9
PSY 201 General Psychology G
$\qquad$3
PSY 215 Lifespan Developmental Psychology*,3,G ..... 3
PSY 239 Introduction to Abnormal Psychology 3,G ..... 3
CH 221, 222, 223 General Chemistry*,3,G. ..... 15
BI 211, BI 212, Z 213 Principles of Biology ${ }^{3, G}$ ..... 12
PH 201, 202, 203 General Physics*,3,G. ..... 15

Total Credits $\overline{104-105}$

* Prerequisite required

G must be taken for a letter grade and earn a grade of a C or higher
1 See science advisor for course selection
2 One Social Science or Arts and Letters course needs to meet Cultural Diversity Requirement
3 Program prerequisite-see advisor for other choices

## Pre-Physician Assistant

Offered by the Science Division

Suggested Course of Study includes prerequisites for transfer

## Associate of Arts Oregon Transfer degree

This suggested course of study is for students who want to earn an Associate of Arts Oregon Transfer (AAOT) degree at Lane Community College and complete prerequisite courses for transfer to a physician assistant program elsewhere. A suggested course of study is not the same as a state-approved vocational program in which a student earns a degree or certificate with a vocational major issued by the Lane Board of Education. The guide below includes all pre-physician assistant courses that can be taken at a two-year institution for the professional physician assistant programs at Oregon Health Sciences University and Pacific University, as well as necessary general education requirements for an AAOT.

Transfer institutions require additional coursework for a physician assistant degree, and may change prerequisites from year-to-year. Any student interested in transfer must accept responsibility to work very closely with a Lane academic advisor, and also to be aware of changes in prerequisites for programs at potential transfer institutions.

General education courses transferred within a completed AAOT degree satisfy lower division general education requirements for any of Oregon's public universities and will transfer intact. See a Lane science advisor for assistance in course selection and transfer policies.

## Suggested Course of Study:

WR 121 English Composition: Exposition
and Introduction to Argument*,3,G ................................... 4
WR 122 or 123 Composition: Style and Argument or
Research ${ }^{*}, 3, \mathrm{G}$........................................................................................ 4
MTH 111 College Algebra*.................................................................................................... 5
MTH 243 Introduction to Probability and Statistics*,3,G ..... 4
AAOT Speech requirement ${ }^{G}$.............................................. 4
AAOT Health requirement ${ }^{1}$.................................................. 3-4
AAOT Arts and Letters requirement 1,2,3,G.......................... 10
AAOT Social Science requirement ${ }^{1,2,3, G}$.............................. 3
PSY 201 General Psychology ${ }^{G}$................................................. 3
PSY 215 Lifespan Developmental Psychology ${ }^{* 3, \mathrm{G}}$............ 3
PSY 239 Introduction to Abnormal Psychology ${ }^{3, G}$............ 3
Sociology elective ${ }^{3, G}$.......................................................... 6
CH 221, 222, 223 General Chemistry*,3,G............................ 15
CH 241 Organic Chemistry*,3,G .......................................... 5
BI 211, BI 212, Z 213 Principles of Biology ${ }^{3, G}$..................... 12
Electives ${ }^{1,3, \mathrm{G} . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~} 12$
Total Credits 93-94

* Prerequisite required

G must be taken for a letter grade and earn a grade of a C or higher
1 See science advisor for course selection
2 One Social Science or Arts and Letters course needs to meet Cultural Diversity Requirement
3 Program prerequisite-see advisor for other choices

# Pre-Veterinary Medicine 

## Offered by the Science Division

Suggested Course of Study includes prerequisites for transfer

## Associate of Arts Oregon Transfer degree

This suggested course of study is for students who want to earn an Associate of Arts Oregon Transfer (AAOT) degree at Lane Community College and complete prerequisite courses for transfer to a veterinary medicine program elsewhere. A suggested course of study is not the same as a state-approved vocational program in which a student earns a degree or certificate with a vocational major issued by the Lane Board of Education. The guide below includes all pre-veterinary courses that can be taken at a two-year institution for the professional veterinary medicine programs at Oregon State University, as well as necessary general education requirements for an AAOT.

Transfer institutions require additional coursework for a veterinary medicine degree, and may change prerequisites from year-to-year. Any student interested in transfer must accept responsibility to work very closely with a Lane academic advisor, and also to be aware of changes in prerequisites for programs at potential transfer institutions.

General education courses transferred within a completed AAOT degree satisfy lower division general education requirements for any of Oregon's public universities and will transfer intact. Courses numbered below 100 generally do not transfer. See a Lane science advisor for assistance in course selection and transfer policies.

## Suggested Course of Study:

WR 121 English Composition: Exposition and Introduction to Argument *,3,G
WR 227 Technical Writing ${ }^{*, 3, G}$.
MTH 097 Geometry *
MTH 111 College Algebra *,G
MTH 112 Trigonometry ${ }^{*}$, $G$
$\qquad$
MTH 243 Introduction to Probability and Statistics *,3,G.
MTH 251 Calculus *,3,G
SP 111 Public Speaking ${ }^{1, G}$
AAOT Health requirement

AAOT Social Science requirement ${ }^{1,2,3, G}$
CH 221, 222, 223 General Chemistry*,3,G 15

CH 241, 242, 243 Organic Chemistry*,3,G 15

BI 211, BI 212, Z 213 Principles of Biology ${ }^{3, G}$ 15
PH 201, 202, 203 General Physics *,3,G.......................................... 12
Total Credits $\overline{104-105}$

* Prerequisite required

G must be taken for a letter grade and earn a grade of a C or higher
1 See science advisor for course selection
2 One Social Science or Arts and Letters course needs to meet Cultural Diversity Requirement
3 Program prerequisite-see advisor for other choices

## Professional Truck Driver

## Offered by the Advanced Technology Division Statewide Career Pathway Certificate of Completion

Purpose To prepare the graduate to drive a tractor-trailer combination or a truck with a capacity of at least $26,000 \mathrm{lbs}$. GVW, to transport and deliver goods, livestock, or materials in liquid, loose, or packaged form, unload a truck, and use automated routing equipment. The Professional Truck Driver certificate of completion program prepares individuals to manage and coordinate all logistical functions in an enterprise, ranging from acquisitions to receiving and handling, through internal allocation of resources to operations units, to the handling and delivery of output. This 19 -hour, four-class series is part of a statewide program designed to create a labor pool of professional truck drivers. Includes instruction in acquisitions and purchasing, inventory control, storage and handling, just-in-time manufacturing, logistics planning, shipping and delivery management, transportation, quality control, resource estimation and allocation, budgeting, and truck driving/ Commercial Driver's Licensing training (which will be provided in partnership with private career schools, such as the IITR Truck Driving School and others). This training prepares students to qualify for commercial drivers' license. Some courses may be offered at the IITR facility in Creswell.

Learning Outcomes The graduate will:

- describe the knowledge and skills necessary to operate a commercial vehicle safely.
- observe and practice the knowledge, skills and abilities necessary to operate a commercial vehicle safely.
- show the range of skill mastery required by an individual driver.
- describe the tasks and duties required of an entry-level trucker and warehouse worker.
- demonstrate the tasks and duties required of an entry-level trucker and warehouse worker.
- understand the logistics industry.
- understand warehouse and loading dock safety.
- identify the foundation skills for creating loyal customers.
- apply skills, strategies and choices for handling challenging customer situations.
- describe behaviors for managing service opportunities.
- identify and use methods for managing stress to ensure service success.

Employment Trends Statewide, there are 717 annual truck driving employment openings, with approximately 64 openings annually in Lane County.

Wages Statewide wages average $\$ 35,699$ annually plus benefits, and Lane County wages average $\$ 31,775$ annually plus benefits.

```
Costs in Addition to Tuition/Registration Fees (estimates)
Cost ofTTL 101 and 121 at IITR Creswell...................$4500
Drug screen...............................................................\$ 41
Physical .....................................................................\$ 77
CDL Fees (DMV)........................................................ \$ 382
Total \$5000
```

Criteria Used for Admission Students may enter this program
fall, winter, or spring term.

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.

TTL 101 Introduction to Transportation and Logistics ........

## TTL 121Practical Applications in Transportation and Logistics 6

 TTL 141 Transportation Customer Service Skills................. 3Total Credits $\quad 13$

Winter
TTL 180 Cooperative Education Seminar 5

Total Credits

## Respiratory Care

## Offered by Health Professions Division

## Two-Year Associate of Applied Science Degree

See the Respiratory Care web pages for additional information.
Purpose To prepare graduates to pass the National Board for Respiratory Care (NBRC) Advanced Practitioner Examination and to become competent Registered Respiratory Therapists.

Learning Outcomes The graduate will:

- provide 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.
- supervise postural drainage, chest physiotherapy and breathing exercises.
- perform cardiopulmonary resuscitation, and measures and maintenance of natural, artificial, and mechanical airways.
- 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.

Employment Trends The employment projection for 2006-2014 is estimated to be at about the statewide average. This occupation is expected to grow somewhat faster than the statewide average. Total job openings are projected to be somewhat higher than the statewide average. Reasonable employment opportunities exist for trained workers largely due to the need to fill replacement job openings.

Wages Oregon statewide average is $\$ 25.36$ hourly and $\$ 53,576$ annually. Lane County average is commensurate with statewide average.

## Costs in Addition to Tuition (estimates)*

## Student Activity Fees ....................................................... \$320

Lab Fees (includes all courses in program)..................... \$200
Uniforms$\$ 70$
Equipment (stethoscope), ..... \$100
Textbooks ..... \$1000
Technology Fee ..... \$303\$133College Transportation Fee (7 terms)..
Personal Health Insurance - required(varies)
Criminal background check - required ..... \$50
Drug Screening. ..... (fee TBA)
CPR Certification (varies)
In addition, respiratory care students pay a differential fee forsome courses. The fee is established annually and is noted inthe online class schedule quarterly by course. The annualdifferential fees are estimated at:
First Year (3 terms) ..... \$1358
Second Year (4 terms). ..... \$2716* Subject to change without notice.Student health insurance is required in the program. This canbe obtained through the college or other health insuranceproviders.

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. Costs related to transportation, childcare, post-graduate credentialing and state licensure are not included in this estimate. Costs related to completion of pre-requisites are not included, but could add up to approximately $\$ 1300$ if completed at Lane Community College. 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.

Program Accreditation The Respiratory Care Program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Committee on Accreditation for Respiratory Care (CoARC).

Licensing or Other Certification Exams Required National credentialing - National Board for Respiratory Therapy, (913) 599-4200, nbrc.org. Oregon State Respiratory Care Practitioner License - Oregon Health Licensing Agency, (503) 378-8667, www.oregon.gov/OHLA/RT

Application requirements In order to apply for Fall 2010* entry all applicants must complete the following minimum prerequisites as indicated below. Other Fall specialized program requirements will be described in acceptance materials.

- Math 95 ( 5 credits), or higher ( 4 or more credits) graded C- or better. For students applying for Fall 2010 entry
- Chemistry $112^{*}, \mathrm{~S}$ and Biology $112^{*}, \mathrm{~S}$ ( 3 credits each), or $100-$ level or higher college chemistry ${ }^{s}$ 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 English Composition: Exposition and Intro to Argument ${ }^{*}$,W (4 credits)
pass/no pass option okay, or grade equal to C- or better
* Application Math Requirement for Fall 2009 entry: Math 60 and 65 ( 4 credits each, total of 8 credits) or Math 70 ( 5 credits, or higher (4 or more credits) (graded C- or better)

Admission Deadline Applications will be screened on a firstcome, first-qualified basis until the program is filled or end of July.

Criteria Used for Admission The application information packet is found on the program web page www.lanecc.edu/hp/rc Selection to the program is based on completion date of the application (application plus all transcripts documenting successful completion of prerequisites) and meeting all requirements indicated in the application information packet.

Admission Information Applications are available online at www.lanecc.edu/hp.

Cooperative Education (Co-op) Respiratory care allows students to earn college credit for participating in job-related activities in respiratory care professional settings under direct supervision. Through Co-op, enrolled students develop skills, connect classroom theory with practice, expand career knowledge, and make contacts for potential future employment in respiratory care. Co-op may be taken as an optional elective, and is a required course as the clinical capstone ICU practicum course in the final term. Contact Norma Driscoll, Respiratory Care Co-op Coordinator, Bldg. 4, Rm. 135, (541) 463-3176.

Program Advisor Rosa Lopez, Bldg. 1, Rm. 107, (541) 463-5660, lopezr@lanecc.edu

Program Counselor Leslie Soriano-Cervantes, Bldg. 1, Rm. 103F, (541) 463-5512, soriano-cervantesl@lanecc.edu

First Day Enrollment Requirements completed prior to enrolling in fall term program courses:
BI 232 Human Anatomy and Physiology 2 (4 credits) (Graded - "C" or better)
Evidence of a physical examination (within the previous nine months)
CPR Certification for Health Care Professionals - 2 year certification preferred

## First Year

BI 233 Human Anatomy and Physiology 3 *, G,S,4
RT 112 Respiratory Care Science 1 G $\qquad$
RT 114 Fundamentals of Respiratory Care 1 G $\qquad$2

RT 146 Introduction to Clinical Respiratory Care $1^{3}$
Human Relations requirement R,G
3
The following are preferred:
CG 203 Human Relations at Work
CG 191 Issues in Cultural Diversity
HO 102 Diversity Issues in Health Care
Total Credits
14

|  | Winter |
| :---: | :---: |
| RT 116 Basic Respiratory Assessment *,G | 2 |
| RT 127 Respiratory Care Diseases and Medications *,G <br> RT 141 Principles of Respiratory Care Lab *,G $\qquad$ <br> RT 144 Principles of Respiratory Care *,G $\qquad$ <br> BI 234 Microbiology ${ }^{*, G, S}$ $\qquad$ | 4 |
|  |  |
|  | 3 |
|  | 4 |
| Total Credits | 14 |
|  | Spring |
| RT 251 Pulmonary Diagnostics and Monitoring Lab *,G <br> RT 254 Pulmonary Diagnostics and Monitoring *,G $\qquad$ <br> RT 126 Respiratory Care Case Review - Part 1 *,G $\qquad$ <br> RT 236 Clinical Practice ${ }^{1 *, 3}$ $\qquad$ | 1 |
|  | 3 |
|  | 2 |
|  | 8 |
| Total Credits | 14 |
|  | Summer |
| RT 110 Introduction to Mechanical Ventilation *,G,4 RT 136 Respiratory Care Case Review - Part 2 *, $\mathrm{G}, 4$ RT 248 Clinical Practice 2 *, 3 $\qquad$ | 3 |
|  | 4 |
|  | 6 |
| Total Credits | 13 |
| Second Year <br> RT 241 Principles of Mechanical Ventilation Lab *,G,4 $\qquad$ <br> RT 244 Principles of Mechanical Ventilation *, $\mathrm{G}, 4$ $\qquad$ <br> RT 216 Respiratory Care Case Review - Part 3 *, G,4 $\qquad$ <br> RT 258 Clinical Practice $3 * 3$. $\qquad$ | Fall |
|  | 1 |
|  | 3 |
|  | 2 |
|  | 8 |
| Total Credits | 14 |
|  | Winter |
| RT 256 Respiratory Care Case Review - Part 4 *, G,4 $\qquad$ <br> RT 262 Neonatal/Pediatric Respiratory Care *,G,4. $\qquad$ <br> RT 266 Emergency and Critical Care - Part $1{ }^{*}, \mathrm{G}, 4$. $\qquad$ <br> RT 268 Clinical Practice $4 *, 3$ $\qquad$ | 2 |
|  | 3 |
|  | 3 |
|  | 8 |
| Total Credits | 16 |
|  | Spring |
| HE 275 Lifetime Health and Fitness 2,P............................ | 3 |
| RT 270 Clinical Competency Assessment *3..................... |  |
| RT 274 Credentialing Topics *,G,D ..................................... |  |
| RT 276 Emergency and Critical Care - Part 2 *,G,4.............. |  |
| RT 280 Co-op Ed: Respiratory Therapy *,G,4...................... |  |
| Arts and Letters A, G ....................................................... |  |
| The following are preferred: |  |
| SP 111 Fundamentals of Public Speaking |  |
| SP 115 Introduction to Intercultural Communication |  |
| SP 218 Interpersonal Communication |  |
| SP 220 Communication, Gender and Culture |  |
| Total Credits $\quad 16$ |  |
| 1 Must be accepted into Respiratory Care Program. |  |
| 2 Students fulfilling Physical Education degree requirements via PE courses must complete activity courses over at least two terms. |  |
| 3 Graded Pass/No Pass |  |
| 4 Must be passed with grade of "C" ore better |  |
| Optional courses each term: |  |
| RT 148 Advanced Placement Clinical Practice |  |
| RT 298 Independent Study |  |
| RT 280 Co-op Ed |  |
| Courses may be offered through distance learning beginning with first-year fall Term 2009. |  |

## Retail Management

Offered by the Business Department

## Two-Year Associate of Applied Science Degree

## One-Year Certificate of Completion

## Career Pathway Certificate of Completion

Purpose This two-year Retail Management Associate of Applied Science (AAS) degree program provides a program of study for retail employees and for students who would like to advance to retail store supervision, store management, and be qualified to move forward into corporate leadership. This program represents skills identified by the retail industry at the statewide level, as represented by the Western Association of Food Chains (WAFC).

Learning Outcomes The graduate of the Associate of Applied Science program will:

- understand the purpose, context, concepts, and processes of retailing and the retail environment and the responsibilities of the retail operations function.
- understand the advantages, disadvantages, and circumstantial uses of various leadership styles.
- understand various ethical tools and the reasoning behind various ethical positions.
- determine appropriate and inappropriate interview, hiring, and employee supervision procedures.
- understand the opportunities and challenges posed by a teambased, multicultural work force and the responsibilities of management in handling and motivating employees to achieve organizational objectives.
- apply leadership skills to achieve a motivational and productive culture and climate.
- understand the impact of technology on marketing and recognize how the major elements of the marketing process apply to actual marketing situations.
- define theories and strategies of business management, including human resources management and operations management.
- understand the basic terms and concepts of accounting, and the content of financial statements and be able to understand and interpret the information they contain.
- understand communication theory and give well-organized, clear written and oral business presentations that inform, recommend, and train.
- prepare mathematical business computations for industry requirements, including discounts and mark-ups, returns and allowances, and data to maintain good records.
- learn and demonstrate proficiency with office suite products, including word processing, spreadsheets, database, communication, and presentation software.
- know, demonstrate, and appreciate good work ethics, including dependability, attention to detail, good customer relations, professionalism, and good team work relationships.
- appreciate the significance of meeting employer/retailer needs in providing superior customer service and apply communication skills to improve customer service and work relationships.
- use appropriate library and information resources to research business topics.
- apply critical thinking and analytical skills in decision making and problem solving.

Employment Trends For retail management and supervision, the projected number of annual openings for the state of Oregon is 555, with approximately 49 in Lane County. Employers particularly seek employees with good communication, teamwork, and interpersonal skills, as well as those who present themselves in a professional manner. Workers must have
related work experience to gain the necessary skills for this occupation. However, workers with postsecondary training have a competitive advantage in the labor market.

Wages Statewide wages for retail managers and supervisors average $\$ 19.53$ hourly and $\$ 40,630$ annually plus benefits. Lane County wages average $\$ 19.87$ hourly and $\$ 41,329$ annually plus benefits.

## Costs in Addition to Tuition (estimate)*

Books and fees $\qquad$ \$2,550
Some Business courses have a one-time fee of $\$ 5$ per term to help support the Student Resource Center. See the Business department for details.

* Subject to change without notice.

Prerequisites The entering student must have the ability to type by touch, have a basic knowledge of the Windows operating system, and place at least into WR 121 and MTH 060, or take classes to reach these levels before enrolling in program courses. Before enrolling in BA 214 Business Communications, students must pass a Language Skills and Proofreading test in the Testing office or pass BT 180 Business Proofreading and Editing. A computer is highly recommended for all Business Department majors; contact the department or advisor for details.

Program Advisor Deb Hupcey, Bldg. 2, Rm. 135, (541) 4635635, hupceyd@lanecc.edu

Program Counselor Marva Solomon, Bldg. 1, Rm. 103B, (541)
463-5625, solomonm@lanecc.edu

## Retail Management

Two-Year Associate of Applied Science Degree
First Year Fall

BA 101 Introduction to Business D,G
BA 101 Coduction to Business i..................................
Copts
MTH 060 Beginning Algebra or higher ${ }^{*}$,D,G,M
4
Mrob0 Beginning Algebra or higher, , , ....................
Choice of:
SP 111 Fundamentals of Public Speaking D,G
SP 100 Basic Communication D,G
SP 130 Business and Professional Speech D,G
Total Credits
16
Winter
BA 211 Financial Accounting *,D,G

BA 224 Human Resource Management ${ }^{*}, \mathrm{D}, \mathrm{G}$ ..... 4

BA 223 Marketing D,G ..... 4
WR 121 English Composition: Exposition and Introduction to Argument ${ }^{*}, \mathrm{D}, \mathrm{G}, \mathrm{W}$. ..... 4
Total Credits ..... 16
BA 214 Business Communications *, D,G

## BA 249 Retailing D,G

BA 278 Leadership and Team Dynamics D,G4
BA 206 Management Fundamentals ${ }^{*}$, D,G ..... 4
Total Credits ..... 16
Second YearFall
BA 213 Managerial Accounting ${ }^{*}, \mathrm{D}, \mathrm{G}$ ..... 4
BA 251 Supervisory Management $\mathrm{D,G}$ ..... 4
HE 252 First Aid D,G ..... 3
SP 115 Intercultural Communication D,G ..... 4

| BA 226 Business Law D,G | Winter |
| :---: | :---: |
| Choice of: | 3-4 |
| BT 114 MS EXCEL for Business *,D,G |  |
| BT 165 Introduction to the Accounting Cycle D,G |  |
| BT 170 Payroll Records and Accounting *,D,G |  |
| BT 171 Payroll Laws and Regulations D,G |  |
| BT 251 E-Business Fundamentals D,G |  |
| ECON 200 Principles of Economics: |  |
| Introduction to Economics D,G ................................................ | 3 |
| SP 105 Listening and CriticalThinking D,G........................ | 4 |
| Total Credits | 14-15 |
|  | Spring |
| BA 124 Negotiating D,G. | 3 |
| BA 217 Budgeting for Managers *,D,G | 4 |
| BA 238 Sales D,G. | 3 |
| BA 261 Consumer Behavior D,G | 3 |
| BA 280 Cooperative Education: Retail D,G ......................... | 3 |
| Total Credits | 16 |

## Retail Management

## One-Year Certificate of Completion

Purpose The Retail Management Certificate of Completion represents skills identified by the retail industry, which desires to provide a program of study for their employees and for students who would like to become retail employees. The certificate builds on the Career Pathway Certificate of Completion and incorporates additional coursework in writing and business. This program is recognized by retail employers and identifies skills that lead to professional growth, hiring, and advancement opportunities. This program is a body of study that prepares the student for retail sales and management responsibilities; those who complete the program may be given preference in hiring, and/or may be eligible for promotions.
Learning Outcomes The graduate will:

- understand the purpose of retailing and the retail environment and the responsibilities of the retail operations function.
- understand the advantages, disadvantages, and circumstantial uses of various leadership styles.
- understand various ethical tools and the reasoning behind various ethical positions.
- determine appropriate and inappropriate interview and hiring questions.
- understand the opportunities and challenges posed by a 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.


## Retail Management

## One-Year Certificate of Completion

|  | Fall |
| :---: | :---: |
| BA 101 Introduction to Business D,G. | 4 |
| CS 120 Concepts of Computing: |  |
| Information Processing D,G | 4 |
| MTH 060 Beginning Algebra or higher *,D,G. | 4 |
| Choice of:. | 4 |
| SP 111 Fundamentals of Public Speaking D,G |  |
| SP 100 Basic Communication D,G |  |
| SP 130 Business and Professional Speech D,G |  |

BA 214 Business Communications *,D,G Spring
BA 249 Retailing D,G .......................................................................................... 4
BA 278 Leadership and Team Dynamics D,G ....................... 4
Choice of:

BA 206 Management Fundamentals *,D,G
BA 226 Business Law D,G
Total Credits
16

## Retail Management

## Career Pathway Certificate of Completion

Purpose This Career Pathway Certificate of Completion represents skills identified by the retail industry, as represented by the WAFC (Western Association of Food Chains), which desires to provide a program of study for their employees and for students who would like to become retail employees. This program is recognized by retail employers and identifies skills that lead to professional growth, hiring, and advancement opportunities. This program is a body of study that prepares the student for retail sales and management responsibilities. Those who complete the program will be given preference in hiring, will be eligible for promotions, and will receive compensation to recognize their educational achievement.

[^38][^39]| BA 101 Introduction to Business D,G. |
| :---: |
| CS 120 Concepts of Computing: |
| Information Processing D,G ....... |
| MTH 060 Beginning Algebra or higher *,D,G..................... |
| Choice of:..................................................................... |
| SP 111 Fundamentals of Public Speaking D,G |
| SP 100 Basic Communication D,G |
| SP 130 Business and Professional Speech D,G |

Total Credits 16


BA 214 Business Communications *,D,G
BA 249 Retailing D,G
BA 278 Leadership and Team Dynamics D,G G..

Total Credits 12

## Speech and Communication Studies

## Offered by Language, Literature, and Communication Division <br> <br> Suggested Course of Study

 <br> <br> Suggested Course of Study}Important note Oregon four-year schools vary in their requirements. If you are a transfer student and considering a Suggested Course of Study in Speech and Communication Studies, you must work closely with a Lane academic advisor as well as an academic advisor at your transfer school.

Lane Community College's four core learning outcomes emphasize how essential communication is to education and success in the workplace. To become a competent communicator, students usually need more than a one-course requirement in Speech and Communication Studies. In choosing this course of study students demonstrate to prospective and current employers their enhanced speech and communication skills.

By selecting one of the following tracks students can prepare themselves for careers in law, public relations, communication consulting, business administration, teaching, speechwriting, speech/debate direction, broadcast, counseling, mediation, labor relations, public opinion research, human resources, advertising, educational administration, lobbying, and marketing, to name a few fields.

This is a suggested course of study, which is not the same as a state-approved vocational program with a vocational major leading to a degree from the Lane Board of Education. Rather the courses below are appropriate electives for students interested in Speech and Communication Studies. This suggested course of study is available in two tracks:

1 Academic track-for those pursuing a bachelor's degree or a minor in Speech and Communication Studies.
2 Occupational track-for those completing a two-year degree program who want to maximize their proficiency in speech and communication to enhance occupational readiness, performance, and flexibility.

Internships Students in either the academic or occupational track can elect to complete a one-term internship related to the field of Speech and Communication Studies. This work would be completed under the joint supervision of the Cooperative Education program at Lane and a Speech and Communication Studies faculty member. Letters of recommendation from the supervising employer and credits earned in practicum can give students a competitive edge when applying for employment. Internships may focus on public relations, advertising, political canvassing, environmental or health education, marketing, or other fields.

Important note: Oregon four-year schools that provide a
Communication major vary in their requirements. When selecting classes for the academic track, students must work closely with a Lane academic advisor as well as an academic advisor at the transfer school.

## Completing an Academic Track in Communication Studies

The suggested course of study recommends either the AAOT, ASOT, or OTM Foundational Skills requirement along with four elective courses in Speech and Communication Studies.

## AAOT Foundational Skills requirements

Communication/Rhetoric: Four credits A fundamentals of speech or communication course. Choice of one course from:
SP100 Basic Communication
Sp 111 Public Speaking
Sp 112 Persuasive Speech
Sp 130 Business and Professional Speech.
SP 218 Interpersonal Communication
SP 219 Small Group Discussion,
ASOT Business Foundational Skills requirements
Communication: Four credits A fundamentals of speech or communication course. Choice of one course from:
SP 100 Basic Communication,
SP 105 Listening and Critical Thinking,
SP 111 Fundamentals of Public Speaking,
SP 112 Persuasive Speech,
SP 115 Introduction to Intercultural Communication,
SP 130 Business and Professional Speech,
SP 218 Interpersonal Communication,
SP 219 Small Group Discussion,
SP 220 Communication, Gender and Culture
SP 262 Voice and Articulation.
OTM Foundational Skills requirements
Oral Communication: Four credits As a part of the Foundational Studies requirement, students select from:
SP 100 Basic Communication
SP 111 Fundamentals of Public Speaking.
Electives and/or University-Specific Prerequisites for the ASOT and AAOT
To complete the suggested course of study, four courses may be selected from the remainder of the Speech and Communication Studies curriculum. All of the following are four credits. Two of these courses may also be applied to the AAOT or ASOT Introduction to Disciplines Arts \& Letters requirement, which specifies that a student must choose 12 credits from at least two disciplines.
SP 100 Basic Communication
SP 105 Listening and Critical Thinking

SP 111 Fundamentals of Public Speaking
SP 112 Persuasive Speech
SP 115 Introduction to Intercultural Communication
SP 130 Business and Professional Speech
SP 218 Interpersonal Communication
SP 219 Small Group Discussion
SP 220 Communication, Gender and Culture
SP 221/222/223 Forensics (1-2 credits)
SP 262 Voice and Articulation
Completing an Occupational Track in Communication Studies
The suggested course of study recommends three skills-oriented courses that include the following:
SP 105 Listening and Critical Thinking
SP 111 Fundamentals of Public Speaking or SP 130 Business and Professional Speech
SP 219 Small Group Discussion

## Speech Language Pathology Assistant (SLPA)

## A collaboration between Chemeketa Community College and Lane Community College

A Speech Language Pathology Assistant (SLPA) is a certified support person who carries out specific therapy-related tasks under the supervison of a licensed speech-language pathologist. The SLPA works closely with others in a variety of settings including schools, hospitals, rehabilitation centers, or private practice. As a member of a speech-language therapy team, the SLPA helps children and adults with communication disorders improve their ability to speak, listen and interact with others.

Lane partners with Chemeketa so that students may take classes at both institutions to become eligible for the SLPA certification through Chemeketa Community College. Chemeketa offers the required coursework for an individual to be eligible for certification as a Speech-Language Pathology Assistant with the Oregon State Board of Examiners for Speech-Language Pathology and Audiology. Chemeketa also offers students the option to obtain an Associate of Applied Science (AAS) degree in Speech Language Pathology Assistant with the completion of an additional 45 general education credits.

Lane offers the general education portion of the SLPA AAS degree and two Education courses. Chemeketa offers most of the SLPA required courses, which are online. Since all of Chemeketa's SLPA courses are online, and the practicum is arranged locally, students are able to complete an AAS degree from Chemeketa and become eligible for the SLPA certification without the need to travel out of the Lane County area.

To earn either an SLPA Certification or the SLPA AAS degree, a student must complete a total of 90 credits: 45 credits of general education and 45 credits of required SLPA courses. The SLPA program description is available at speechpathology.chemeketa.edu.
All students must apply to and be accepted into Chemeketa's SLPA program before they are eligible to enroll in Chemeketa's SLPA courses. Current information regarding prerequisites, admissions procedures, and program costs is available at chemeketa.edu/programs/slpa/process. Lane students may enroll in two of the SLPA courses that are offered at Lane, ED 258 Multicultural Education, ED 130 Comprehensive Classroom Management without admission to the SLPA program.
A student enrolled continuously at Lane or Chemeketa, or enrolled continuously in a combination of courses alternating between the colleges, will be able to use the requirements in place when the student entered the program. Chemeketa's two year interruption clause will apply. A candidate for the AAS in SLPA may be enrolled at either Lane or Chemeketa during the final term of classes and need not be enrolled at Chemeketa in the term the graduation application is submitted.

Wages Data from Chemeketa indicate that the pay range for SLPAs is $\$ 14$ to $\$ 20$ per hour with benefits. Most jobs currently are in school districts (K-12) or with Lane Educational Service Districts

Program Advisor Cindy Lott (541) 463-5232 lottc@lanecc.edu
Program Counselor Anthony Hampton (541) 463-5275
hamptona@lanecc.edu
Required Chemeketa Courses to be eligible for SLPA certification:
ED169 Overview of Students with Special Needs
ED229 Learning and Development
SLP180 Survey of Speech and Language Disorders
SLP181 Phonetics for Language
SLP182 Intervention Strategies for SLP Assistants
SLP183 Introduction to Language Development
SLP184 Language Therapy
SLP185 Anatomy and Physiology of Speech and Language SLP186 Speech Intervention in Children, Adolescents and Adults
SLP187 Clinical Documentation and Materials Management for the SLPA
SLP188 Communication Disorders in Low Incidence Populations

Standard footnotes:

* Prerequisite required

A Meets Arts/Letters requirement
B Must be passed with grade of " $B$ " or better to use as a prerequisite
D Degree or certificate requirement; must be passed with grade of "C-" or better
G Must be taken for a grade, not P/NP; major requirement

[^40]Required Lane Courses to be eligible for SLPA certification:
ED130 Comprehensive Classroom Management. $\qquad$
ED258 Multicultural Education
ED280 Cooperative Education: SLPA
*Cooperative Education is part of the 45 credits that make up the OAR requirement of the Oregon Board for Speech Language Pathology and Audiology for 45 credits in speech language pathology technical coursework. Lane's ED 280 has a special section exclusively for SLPA students. Co-op courses require onsite clinical interaction and a weekly seminar with reading and assignments geared toward the direct clinical practice of a speech language pathology assistant. In collaboration with the SLPA program at Chemeketa, Lane provides a local practicum supervisor licensed in the SLPA field.

Additional Lane general education courses are required for Chemeketa's Associate of Applied Science Degree, Speech Language Pathology Assistant. Students choosing to earn Chemeketa's Associate of Applied Science Degree in addition to the SLPA Certificate may complete general education coursework at Lane. Students must pass the following courses with a grade of "C" or better:

## Writing

WR 121 English Composition: Exposition and
Introduction to Argument, or higher 4 credits

## Mathematics

Math 070 Elementary Algebra, or higher $\qquad$ .4 credits
Recommended course
MTH 211 Fundamentals Elementary Math 1 ....................... 4 credits
Computer Literacy
CS 120 Concepts of Computing or ..................................3-4 credits
CIS 101 Computer Fundamentals

## Speech

SP 100 or higher ................................................................... 4 credits
Any Speech course from Lane's Associate of Arts Oregon
Transfer degree approved Arts and Letters offerings**..... 4 credits
Physical Education or Health.............................................. 3 credits
Any course from Lane's Associate of Arts Oregon Transfer degree approved Health offerings.
Recommended course
HE 252 First Aid
.3 credits
Humanities/Fine Arts .9 credits
Any courses from Lane's Associate of Arts Oregon Transfer
degree approved Arts and Letters offerings. **
Recommended course
ENG 100 Children's Literature ............................................ 4 credits
Social Science .12 credits
Any courses from Lane's Associate of Arts Oregon Transfer
degree approved Arts and Letters offerings. ${ }^{* *}$
Science. $\qquad$ .9 credits
Any two 4 credit classes from Lane's biological sciences with laboratories or physical sciences with laboratories course offerings. **
**Because of the variety and extent of courses that qualify in Social Science, Arts and Humanities, and Science please refer to the appropriate Lane catalog for a complete list of approved courses in these areas.

## Sustainability

Offered by Multiple Departments

## Suggested Course of Study

This is a suggested course of study leading to an AAOT degree for students interested in pursuing a bachelor's degree in fields such as environmental science, environmental studies, or community planning. A suggested course of study is not the same as a state-approved vocational program in which a student earns a degree or certificate issued by the Lane Board of Education.

Most courses listed below relate to sustainability topics and outcomes. Sustainability is by its nature multidisciplinary, and this course of study can lead to many different fields. Students will be able to move onto further studies equipped with knowledge of the systems that sustain life on the planet; a broad understanding of sustainable ecological, social, and economic systems; a concern for building a socially diverse, just, and sustainable society; and the competence to act on such knowledge. For more information about sustainability at Lane contact Susie Cousar, Sustainability and Learning coordinator, at (541) 463-5271 or cousars@lanecc.edu.
First Year ..... Fall
Arts \& Letters requirement ..... 3
ENVS 181 Terrestrial Environment ..... 4
HE 255 Global Health ..... 4
WR 121 English Composition: Exposition and Intro to Argument 4Total Credits15
Winter
BI 102H General Biology: Forest Biology ..... 4
GEOG 141 Natural Environment ..... 4
WR 122 Composition: Style and Argument ..... 4
Total Credits ..... 16
BI103 Biodiversity and Sustainability Spring
ENVS 184 Global Climate Change ..... 4
4
ECON 260 Intro to Environmental and Natural Resource Economics ..... 4
SOC 216 Global Social Movements ..... 3
Total Credits ..... 15
Second Year ..... Fall
MTH 105 Introduction to Contemporary Mathematics ..... 4
PS 211 Peace and Conflict Studies: Global ..... 4
REL 243 Nature, Religion and Ecology ..... 4
SP 111 Fundamentals of Public Speaking ..... 4
Total Credits ..... 16
WinterENVS 182 Atmospheric Environment and Population4
PS 212 Peace and Conflict Studies: National ..... 4
PS 297 Environmental Politics. ..... 4
SP 115 Intro to Intercultural Communication. ..... 4
Total Credits ..... 16
BI 103G General Biology: Global Ecology ..... Spring
ENVS 183 Aquatic Environment4
PS 213 Peace and Conflict Studies: Local ..... 4
ENG 240 Nature Writing ..... 4
Total Credits ..... 16

## Teacher Education Preparation

Offered by Cooperative Education Department

## Suggested Course of Study

## Elementary Teacher Preparation

This information is a guide for students interested in pursuing a career in elementary education. A suggested course of study is not the same as a state-approved vocational program in which a student earns a degree or certificate issued by the Lane Board of Education.

There are 19 Oregon schools that offer teacher education preparation. Admission is selective and based on coursework, experience with children, tests scores, and other application material. Every school has a specific set of recommended and required curriculum that students should follow to increase their chances of being admitted. It is critical that students work closely with a Lane education advisor in selecting the transfer school and designing their educational plan.

A broad liberal arts curriculum including coursework in literature, art, music, child development, history, geography, mathematics (including geometry and algebra), biology and physical science is required of many education programs. In addition, experience working in a classroom setting under the supervision of a certified teacher is beneficial to students considering a teaching career.

Cooperative Education (Co-op) offers Lane students the opportunity to gain classroom experience at the elementary or secondary level. Letters of recommendation from the supervising teacher, your Lane instructors in courses in education, and credits earned through Co-op give students a competitive advantage when applying for admission to four-year education programs and to graduate programs.
Students unsure of whether they want to become teachers may participate in the Foundations of Education seminar while also working in a classroom to help decide if teaching is a good career choice for them.

For information about seminar classes and gaining experience in a classroom, contact: Merrill Watrous, Education Co-op Coordinator, (541) 463-5423.

The following list is a sample of classes that many elementary education programs recommend. It may be a good starting point for students who have not yet identified a specific transfer institution. Completion of these suggested classes alone will not constitute a degree, but can be applied toward the Associate of Arts Oregon Transfer (AAOT) degree. Consult with Lane's education advisors for course planning to meet your specific educational goals.

Program Advisor Deb Hupcey, Academic Advisor, (541) 463-5635.

Program Counselor Marva Solomon, Counselor, (541) 463-5625.

## Recommended Classes for AAOT Degree

WR 121 English Composition: Exposition and Introduction to Argument (or higher)
MTH 211 Fundamentals of Elementary Mathematics 1
ENG 100 Children's Literature
HST 201 or 202 or 203 History of the United States
GEOG 103 Cultural Geography
PSY 235 Human Development or HDFS 226 Child Development
BI 101 or 102 or 103 Survey of Biology
One Physical Science course such as (but not limited to):
CH 104 Introduction to Chemistry
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
GS 104 or 105 or 106 Physical Science
PH 101 or 102 or 103 Fundamentals of Physics
Recommended Electives toward AAOT Degree
CG 211 Dreikursian Principles of Child Guidance 1
ED 130 Comprehensive Classroom Management
ED 131 Instructional Strategies
ED 200, 201 Foundations of Education
ED 258 Multicultural Education
ED 280 Cooperative Education
ENG 104, 105, 106 Introduction to Literature
HDFS 226 Child Development
HDFS 227 Children Under Stress
HDFS 229 Middle Childhood Ages 6-12
HDFS 250 Developmental Kindergarten
MTH 212, 213 Fundamentals of Elementary Mathematics 2 and 3
SPAN 101, 102, 103 Spanish, First Year
Introductory Art and/or Music classes

## Middle/High School Teacher Preparation

For middle/high school teaching (secondary education), students should major in the subject they plan to teach. Examples of subjects commonly taught are History, Geography, English, Mathematics, Biology and general or specific Science. For more information about middle/high school teaching contact Counseling and Advising and ask to meet with the advisor for your specific major.

## Theatre Acting

## Offered by Music, Dance and Theatre Arts <br> Suggested Course of Study

For students pursuing a bachelor's degree with a major in theatre arts. For information and advice about other courses required for transfer to specific Oregon colleges and universities, and about other degree and non-degree options, see department advisor Tim Blood, Bldg. 1, Rm. 110.

For advice about career choices other than transfer study it is strongly recommended that each student meet with a member of the Theatre Arts faculty.

This is a suggested course of study for students interested in acting. A suggested course of study is not the same as a stateapproved vocational program in which a student earns a degree or certificate issued by the Lane Board of Education, nor is it an associate of arts degree. See department advisor Tim Blood for further information.

This "fast track" first-year curriculum is designed to help students get a B.A. degree in four years. Individual needs and desires may require a different approach. Interested students should seek advice from Theatre Arts instructor Patrick Torelle, Bldg. 6, Rm 132.

| First Year | Fall |
| :---: | :---: |
| TA 141 Acting 1. | 3 |
| WR 121 English Composition: Exposition and Introduction to Argument | 4 |
| Science or Social Science | 3-4 |
| Foreign Language....... | 5 |
| Total Credits | 15-16 |
|  | Winter |
| TA 142 Acting 2. | 3 |
| WR 122 Composition: Style and Argument ...................... | 4 |
| Science or Social Science. | 3-4 |
| Foreign Language. | 5 |
| Total Credits | 15-16 |
|  | Spring |
| TA 143 Acting 3 .. | 3 |
| WR 123 Composition: Research ...................................... | 4 |
| Science or Social Science .............................................. | 3-4 |
| Foreign Language ............................................................ | 4 |
| Total Credits | 14-15 |

Two-Year Transfer Course of Study The following is a general second year course of study. It is strongly recommended that each student meet with Patrick Torelle, Bldg. 6, Rm. 132, to design a curriculum to meet the requirements of the particular school the student wishes to attend.
Second Year ..... Fall
TA 241 Intermediate Acting ..... 3
Voice, Dance or Improvisation , Dance, or Improvisation ..... 2-3
One otherTheatre class ..... 3
Health requirement ..... 3
Science or Social Science ..... 3-4
Winter
TA 242 Intermediate Acting ..... 3
Voice, Dance or Improvisation. ..... 2-3
One otherTheatre class ..... 3
Cultural Diversity requirement. ..... 3
Science or Social Science ..... 3-4
Total Credits ..... 14-16
Spring
TA 243 Intermediate Acting ..... 3
Voice, Dance or Improvisation. ..... 2-3
Speech requirement ..... 3
One otherTheatre class. ..... 3
Science or Social Science ..... 3-4
Total Credits ..... 14-16

## Water Conservation Technician

## Offered by the Science Division

## Two-Year Associate of Applied Science Degree

Purpose This degree will prepare students to enter careers in the water field as water efficiency technicians and workers, coordinators, specialists or managers or as water management specialists and technicians. The program prepares students to design, implement and evaluate water conservation programs. Upon successful completion of the program students will have the opportunity to seek professional certification.

Learning Outcomes The graduate will:

- evaluate indoor and outdoor water use patterns for rural, urban, residential and commercial sites
- recommend water efficiency measures, wise water landscapes and efficient plumbing solutions
- design, implement and evaluate water conservation programs
- convey water conservation strategies to a broad audience using multiple communication methods
- understand regional regulatory context and international code trends as they pertain to water conservation
- develop basic knowledge of water resource economics and how economics relates to supply and demand
- understand water distribution, flow and elimination systems as well as time of use
- create technical reports and collect, interpret, display and explain data
- perform systems analysis using water bills, meters and other evidence to solve problems.

Employment Trends The annual projected number of openings in Oregon is growing moderately and in the future will grow rapidly along with population growth. In addition to openings resulting from growth, the need to replace retirees or those who transfer to other occupations will provide numerous job openings. Graduates must consider the entire nation for job placement as those that do will enhance their opportunities.
Wages in Oregon range from $\$ 32,000$ to $\$ 48,500$ annually plus benefits.

Costs in Addition to Tuition (estimated)* $\$ 800$ for the Two-year degree program
*Subject to change without notice.

Program Admission Requirements A high school diploma (or equivalent) and completion of Math 070 is required for entry into the Water Conservation Technician Program along with a completed Water Program application form. This is a limited enrollment program.

Admission Information Science Department, (541) 463-4729, Bldg 16, Rm. 252/253, young@lanecc.edu or ebbager@lanecc.edu or advisor, lukacss@lanecc.edu or counselor, ganserd@lanecc.edu

Program Information Tammie Stark, Lane Community College Faculty, starkt@lanecc.edu, (541) 463-5451

Cooperative Education Cooperative Education is an important avenue to provide 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 Larry Scott, Science Co-op program coordinator, Bldg 19/Rm. 154, (541) 463-5458.

| First Year | Fall |
| :---: | :---: |
| SUST 101 Intro to Sustainability 1D,G | 3 |
| WATR 101 Intro to Water Resources 1,D,G. | 3 |
| BT 114 MS Excel for Business *,D,G | 4 |
| WR 121 English Composition 2,5,6,W,G. | 4 |
| Choice of: 5,6,R | 2 |
| Physical Education Activity Requiremen Health requirement |  |


| Total Credits | 16 |
| :---: | :---: |
|  | Winter |
| WATR 105 Water Conservation: Residential 1,D,G ............... | 4 |
| MTH 095 Intermediate Algebra *,2,M,G .............................. | 5 |
| WR 227 Technical Report Writing *,5,6,A,G ........................... | 4 |
| WATR 206 Co-op Ed: Water Conservation SeminarD | 1 |
| Choice of: 5,6,R ................................................................ | 1 |
| Physical Education Activity Requirement Health requirement |  |


| Total Credits | 15 |
| :---: | :---: |
|  | Spring |
| WATR 107 Water Conservation: Outdoor 1,D,G | 4 |
| Choice of: |  |
| WATR 150 Water Resource Economics 1,D,G or |  |
| ECON260 Introduction to Environmental and Natural Resource Economics *1,D,G | 4 |
| BI 103F General Biology: Wildflowers of Oregon (Regional Botany class) ${ }^{\text {G }}$ $\qquad$ | 4 |
| Human Relations requirement ${ }^{R}$ | 3 |
| Total Credits | 15 |

## Second Year

WATR 210 Water Conservation: Industrial, Commercial 1,D,G 4
WATR 208 Water Conservation: Agricultural 1,D,G
WATR 261 Regional Water Policy 1,D,G
WATR 280 Co-op Ed: Water Conservation 4,D $\qquad$
Restricted electives $5,7, \mathrm{D}, \mathrm{G}$

|  | ATR 215 Integrated Water Resources Management 1,D,G | Winter |
| :---: | :---: | :---: |
| GIS 245 Maps and Spatial Information *,D,G .................... |  |  |
| SUST 202 Fostering Sustainable Behavior 1,D,G................. |  |  |
| WATR 280 Co-op Ed: Water Conservation ${ }^{4, D}$ |  |  |
| WATR 206 Co-op Ed Water Conservation Seminar............ |  |  |
| Arts/Letters requirement ${ }^{\text {5,6,R}}$......................................... |  |  |
|  | Total Credits | 14 |
|  |  | Spring |
| WATR 220 Water Conservation Program Development 1,D,G |  |  |
| WATR 221 Water Mechanical Systems 1,D,G...................... |  |  |
| WATR 280 Co-op Ed: Water Conservation4, D. |  |  |
| Restricted Elective 5,7,D,G |  |  |
| AWWA Certification Preparation,(optional elective) ${ }^{8}$......... |  |  |
|  | Total Credits | 14 |
| 1 Instructor permission required |  |  |
| 2 Must be completed before spring term of the first $y$ |  |  |
| 3 Contains computation instruction to meet industry requirements |  |  |
| 4 May also be taken during summer |  |  |
| 5 Can be taken any term |  |  |
| 6 See catalog for AAS requirements |  |  |
| 7 Restricted Electives are arranged with the program advisor |  |  |
|  | Optional 2 credit course. |  |

## Web Designer

## Offered by the Arts Division

## Suggested Course of Study

## Divisional Recognition Award

This suggested course of study 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. A suggested course of study is not the same as a state-approved vocational program in which a student earns a degree or certificate with a vocational major issued by the Lane Board of Education, nor is it an Associate of Arts degree. The guide below includes recommended art, multimedia, and computer technology courses, as well as recommended general education courses.

Transfer institutions require additional coursework for a degree, and may change requirements from year-to-year. Any student interested in transfer must accept responsibility to work very closely with a Lane academic advisor, and also to be aware of changes in prerequisites for programs at potential transfer institutions.

Courses numbered below 100 generally do not transfer, and career technical courses may only have limited transferability to four-year institutions. See a Lane arts counselor or advisor for assistance in course selection and transfer policies.

[^41][^42]Learning Outcomes Students completing this suggested course of study 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 area: 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 Counselor Timothy Blood, Bldg. 1, Rm. 110
Program Coordinator Rick Simms, Bldg. 17, Rm. 107

| First Year | Fall |
| :---: | :---: |
| CIS 125H Software Tools 1: XHTML D,G. | 3 |
| ART 115 Basic Design Fundamentals D,G. | 3 |
| (New Course ${ }^{1}$ ) Web 2.0 CIT Social Networks, Blogs D,G . | 4 |
| MUL 212 Digital Imaging D,G | 3 |
| WR 121 English Composition: Exploration and *,B,G,W |  |
| Introduction to Argument | 4 |

Winter
CS 133JS Beginning Programming: JavaScript $D$, $\qquad$
Winter
ART 245 Drawing for Media G $\qquad$
$\qquad$ 3

ART 289 Web Production Tools D,G ...................................... 3
MTH 060 Beginning Algebra or higher math *,G,M . $\qquad$
Total Credits
14

|  | Spring |
| :---: | :---: |
| CS 295 Web Development 1 *, D,G | 4 |
| (New Course ${ }^{1}$ ) Multimedia for the Web................... | 4 |
| ART 290 Design Concepts for the Web*,D,G ................. | 4 |
| ART 151A Media Graphics *,D,G ...................................... | 3 |
| CG 203 Human Relations at Work G,H .............................. | 3 |
| Total Credits | 18 |

## Suggested Electives

Contact the Art and Applied Design Department for additional choices.

## Computer Science

CS 120 Concepts of Computing
CS 125 G SWTools 1: Game Development
CS 133G Beginning C++ Programming for Games
CS 133JS Beginning Programming: JavaScript
CS 295 Web Development 1
Design
ART 116 Basic Design: Color
ART 119 Typography
ART 216 Digital Design Tools
ART 225 Digital Illustration
ART 231 Drawing: Intermediate
ART 234 Drawing: Figure
ART 288 Introduction to Web Design
ART 290 Design Concepts for the Web

## Media

ART 210 The Photographic Vision
ART 262 Photography 2
FA 221 Computer Animation
FA 222 Computer Animation 2
FA 254 Lighting: Video
J 134 Photojournalism
J 234 Photojournalism 2
MDP 248 Multimedia Production 3
MUL 214 Digital Photography
MUS 119 Music Technology MIDI/Audio 2
MUS 298 IS: Music Technology
*Prerequisite required
1 See Art department or advisors for new course information
A Arts/Letters general education course
B Must be passed with grade of "B-" or better to use as a prerequisite
G Must be taken for a grade, not P/NP
H Human Relations/Social Science general education course
M Mathematics general education course
P PE/Health
R Use AAS degree lists
S Science/Math/Computer Science general education course
W Written Communications / English Composition course

## Women's Studies

## Offered by Multiple Departments

## Suggested Course of Study

Does our understanding of the world change if we explicitly place women's experience and perspective at the center and look outward? Women's Studies answers this question with a resounding, "Yes!" It is an interdisciplinary field that explores how gender relations structure our lives. Through feminist scholarship and a focus on women, Women's Studies challenges and transforms existing thought and practices across academic boundaries. Women's Studies courses at Lane address the manner in which gender-entangled with issues of race and class-remains a critical lens of analysis in the artistic, literary, religious, political, economic, and interpersonal aspects of society.

There are hundreds of women's studies programs in colleges and universities across the country offering undergraduate minors and majors as well as graduate degrees and graduate certificates including a few programs that offer Ph.D.'s. Because Women's Studies at Lane is an interdisciplinary program, students who take women's studies courses are prepared to enter a variety of fields and address the accompanying gender issues that they will invariably face. Any career objective can benefit from courses taken in women's studies as the field inherently enhances critical thinking skills through crossdisciplinary analyses.

This is a suggested course of study for students interested in women's studies and wishing to complete an AAOT degree. However, those not choosing to pursue a degree progression may find this a useful listing as well. The current Women's Studies offerings at Lane fulfill all 12 credits of requirements in the Arts/Letters and 12 of 15 credits in the Social Science Category of the AAOT degree. A suggested course of study is not the same as a state-approved vocational program in which a student earns a degree or certificate with a vocational major issued by the Lane Board of Education nor is it an associate of arts degree. For those interested in going on to obtain a women's studies degree, minor or certificate, the women's studies courses at Lane are transferable. For example, the Women's and Gender Studies program at the University of Oregon allows up to eight credits to transfer for a major or minor in women's studies. See Patsy Raney, Women's Studies Instructor, (541) 463-5877 or email raneyp@lanecc.edu for further information.

| First Year | Fall |
| :---: | :---: |
| WS 101 Introduction to Women's Studies . | 4 |
| ENG 222 Literature and Gender or |  |
| ENG 260 Introduction to Women Writers | 4 |
| General Education requirements and Electives |  |
|  | Winter |
| HST 266 U.S. Women's History (elective) | 4 |
| SP 220Communication, Gender, and Culture | 4 |
| General Education requirements |  |
|  | Spring |
| SOC 108A Selected Topics in Women's Studies, Women's Bodies Women's Selves (elective) ... | 3 |
| FA 264 Women Make Movies | 4 |
| General Education requirements and Electives |  |
| Second Year | Fall |
| ENG 222 Literature and Gender or ENG 260 Intro to Women Writers . | 4 |
| General Education requirements and Electives |  |
|  | Winter |
| SOC 207 Women and Work.. | 3 |
| General Education requirements and Electives |  |
|  | Spring |
| ES 250/ECON 250 Class, Race, and Gender in the |  |
| U.S. Economy ................................. | 4 |
| SOC 218 Sociology of Gender (elective) | 3 |
| General Education requirements |  |


 4

4 4
SP 220Communication, Gender, and Culture

SOC 108A Selected Topics in Women's Studies,
Women's Bodies Women's Selves (elective) .................... 3
FA 264 Women Make Movies ............................................ 4
General Education requirements and Electives

ENG 222 Literature and Gender
or ENG 260 Intro to Women Writers 4
General Education requirements and Electives

SOC 207 Women and Work................................................. 3
General Education requirements and Electives

ES 250/ECON 250 Class, Race, and Gender in the
SOC 218 Sociology of Gender......................................
4
General Education requirements

## Standard footnotes:

* Prerequisite required

A Meets Arts/Letters requirement
B Must be passed with grade of " $B$ " or better to use as a prerequisite
D Degree or certificate requirement; must be passed with grade of "C-" or better
G Must be taken for a grade, not P/NP; major requirement

## Accounting

Also see Computers: Software Applications
For information, contact the Business Department, Bldg. 2/Rm. 141, (541) 463-5221.
BA 211 Financial Accounting 4 credits
Prerequisite: BA 101 or instructor consent. Students will gain an understanding of the basic terms, the accounting model, and content of financial statements and then focus on understanding and interpreting the information they contain. Students are strongly encouraged to take BT 165 Intro to the Accounting Cycle before this class. Because of the overlap between BA 211 and BA 215 only one of these courses will be counted toward a degree or certificate. May be offered through Distance Learning.
BA 213 Managerial Accounting. $\qquad$ 4 credits
Prerequisite: BA 211 and MTH 060 or higher, or instructor consent. 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 through Distance Learning.
BA 280AC Co-op Ed: Accounting. $\qquad$ .3-12 credits An opportunity to apply theory learned in the classroom to practical work experience in the accounting field. In this course a student will develop skills, explore career options and network with professionals and employers while earning credit toward a degree.
BT 165 Introduction to the Accounting Cycle $\qquad$ 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 through Distance Learning.
BT 170 Payroll Records \& Accounting .4 credits
Prerequisite: BT 175 or instructor consent, and knowledge of basic accounting and MS Excel. 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 through Distance Learning.

BT 171 Payroll Laws and Regulations. $\qquad$ .4 credits
This is an advanced course on complex payroll functions and regulations. Issues such as how the payroll function impacts the accounting, benefits, and human resources department are discussed, as well as more complicated legal issues like benefits taxation, third-party sick pay reporting, and involuntary deductions. Using case studies, students will develop a best practices plan based on examining organizational structures and models, processes, compliance issues, internal controls, methods of service delivery, corporate culture and staffing, and technology. Students will learn how to keep abreast of changes in federal and state payroll legislation and complete year-end payroll tax functions. May be offered through Distance Learning.
BT 172 Tax Concepts and Preparation. $\qquad$ .4 credits
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 through Distance Learning.

BT 175 Survey of Accounting Software 4 credits
Prerequisite: BT 165 or instructor consent. Introduction to various accounting software packages that are commonly used by businesses. Students will become acquainted with the similarities between packages and the features that can be found in different software products. The student will complete automated practice sets on each of the software packages. May be offered through Distance Learning.
BT 263 Applied Financial Accounting.
. 5 credits Prerequisite: MTH 065 or higher, BT 165, BT 170, BT 175, BT 217, BT 250, \& BA 211, or instructor consent. Provides experience applying financial accounting principles and understanding basic business systems, with a focus on improving problem-solving skills needed for accounting work. Students prepare actual documents,
accounting records, and federal and state payroll tax reports, as well as professional quality working papers to document their analysis of the accounting records. The course requires integration of skills needed in an accounting office - knowledge of GAAP, computer software applications for business, communication skills, and teamwork.

BT 295 Professional Bookkeeping Course $\qquad$ . 3 credits
This course is designed to prepare students for the American Institute of Professional Bookkeeper's (AIPB) certification. The course consists of five areas of focus. The areas of focus and examination include the correcting of accounting errors, adjusting entries, payroll, depreciation and inventory. Students are expected to have experience and knowledge of these accounting areas and can use the course to refresh and supplement existing knowledge in preparation for the exam. Exams are administered at the local Sylvan Learning Center. The course will include some lecture, review of problems, and test taking strategies. Homework will supplement the weekly meeting schedule. May be offered through Distance Learning.

## Acting - See Theatre Arts <br> Administrative Support

For information, contact the Business Department, Bldg. 2/Rm. 141, (541) 463-5221.
BA 280AA Co-op Ed: Administrative Assistant.................3-12 credits
Applies theory learned in the classroom to practical work experience in the administrative support field. In this course a student will develop skills, explore career options and network with professionals and employers while earning credit toward a degree.
BT 020 10-Key Calculator. $\qquad$ .. 1 credit
This course provides students the opportunity for intensive practice on the basic operations of the electronic calculator and solving basic business application problems.

BT 144 Administrative Procedures $\qquad$ .. 4 credits Prerequisite: BT 120, BT 146, and WR 121. Recommend the ability to accurately type by touch at least 35 words per minute. This course introduces students to a wide variety of office procedures and skills needed to be efficient and effective in the changing office environment. Students will draw upon related learning in previous courses as they participate in team and individual office skills projects. New skills and knowledge will be added in professional advancement through preparation of resumes, interviewing, and the job application process, and in general administrative procedures required to create an efficient office environment. Students will practice with formatting and arranging of informal reports, correspondence, and other business documentation and continue the development of keyboarding skill. May be offered through Distance Learning.
BT 180 Business Proofreading and Editing. $\qquad$ .4 credits Review of writing and language skills necessary to succeed in a business career. Practice writing and editing business appropriate paragraphs and e-mail. As part of a team and as an individual, the learner will analyze and apply software and reference tools to proofread, edit, and format mailable business documents.
BT 243 Document Formatting .. 4 credits Prerequisite: BT 114 or BT 117, BT 144, and BT 220, or instructor consent. Recommend the ability to accurately type by touch at least 45 words per minute or BT 016 (may be taken the same term), and familiarity with MS PowerPoint or BT 118. Professional standards for document processing are emphasized. Prepare a variety of business documents such as letters, memos, reports, tables, and electronic forms as well as agendas, meeting minutes, itineraries, news releases, brochures, slide shows, and newsletters. The course will include the integration of spreadsheet, database, and presentation software, and application of advanced word processing skills.

## Course Fees

Many courses may have additional fees. Please refer to the web class schedule credit listings and registration information for updated fee information and fee amounts.

BT 245 Office Management
3 credits
Prerequisite: Recommended for second year students or individuals with practical office experience. Application of principles and practices of office management aimed at increasing efficiency and productivity in the operation of a business. Includes examining management in transition, managing human resources in the office, and maintaining office systems and environments. May be offered through Distance Learning.
BT 248 Integrated Office Systems 4 credits
Prerequisite: BT 144, BT 220, BT 242 or BT 243, and BT 245. A capstone course for the Administrative Assistant degree. In a simulated business setting, students analyze data and produce business documentation using computer technology, including local area networks, electronic communications, and peripheral devices. Working in teams, students solve problems, make decisions, and apply software integration techniques to complete business projects. Projects incorporate object linking and embedding (OLE) and import/export functions of commonly-used office software as well as analysis and examination of office information and decision support systems.

## Agriculture Equipment/Mechanics - See Diesel and Heavy Equipment

## Air Conditioning - See Automotive, Diesel

## Anatomy/Physiology/Microbiology

For information, contact Science, Bldg. 16/Rm. 156, (541) 463-5446.

## BI 231 Human Anatomy and Physiology 1.

$\qquad$ .4 credits Prerequisite: Grade of ' $\mathrm{C}-$ ' or better in BI 112 and $\mathrm{CH} 112 . \mathrm{BI} 231$ is the first course in a sequence and provides a foundation for the subsequent courses. The BI 231, 232 and 233 courses provide basic information needed by pre-health professionals and are both required and accepted by many of Lane's Health Careers programs. These credits are generally transferable to other academic institutions. Each class includes a study of anatomical models, histological slides, selected dissections and appropriate multimedia technologies. This first course includes an introduction to human body organization, tissues and the integumentary, skeletal, articular and muscular body systems. The fundamentals of the nervous system and a study of the autonomic nervous system are also included. May be offered through Distance Learning.
BI 232 Human Anatomy and Physiology 2 $\qquad$ .4 credits
Prerequisite: Grade of 'C-' or better in Bl 231 The second course in the sequence includes anatomy and physiology of central and peripheral nervous systems, special senses, hematology, cardiovascular, lymphatic and immune systems. Common laboratory/clinical tests associated with these topics are presented. See sequence description under BI 231.
BI 233 Human Anatomy and Physiology 3 $\qquad$ .4 credits Prerequisite: Grade of 'C-' or better in BI 232 The third course in the sequence includes anatomy and physiology of the respiratory, digestive, urinary, endocrine, and reproductive systems. Also included are concepts of genetics, inheritance patterns and disorders. Common laboratory/clinical tests associated with the topics above are presented. See sequence description under BI 231.
BI 234 Introductory Microbiology.. .4 credits
Prerequisite: Grade of 'C-' or better in BI 233 or instructor consent A medically oriented survey of bacteria, viruses and other microorganisms, body defenses, immunology, sterilization and disinfection, and a discussion of representative infectious diseases. Laboratory manipulations and observations of microbes enhance student learning.
BI 298 Independent Study 1-3 credits
A variable credit course based on independent study contracted between an instructor and a student.

## Anthropology

For information, contact Social Science, Center Bldg./Rm. 403, (541) 463-5427.

## ANTH 101 Physical Anthropology.

$\qquad$ .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 through Distance Learning.

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 through Distance Learning.
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 Distance Learning.

ANTH 199 Special Studies: $\qquad$ .3 credits See department for topics.
ANTH 227 Prehistory of Mexico .3 credits
First term of a three-term sequence of Anthropology courses which deal with the culture of Americans of Mexican descent. This term, the focus is on the archaeology and cultural anthropology of Mesoamerica. Olmec, Zapotec, Toltec, Mayan, and Aztec cultures are surveyed. This course draws upon a number of different resources: readings, videos, student presentations, and artwork, to obtain as accurate a knowledge and understanding of these cultures as is presently possible.
ANTH 228 Cultures of Mexico. $\qquad$ .3 credits
Second term of three-term sequence of Anthropology courses which deal with culture of Americans of Mexican descent. This term, the focus is on indigenous peoples and cultures of contemporary Mexico. Special emphasis given to contemporary Mayan, Nahuatl, and Zapotec cultures as well as impact of European civilization on these cultures. Course design as described for ANTH227.
ANTH 229 Chicano Culture. .3 credits
This is the third term of a three-term sequence of Anthropology courses which deal with the culture of Americans of Mexican descent. In this term, the focus of the course is on the social and cultural characteristics that define Chicanos as a culturally unique group within American society. Course design as described for ANTH227.
ANTH 231 American Indian Studies $\qquad$ 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. $\qquad$ .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 $\qquad$ .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
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 www.boli.state.or.us and www.lanecc.edu/apprenticeship or call (541) 463-5843.

APR 101 Apprenticeship 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 apprenticeship programs. Students will become familiar with licensing and certification in a chosen trade. General topics include: employment opportunities and an introduction to construction and maintenance skills used in various crafts. Basic concepts in safety, trade vocabulary, trade math, hand and power tools, blueprint reading, and basic rigging are examined in this course.

APR 101A Apprenticeship Trade Skills Fundamentals 4 credits Designed for Oregon state-recognized apprentices employed in a trade or industry-related occupation. 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 apprenticeship programs. Students will become familiar with licensing and certification in a chosen trade. General topics include: employment opportunities and an introduction to construction and maintenance skills used in various crafts. Basic concepts in safety, trade vocabulary, trade math, hand and power tools, blueprint reading, and basic rigging are examined in this course.
APR 105 Residential Wiring $\qquad$ .4 credits
This course is designed to familiarize the student with work tasks in the electrical construction industry. In this introductory course, the student will learn basic electrical concepts and build basic circuits using physical components of residential electrical systems. The student will study and be introduced to electrical trade tools, equipment and materials.

APR 130 Electrical Principles 5 credits
Designed for Oregon state-recognized apprentices employed in a trade or industry-related occupation. This course is the first term of the first year of general journeyman inside wire electrician program. Course content will include safety/electrical, electrical theory, Ohm's law, residential wiring, and introduction to the National Electrical Code.

APR 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 $\qquad$ .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. $\qquad$
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

$\qquad$ .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. $\qquad$ .. 4 credits
Designed for Oregon state-recognized apprentices employed in a trade or industry-related occupation. This course explores construction materials and methods used in the installation of limited electrical systems along with the NEC codes that regulate installation. Students will learn a knowledge base consisting of the basic theory, vocabulary and safety practices common to limited electrical installations.
APR 141 Limited Voltage Electrical Circuits $\qquad$ .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 electric field. Power quality, trade repairs and installations and blueprint reading will be reviewed along with the NEC codes that regulate the trade. Students learn a knowledge base consisting of the basic theory, vocabulary and safety practices common to limited energy installations
APR 142 Testing Equipment and Specialized Applications ... 4 credits Designed for Oregon state-recognized apprentices employed in a trade or industry-related occupation. This course explores the basic theory and safety practices employed in equipment hook up, testing, computer applications and specialized test equipment along with the NEC codes that regulate their use and installation. Students will gain a knowledge base consisting of the basic theory, vocabulary and safety practices common to limited electrical hook up, testing, computer applications, and specialized test equipment.

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 a base knowledge of the basic theory, vocabulary and safety practices common to communication and control systems.
APR 144 System Planning and Maintenance. $\qquad$ .. 4 credits Designed for Oregon state-recognized apprentices employed in a trade or industry-related occupation. This course explores, wireless communications, as well as site survey and project planning. An emphasis is placed on the operations and principles involved in troubleshooting and the skills necessary to perform as a successful crew leader. Students will learn basic theory, vocabulary and safety practices common to maintenance and repair, wireless communications and project planning.
APR 199 Special Studies:.......................................................... 2 credits See department for topics.
APR 199A Special Studies: .4 credits
See department for topics.

## Course Fees

Many courses may have additional fees. Please refer to the web class schedule credit listings and registration information for updated fee information and fee amounts.

APR 220 Electrical Apprenticeship Code and Exam Prep...2-3 credits Designed for Oregon state-recognized apprentices employed in a trade or industry-related occupation. This course is designed to instruct students in techniques for interpreting and understanding the National Electrical Code (NEC) . Students will participate in practice exams to illustrate the development and layout of the NEC. APR 220 is presented in 2 or 3 credit blocks preparing students for the electrical licensing examination administered by the State of Oregon Building Codes Division.
APR 225 Electrical Motor Controls .5 credits
Designed for Oregon state-recognized apprentices employed in a trade or industry-related occupation. This is the first term of the third year of the 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 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 multimeters and troubleshooting concepts.

APR 228 Apprenticeship Blueprint Reading .3 credits
Designed for Oregon state-recognized apprentices employed in a trade or industry-related occupation. The student will learn to interpret drawings used in trades such as electrical, HVAC/R, millwright, sheet metal, and plumbing. This class emphasizes the fundamentals of blueprint reading and includes electrical symbology, views, symbols, and notations for blueprints. Students will learn an overview of various topics including: civil, architectural, electrical, mechanical, HVAC/R, sheet metal and plumbing as they apply to practical drawings.
APR 240 Alarm Systems 4 credits
Designed for Oregon state-recognized apprentices employed in a trade or industry-related occupation. This course explores the theory and safety practices employed in fire alarm and intrusion detection systems along with the NEC codes that regulate their use and installation. Students will learn the basic theory, vocabulary, and safety practices common to alarm systems.
APR 241 Audio and Signaling Systems .4 credits
Designed for Oregon state-recognized apprentices employed in a trade or industry-related occupation. This course explores the theory and safety practices employed in audio, nurse call, CCTV and Broadband systems along with the NEC codes that regulate their use and installation. Students will learn basic theory, vocabulary, and safety practices common to audio and nurse call systems.
APR 242 Limited Voltage System Integration $\qquad$ .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 basic theory, vocabulary, and safety practices common to control and media management systems and systems integration.

## Architecture - See Drafting

## Art History

For information, contact Art and Applied Design, Bldg. 11/Rm. 101, (541) 463-5409.
ART 111 Introduction to Visual Arts. $\qquad$ .3 credits Introductory course in understanding the visual arts through exploration of fundamentals, techniques, media and process. Student projects emphasize visual perception, appreciation, and critical assessment. Presents visual art from different cultures and eras, insight of practicing artists. Recommended art majors take concurrently with ART115, ART131.

ART 200 Graphic Design History 3 credits A team-taught interdisciplinary approach to graphic design history and its relationship to traditional art. Students will 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, required for graphic design majors.
ART 202 Survey of Western Art .3 credits
ART 202 - Survey of Western Art This course introduces and examines works of art that have come to define the Western visual tradition from ancient 5th century B.C. to the 20th century. May be offered through Distance Learning.
ART 203 Survey of American Indian Art and Architecture: North and Central America .4 credits
Historical survey of North and Central American Indian Art and Architecture. Areas covered include Mayan, Mississippi Valley, American Southwest, Northwest, Northern Plains, California and Arctic cultures. Emphasis on how art and architecture reflect the ideology of the cultures and peoples who created it, including symbolism, aesthetics, spirituality, materials, and in what form it exists today.
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 early Christian through the High Renaissance in the Western world. 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 century to the late 19th century, with 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, with emphasis on critical evaluation. Explores connections to present art and culture.

ART 207 History of Asian Art: India .3 credits Historical survey of Indian art from the Indus Valley civilization (3rd millennium B.C.) through the Mughal period (18th century.) Examines the influence of Buddhism, Hinduism, and Islam on architecture, sculpture and painting.

ART 208 History of Asian Art: China. .3 credits
Historical survey of major developments in Chinese art from Neolithic through the 18th century. Emphasis is on stylistic developments and changes, as well as themes and their interrelationships. Examines the relationship of art and philosophy, religion and foreign contacts.
ART 209 History of Asian Art: Japan $\qquad$ ... 3 credits Historical survey of major monuments and movements of Japanese art from prehistoric times through the early 19th century. The course examines the relationship of religion, social institutions, and foreign contacts to the arts.
ART 211 Survey of Visual Arts: Early Modern Art $\qquad$ 3 credits Historical survey of the development of early "modern" art from the mid-19th century in Europe 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 Survey of Visual Arts: Modern Art $\qquad$ 3 credits Historical survey of 20th-century art. Examines key artist, styles and movements within a social, philosophical and political context. Course focus 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 214 American Art .3 credits Survey of major developments in American painting from the 17th century through the 20th century. Major art movements are related to historical and cultural developments. Course presents insight into what makes American art unique.

ART 217 Islamic Art .3 credits
Surveys the major developments in Islamic art from the 7th through the 18th centuries. Topics include architecture, painting, calligraphy, crafts, and the characteristics that make them uniquely Islamic. Explores historical, cultural and religious issues that have shaped Islamic visual traditions.
ART 298 Independent Study. $\qquad$ 1-3 credits
An independent study experience designed to allow the student with prior qualifying college course experience in his/her field of interest to initiate individual projects, with instructor approval. Enables the student to explore further some specific interest, method, project, or technique. Upon completion of the course, the student should demonstrate an increased capability in the chosen field, method or technique. May be available in the following areas: Art History, Design, Drawing, Ceramics, Graphic Design, Painting, Fibers, Printmaking, and Sculpture. Repeatable.

## Art, Studio

For information, contact Art and Applied Design, Bldg. 11/Rm. 101, (541) 463-5409.
ART 115 Basic Design: Fundamentals $\qquad$ 3 credits
Beginning course in two-dimensional design for art and non-art majors. Emphasis on fundamental visual elements, concepts and theory basic to drawing, painting, graphic design and other media. Strongly recommended for first year art majors, taken prior to ART116 and concurrently with ART111 and ART131.
ART 116 Basic Design: Color $\qquad$ 3 credits A beginning course in the study of color for art and non-art majors. Emphasis on visual concepts, theory and application of color in two-dimensional and three-dimensional artwork such as: painting, graphic design, sculpture, fiber and printmaking. Strongly recommended students first take ART 115.
ART 117 Basic Design: 3-Dimensional. 3 credits
Beginning course in principles of three-dimensional design for art and non-art majors. Studio projects explore basic elements such as mass, space, delineation of space, planes in space and physical texture. Fundamental course for students interested in ceramics, sculpture, architecture and other 3-dimensional design fields.
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 threedimensional objects on two-dimensional surfaces. This course or equivalent ability level is a prerequisite for many 200-level studio courses. Recommend art majors take concurrently with ART 115. Repeatable.

ART 199 Special Studies: .1-3 credits See department for topics.
ART 199A Special Studies: ........................................................ 3 credits See department for topic.
ART 199B Special Studies: ........................................................ 3 credits
See department for topics.
ART 199DP Special Studies:
See department for topics.
ART 231 Drawing: Intermediate $\qquad$ 3 credits
Art 131 or instructor permission by portfolio. Develops basic drawing skills of observation, selection, representation, perception, and hand-eye-mind coordination. Emphasis on composition and understanding visual form. Examines visual concepts and theory within historical and cultural contexts. This course is recommended before taking any 200 level painting or printmaking course. Repeatable.
ART 232 Drawing: Perspective. $\qquad$ 3 credits
Prerequisite: ART 131. Explores principles of perspective drawing and visual problem solving using various media and subjects. Course includes 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 would be helpful training for prospective students in Graphic Design, Multimedia and Architecture. Repeatable.

ART 234 Drawing: Figure
Prerequisite: ART 131. Explores complex form relationships in value and space through drawing the human figure. Develops understanding of basic anatomical structure, proportion, and foreshortening. Students develop skills in compositional techniques and individual expression. Examines the portrayal of the figure through historical context. Repeatable.
ART 245 Drawing for Media .4 credits
From concept to finished product, the ability to develop and communicate ideas visually is an essential skill for media professionals. This course teaches drawing techniques and practices valuable to a career in media. Students will work with materials and learn methods used for concept development, design, and production. The practice of drawing will be integrated into the visualization process through the production of concept sketches, thumbnails, and storyboards.
ART 247 Site Specific Sculpture $\qquad$ .3 credits
An introduction to the historic and contemporary trend toward sitespecific sculpture making. This includes low impact green sculpture, temporary work, large-scale public work, urban planning, and installation artwork. This course will take the students through the entire process of creating a site-specific artwork from formulating a concept, planning, budgeting and timeline, construction logistics, installation and presentation. Repeatable.

## ART 248 Stone Sculpture

A sculpture course designed for the beginning student who desires to learn the art of stone carving. Historical and contemporary stone sculpture will be studied as a basis for understanding the medium. Students will 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 will be used to further an understanding of technical and formal considerations in the work. Repeatable.
ART 250 Ceramics: Hand Building. $\qquad$ .3 credits Introduction to the materials, methods, and techniques of pottery design and construction. Emphasis on basic hand building skills, simple glaze application and an understanding of the fundamental pottery processes. Development of basic hand-eye-mind coordination for good form making. Introductory exploration of historical, cultural, modern trends and ideology. Students should plan on at least one term of this course and/or Ceramics: Wheel Throwing ART 251 before advancing to Ceramics: Intermediate ART 253. Repeatable.

ART 251 Ceramics: Wheel Throwing $\qquad$ .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. Development of basic hand-eye-mind coordination for good form making. Introductory exploration of historical, cultural, modern trends and ideology. Student should plan on at least one term of this course and/or Ceramics: Hand Building ART 250 before advancing to Ceramics: Intermediate ART 253. Repeatable.

## ART 253 Ceramics: Intermediate

$\qquad$ .3 credits
Prerequisite: ART 250 and ART 251. Enhancement of ceramic wheel throwing and handbuilding skills. Introduction to complex thrown and handbuilt forms with attention to good visual resolution. Introduction to the understanding of glaze formulation, testing and kiln firing. Enhancement of pottery decoration techniques. Indepth exploration of historical, cultural, and modern trends and ideology in ceramics. Repeatable.
ART 266 Off-Loom Fibers 3 credits Traditional and contemporary applications in fiber arts. Provides the opportunity to study non-woven textile processes. The content emphasizes a different focus from term to term, including natural and synthetic dyeing; two and three dimensional fiber construction; feltmaking, spinning, papermaking; fabric printing; resist techniques of surface design, chemical and mechanical techniques to manipulate cloth.

ART 270 Printmaking, Intaglio . 3 credits
A beginning and intermediate level course in the medium of Intaglio Printmaking (etching, aquatint, drypoint and engraving). Students will explore the techniques involved in intaglio printmaking and will design and create original edition prints. A variety of metal etching techniques will be introduced, as well as the aesthetics and history of printmaking. Repeatable
ART 271 Printmaking, Relief. .. 3 credits
A beginning and intermediate level course in the medium of relief printmaking (woodcut or linoleum cut). Students will explore techniques involved in relief printmaking and will design and create original edition prints. Single block, multiple block and reduction block techniques will be introduced, as well as the aesthetics and history of printmaking. Repeatable.
ART 272 Printmaking,Monotype, Collograph $\qquad$ 3 credits A beginning and intermediate level course in the mediums of monotype and collage plate printmaking. Students will explore techniques involved in creating original prints. A variety of monotype and collage plate techniques will be introduced as well as the aesthetics and history of printmaking. Repeatable.
ART 273 Intermediate Intaglio Print. $\qquad$ . 3 credits Prerequisite: ART 270 Provides instruction in multiple plate and other color intaglio techniques. This course explores traditional as well as contemporary issues in intaglio printmaking. It may be repeated for credit. This is a lecture/lab class, and students will be expected to produce work reflecting the course content. The objective of this course is to give students wanting to continue with Intaglio printmaking a structured, in depth form of study. Repeatable.

## ART 274 Intermediate Relief Printmaking.

$\qquad$ .3 credits Prerequisite: ART 271. Provides instruction in intermediate level techniques as well as combining techniques. This course explores traditional as well as contemporary issues in relief printmaking. It may be repeated for credit. This is a lecture/lab class, and students will be expected to produce work reflecting the course content. The objective of this course is to give students wanting to continue with Relief printmaking a structured, in depth form of study. Repeatable.
ART 275 Silkscreen. . 3 credits
This course provides instruction in screen-printing. The curriculum focuses on traditional and experimental techniques using waterbased inks, emphasizing both skill development and personal image making. This course will explore established and contemporary issues in screen-printing. The objective of this course is to provide students with a strong foundation in this medium. Repeatable.
ART 276 Sculpture: Introduction $\qquad$ .3 credits A beginning course for students without prior training in sculpture. Explores fundamentals of sculptural processes and their aesthetic and theoretical considerations. Emphasizes development of hand-eye-mind coordination skills, understanding space and form, and the techniques of tool usage. Students complete a project in each basic process. Repeatable.
ART 277 Sculpture: Welding $\qquad$ 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; and the aesthetics of fabricated metal sculpture. Repeatable.
ART 278 Sculpture: Wood 3 credits
A beginning-level course designed to strengthen and further develop the student's initial capability in sculpture. Specific emphasis on exploring wood construction and carving techniques, and their application in making sculpture. Recommended prerequisite: ART 276 or ART 117. Repeatable.
ART 279 Figure Exploration. $\qquad$ .. 3 credits An intermediate course in the study of the human form and portraiture. Emphasis on theory and concepts of shape, form, value and composition in a choice of media. There will be opportunities for studies in bas-relief sculpture, printmaking, and painting. Repeatable.

ART 280A Co-op Ed: Art and Applied Design . $3-12$ credits This course offers career-related work experience in community businesses and organizations. The student may have the opportunity to integrate theory and practice gleaned in the classroom with practical experience in the professional world. In this course a student may develop skills, explore career options and network with professionals and employers while earning credit toward a degree. Please contact art cooperative education coordinator as soon as possible after registering.
ART 281 Painting: Introduction. .3 credits
Prerequisite: ART 131, ART 115, and ART 116. Introductory course for beginning students employing oil or acrylic media. Emphasis on basic technical skills of painting, physical properties and manipulation of materials, painting concepts and art historical context. Develops understanding of composition and color necessary for intermediate-level painting courses. Students complete several painting compositions. Repeatable.
ART 284 Painting: Intermediate .. 3 credits
Prerequisite: ART 281 and ART 131. Oil painting course for the student already familiar with the medium. Further expands the student's knowledge of composition and technique. A series of structured exercises are introduced to develop personal expression. Subject matter may emphasize figure or landscape; see 'notes' for course emphasis. Repeatable.
ART 291 Sculpture: Metal Casting .. 5 credits
Prerequisite: ART 276 or ART 117 and ART 277. Designed for students with prior sculpture training who desire to learn the method and theory of the lost-wax foundry casting process. Students will gain the experience of using wax as the direct sculptural medium, preparing the sculpture for casting, and the foundry processes of burnout, melting, and pouring. Repeatable.

## ART 293 Sculpture: Figure.

 . 3 creditsSculpture course providing intensive study of the human figure in three dimensions using live models. Emphasis will be on the study and theory of anatomy, proportion and gesture. Projects will be developed from modeled clay over wire armatures and may be completed in fired terra cotta. Repeatable.

## ART 294 Watercolor: Introduction.

$\qquad$ . 3 credits
Prerequisite: Recommend taking ART 131 prior to course. Beginning course for students without previous training in watercolor medium. Introduces basic technical skills of painting, the physical properties and manipulation of the materials, visual theory of composition and color knowledge. Students complete a number of painting assignments. Repeatable.
ART 295 Watercolor: Intermediate .3 credits
Intermediate level course in the technique and use of transparent watercolor. Students further develop technical skills, personal expression and understanding of visual theory. Subject matter may emphasize figure or landscapes; see 'notes' for course emphasis. Repeatable.
ART 298 Independent Study
y..... . $1-3$ credits
An independent study experience designed to allow the student with prior qualifying college course experience in his/her field of interest to initiate individual projects, with instructor approval. Enables the student to explore further some specific interest, method, project, or technique. Upon completion of the course, the student should demonstrate an increased capability in the chosen field, method or technique. May be available in the following areas: Art History, Design, Drawing, Ceramics, Graphic Design, Painting, Fibers, Printmaking, and Sculpture. Repeatable.
ART 299 Trends: $\qquad$ See department for topics.
ART 299A Trends: $\qquad$
ART 299S Trends: $\qquad$
See department for topic.

## Astronomy - See Physics

## Audio

For information, contact Art and Applied Design, Bldg. 11/Rm. 101, (541) 463-5409.
AUD 120 Audio Production. 4 credits
Prerequisite: CIS 140B. 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.
AUD 199 Special Studies: .3 credits See department for topics.

## Auto Collision and Refinishing

For information, contact Advanced Technology, Bldg. 12/Rm. 201, (541) 463-5380.
AB 132 Beginning Auto Paint. $\qquad$ 1-12 credits
Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Theories and principles used in the auto paint industry. Included: fundamentals of surface preparation, spray guns and their use, sanding materials, undercoats, basic application of color coats, and masking.
AB 133 Beginning Auto Collision. .1-12 credits Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Theories and principles used in the collision repair industry. Fundamentals of automobile construction; basic auto sheet metal work; minor auto body repair; body alignment; welding equipment and its uses; and basic panel replacement and adjustments.
AB 134 Paint and Collision $\qquad$ ..1-6 credits
Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Theories and principles used in the auto paint and collision industry. Technical information and shop projects to apply and understand auto collision and paint shop work and safety procedures; hand tools; power tools; compressed air supply equipment; restoring corrosion protection; auto collision and paint nomenclature; abbreviations used by technicians and estimators; and estimating auto body and refinishing costs. Major students should enroll in 6 credits per term for three terms. AB 134 consists of a total of 18 credits ( 330 hours).

AB 260 Intermediate Auto Painting $\qquad$ 1-15 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 $\qquad$ .1-15 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. $\qquad$ .1-15 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. 1-15 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. $\qquad$ .3-12 credits
This course provides students with auto body-related work experience in community businesses. 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.

## Automotive

For information, contact Advanced Technology, Bldg. 12/Rm. 201, (541) 463-5380.
AM 105 Fundamentals of Automotive Systems $\qquad$ 2-12 credits This course is designed to prepare students for entry into the Automotive Technology Program. Students will learn fundamental skills required for success in the automotive field including: Basic Electricity, Basic Hydraulics, Automotive Electrical Systems, Automotive Brakes, Engine Repair, Precision Measurement, Safety and Tools. Students will develop employability skills such as teamwork and communication. This course may be repeated up to 12 credits total.
AM 143 Brakes .1-8 credits
Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Braking systems found on passenger cars and light trucks. Design, function, diagnostic and repair procedures, including theory and laboratory experience in brake system fundamentals, brake safety, master cylinders, power-assist units, hydraulic lines and valves, disc brakes, drum brakes, antilock braking systems, parking brakes, and brake electrical and electronic components.

## AM 145 Engine Repair

 1-12 credits Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Engines found in passenger cars and light trucks. Design, function, diagnostic and repair procedures for cylinder heads, engine blocks and internal parts, lubrication and cooling systems, gaskets and seals, and measurement and machining procedures commonly performed in repair shops.AM 147 Suspension and Steering. 1-6 credits
Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Design, function, diagnosis, repair and replacement of steering and suspension components used in passenger cars and light trucks including wheel balancing, front-end alignment, and shock absorber service.

AM 149 Manual Drive Trains and Axles $\qquad$ .1-6 credits Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Manual transmissions and transaxles and other drive train components. Included are design, function, diagnosis, service and overhaul procedures for manual transmissions, differentials, clutches, drive shafts and axles. Also covered are four wheel drive and all wheel drive components.

AM 242 Automatic Transmissions/ Transaxles $\qquad$ 1-12 credits Prerequisite: AM 147 AND AM 149. Automatic transmissions and transaxles used in passenger cars and light trucks. Design, function, diagnosis, service and overhaul procedures, principles of hydraulics as applied to automatic transmissions, planetary gear theory and principles, torque converter design and function, and basic electronic controls.
AM 243 Electrical and Electronic Systems .1-12 credits
Prerequisite: Minimum reading score of 68 OR RD 0080 OR Prior College. Automotive electrical and electronic systems. Theories and principles used to operate, diagnose, test, and repair systems. Included: basic theories; electric components; wiring and circuit diagrams; automotive batteries; DC motors and the starting systems; charging systems; ignition systems; lighting circuits; conventional analog instrumentation, indicator lights, and wiring devices; electrical accessories; introduction to body computer systems; advance lighting circuits and electronic instrumentation; and chassis electronic control systems.
AM 244 Engine Performance. $\qquad$ ...1-12 credits Prerequisite: AM 145 And AM 243. Automotive engine systems. Theories and principles used to operate, diagnose, test, and repair systems. Included: engine design and operation; engine cooling and lubrication systems; intake and exhaust systems; introduction to engine tune-up; computers and input sensors; ignition systems; conventional and computer controlled carburetors; electronic fuel injection systems; vehicle emission control systems; scope and gas analysis; and turbo chargers and super chargers.

## Course Fees

Many courses may have additional fees. Please refer to the web class schedule credit listings and registration information for updated fee information and fee amounts.

AM 246 Heating and Air Conditioning 1-4 credits Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Automotive heating and air conditioning systems. Theories and principles used to operate, diagnose, test, and repair systems. Included: temperature and pressure fundamentals; the refrigeration system; system components; compressors and clutches; system servicing, testing, and diagnosing; case and duct systems; retrofit CFC-12 to HFC-134a; system controls; and engine cooling and comfort heating systems.
AM 280 Co-op Ed: Automotive .3-12 credits This course provides automotive-related work experience in community businesses and organizations. The student will have the opportunity to integrate theory and practice gained in the classroom with practical experience in the professional world. In this course a student may develop skills, explore career options and network with professionals and employers while earning credit toward a degree.

RTEC 100 Basic Career Technical Skills
.2-6 credits
This course explores the basic skills for entering technical careers such as mechanics, manufacturing, aviation, electronics, etc. The course includes; safety, math, tools, basic electricity, basic hydraulics, employability skills, rigging, blue prints, and communication. Students may not receive credit for both RTECH 100 and APPR 101.

## Aviation Maintenance

## Also see Flight

For information, contact Advanced Technology, Bldg. 12/Rm. 201, (541) 463-5380.
AV 192 General 101. $\qquad$ ..1-6 credits Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Basic physics, aircraft drawings, mechanic privileges and limitations, and materials and processes. Technical information and laboratory projects to apply and understand theories, principles, and concepts.

## AV 193 General 102

$\qquad$ .1-6 credits Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Maintenance publications, maintenance forms and records, ground operation and servicing, fluid lines and fittings, cleaning and corrosion control, and airframe and engine inspection. Technical information and laboratory projects to apply and understand theories, principles, and concepts.
AV 194 General 103 $\qquad$ 1-6 credits Prerequisite: RD 080 or minimum reading score of 68 or Prior College. Basic electricity. Technical information and laboratory projects to apply and understand theories, principles, and concepts.
AV 195 General 104 .1-6 credits
Prerequisite: AV 194. Aircraft and engine electrical systems and components. Technical information and laboratory projects to apply and understand theories, principles, and concepts.
AV 196 General 105 $\qquad$ .1-6 credits
Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior
College. Aircraft and engine fuel systems, aircraft and engine fire protection systems, aircraft and engine instrument systems, and weight and balance. Technical information and laboratory projects to apply and understand theories, principles, and concepts.
AV 279 Airframe 1-6 credits
Prerequisite: MTH 076 Airframe structures, systems, and components. Technical information and laboratory projects to apply and understand theories, principles, and concepts. AV 279 consists of a total of 24 credits, 576 lecture/lab hours. AV 279 is scheduled in 6 credit sections. Credits are issued on the basis of satisfactory completion of subtopics within each section.
AV 280 Co-op Ed: Aviation Maintenance $\qquad$ .3-12 credits
This course offers on-the-job field experience in aviation maintenance that integrates theory and practice while providing opportunities to develop skills, explore career options and network with professionals and employers. Work schedules and work sites vary. Students earn college credit, which may apply toward their degree.

AV 281 Powerplant 1-6 credits Prerequisite: MTH 076 Powerplant maintenance, systems, and components. Technical information and laboratory projects to apply and understand theories, principles, and concepts. AV 281 consists of 24 credits, 576 lecture/lab hours. AV 281 is scheduled in 6 credits sections. Credits are issued on the basis of satisfactory completion of subtopics within each section.
AV 282 Airframe Return to Service........................................1-6 credits Prerequisite: AV 192, AV 193, AV 194, AV 195, AV 196, MTH 076, And MTH 086 Airframe structures, systems, and components. Technical information and practical application of theories, principles, and concepts.
AV 283 Powerplant Return to Service. .1-6 credits Prerequisite: AV 192, AV 193, AV 194, AV 195, AV 196, MTH 076, And MTH 086 Powerplant systems and components. Technical information and practical application of theories, principles, and concepts.
AV 289 Helicopter Maintenance .1-3 credits
Technical information and hands-on experience with the following topics: rotary-wing principles of flight, main rotor systems and blades, main transmission, tail rotor system, component sheet and logbook, rotor wing systems, inspections, operational checks, and helicopter components. Students enrolled in Flight Technology with helicopter emphasis may substitute this course for Aircraft Structured Systems FT 115.

## Biology

For information, contact Science, Bldg. 16/Rm. 156, (541) 463-5446.
BI 101 General Biology $\qquad$ ..... 4 credits Fulfills the AAOT science requirement for non-science majors. General biology is taught either as a survey or through special emphasis classes. For each quarter, several emphasis classes are available Note: BI 101, BI 102, BI 103 course numbers have suffixes to indicate different special emphasis topics. The general concepts covered in ALL BI 101 classes include the topics of atoms and molecules, cellular processes, genetics, photosynthesis, respiration, cell division, and protein synthesis. Therefore, BI 101E, BI 101F, BI 101I, BI 101J, etc., are considered to be equivalent courses. Thus, only one of the BI 101 's and one of the BI 102 's and one of the BI 103's can be used to meet the science requirement, and any additional Biology course credits will be used as electives for a Lane degree.
BI 101E General Biology-Ocean Life Foundations. $\qquad$ .4 credits Students learn about the life processes of marine organisms at the cellular and organismal level. They discover how each organisms is adapted to living in estuaries, rocky intertidal areas, sandy beaches and the open ocean. Marine organisms will be used to demonstrate processes that involve photosynthesis, cell division, genetics, and cell structure. The nature of currents, tides, and plate tectonics and their influence on ocean life will be discussed, as will human impacts and efforts to sustain viable ocean ecosystems. Lecture material will be supplemented with discussion of current issues, DVD's, student research and weekend field trips.

BI 101F General Biology-Survey of Biology... $\qquad$ .4 credits
A survey course providing an overview of the molecular and cellular basis of life. Through lab, Internet explorations, computer activities, lecture, group projects, and discussions, students will study cell structure and function, including diffusion,
photosynthesis, respiration, cell division, and genetics. Students will also discuss current issues related to these topics, such as gene therapy, cloning, cancer, and global climate change. This course may be offered through Distance Learning.
BI 101I General Biology-Botanical Beginnings $\qquad$ .4 credits Plant characteristics and functions are studied to explore cellular and molecular processes. We begin by determining what characteristics distinguish plants from other organisms as we examine the structure of the plant body. Investigation of plant cell structures, chemistry, photosynthesis, respiration, cell division and genetics provide a basis to understand the foundational role plants play in ecosystems.

[^43]BI 101J General Biology-Unseen Life on Earth $\qquad$ 4 credits Introduces the student to the smallest organisms on the planet. Microbes may be small, yet they are crucial for the survival of all life forms, from large to tiny, from mountaintop to sea floor. Students will explore the diversity of bacteria, fungi, and viruses and their impact on the planet and on humans the cellular workings of microbes and the contributions of microbes to human health and food supplies. Students will perform lab activities at home. Available through Distance Learning.

BI 101K General Biology: Introduction to Genetics $\qquad$ 4 credits
The course introduces students to the rapidly evolving and increasingly relevant world of genetics. Cell division, structure, and metabolism will be demonstrated through explorations of common and rare human genetic diseases. Modern genetic technologies will be explained in the context of societal applications such as identity testing and biotechnology. Students will learn the different types of genetic tests as well as when, how, and on whom they are performed.
BI 102 General Biology
4 credits
Fulfills the AAOT science requirement for non-science majors. General biology is taught either as a survey or through special emphasis classes. For each quarter, several emphasis classes are available. Note: BI 101, BI 102, BI 103 course numbers have suffixes to indicate different special emphasis topics. The general concepts covered in ALL BI 102 classes include the topics of homeostasis (the organism in balance), and body systems. Therefore, BI 102B, BI 102C, BI 102D, BI 102E, etc., are considered to be equivalent courses. Thus, only one of the BI 101's and one of the BI 102's and one of the Bl 103 's can be used to meet the science requirement, and any additional course credits will be used as electives for a Lane degree.

BI 102B General Biology-Jungle Biology .4 credits
This course explores how plants, people and other organisms live together in tropical rainforest ecosystems. Students examine physiological systems of plants and animals and how they are adapted to tropical environments individually and symbiotically. Students explore indigenous people's use of tropical rainforests. They investigate the current status of rainforests and evaluate factors which do or do not support our use of these forests.

BI 102C General Biology-Marine Biology................................. 4 credits Students will be introduced to the fascinating creatures that live in the sea, their unique environment and incredible diversity. They will identify organisms from microscopic plankton, to sponges, seastars and other invertebreates, as well as bony fish and sharks. The classification, anatomy, physiology, homeostasis and unique ecological adaptations of marine organisms will be explored. The focus of the class will be on life along the Oregon coast. The role of humans in the sustainability of these habitats will also be examined. Class discussions, computer work, experiments in the wet lab and weekend field trips to tide-pool areas will be conducted.
BI 102D General Biology-Survey of Biology ............................ 4 credits An overview of whole organisms examining structure and function of tissues, organs, and organ systems. Through lab, internet explorations, computer activities, lecture, group projects and discussions, students will study many body systems, which may include digestive, circulatory, immune, respiratory, excretory, nervous, musculoskeletal, and reproductive. The structure and function of plants may also be included. The class will discuss a variety of current issues related to these topics, such as organ transplants, AIDS, drug addiction, vaccines, and stem cell research.
BI 102E General Biology-Animal Biology. $\qquad$ .4 credits
This course presents an overview, from an evolutionary perspective, of the vertebrate animals: fish, amphibians, reptiles, birds, and mammals. Emphasis is placed on structure and physiology, unique adaptations to different habitats, and natural history of the different animal groups. The course includes laboratory, lecture, discussion, computer, internet, and group activities. The class will also discuss a variety of current issues related to these topics, such as endangered species, habitat loss, effects of pollution, and captive breeding programs.
BI 102G General Biology: Genetics and Society $\qquad$ .4 credits The relationship between inheritance, genetic conditions and human body systems they affect. Current issues in genetics and their impact on ethics and values are integrated into the study of human genetic variations and disorders. This course may be offered through Distance Learning.

BI 102H General Biology-Forest Biology .4 credits
Forest Biology provides an introduction to the discipline of comparative biology. The emphasis is on developing a general understanding of forest organisms and their structural and physiological adaptations to one of the most important ecosystems on earth: the coniferous forest of the Pacific Northwest. Through lab and field investigations, computer activities, lecture, and discussions, students will study plant and animal body systems and their requirements for nutrition, growth and reproduction, function of the vascular system and responses to pathogens. Throughout the course students will explore connections between the biological interactions that take place in forests and human activity that affects forest organisms. Community service projects in forest biology may be integrated into course activities. All inclass field trips are required and there may be one out-of-class required trip.

BI 102l General Biology-Human Biology .4 credits
Explores the human body, including the following human organ systems: circulatory, respiratory, urinary, reproductive, nervous, muscular, skeletal, lymphatic, digestive, and endocrine. The course will be offered as a web-based instructional unit. Course content will be presented on a CD-ROM with multiple WWW linkages. May be offered through Distance Learning.
BI 102J General Biology: Ethnobotany. . 4 credits Explores the Native uses of plants by the original peoples of the Pacific Northwest, past and present, in class and through required field trips. Addresses world views and belief systems of Native people regarding plants, and how these views and beliefs were affected by non-Native explorers and settlers. Introduces the structure and function of plants and how those features allow plants to be useful to people. Examines structure and function of certain human organ systems and the ways in which plants do and do not affect us. The question will be addressed which is more sustainable, an indigenous or a modern way of interacting with the plant world and with each other.

BI 103 General Biology. 4 credits Fulfills the AAOT science requirement for non-science majors. General biology is taught either as a survey or through special emphasis classes. For each quarter, several emphasis classes are available. Note: BI 101, BI 102, BI 103 course numbers have suffixes to indicate different special emphasis topics. The general concepts covered in ALL BI 103 classes include the topics of ecology, evolution and the classification and natural history of organisms. Therefore, BI 103A, BI 103B, BI 103D, BI 103E, etc., are considered to be equivalent courses. Thus, only one of the BI 101's and one of the BI 102's and one of the BI 103's can be used to meet the science requirement, and any additional course credits will be used as electives for a Lane degree.
BI 103A General Biology-Birds of Oregon. 4 credits Students will explore the natural history and incredible diversity of birds in Oregon. They will learn how to identify many Oregon species as well as study bird behavior, habitat use, evolution, classification, adaptations, and ecological relationships. Field trips, laboratory exercises, lecture, discussion, Internet, group and computer activities will be utilized in the learning process.
Students will also discuss current issues related to these topics, such as endangered species, effects of humans on bird populations, and global climate change. A variety of field trips will include the Oregon coast, Willamette Valley, and other Oregon birding sites.

BI 103B General Biology-Field Biology .. 4 credits
Students will study the structure and function of different environments and habitats, along with the plants, animals and other organisms that live in them. Topics will include evolutionary and ecological relationships, life cycles, identification, plant-animal interactions, and natural history. Students will also discuss current issues related to these topics, such as global climate change, endangered species, effect of overpopulation and pollution, and conservation efforts. Field trips, laboratory exercises, lecture, discussion, Internet, group and computer activities will be utilized in the learning process. One section each summer may be taught in Costa Rica.

BI 103D General Biology: Sea Birds and Mammals .4 credits An introduction to the biology of marine birds, seals, sea lions, manatees, dolphins and whales. Students will learn how to identify and classify these organisms and study their unique anatomical and physiological adaptations as a framework for evolutionary processes and ecological interactions. The role of humans in the sustainability of these magnificent creatures will also be examined. Classroom discussions are supplemented with computer work, DVD's, examination of specimens and weekend field trips.
BI 103E General Biology: Survey of Biology .4 credits An overview of large-scale biological patterns, including animal and plant diversity, evolution, and ecology. Students will learn how the theory of evolution, including natural selection, explains why there are so many different kinds of plants and animal species in the world with such diverse and interesting life styles. The principles of ecology and human impact on the natural world will also be studied. Field trips, laboratory exercises, lecture, discussion, internet and computer activities will be utilized in the learning process. May be offered through Distance Learning.
BI 103F General Biology-Wildflowers of Oregon $\qquad$ .. 4 credits
Our region's flowering plants and their habitats provide the framework to learn about plant diversity, ecological and evolutionary processes. Students will study flower characteristics to aid in identification and how natural selection explains why there are so many different kinds of plants and animal species in the world with such diverse and interesting life styles. Field trips to a diversity of local ecosystems enhance the study of natural history, and habitat conservation and restoration efforts.
BI 103G General Biology: Global Ecology. 4 credits Students learn to identify many of the organisms living in several ecological regions found in Oregon and to relate this history and its diversity to ecological and evolutionary concepts. Students explore how the activities and values of Native Americans relate to these natural environments, and they examine basic ecological concepts through scientific and indigenous eyes. Students evaluate possible human threats to our natural world and address the question of how can we most sustainably interact with these ecosystems. This course requires field trip participation.

BI 103H General Biology-Mushrooms .4 credits
Through field, classroom, and laboratory work this course will help 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 are included in the field work.
BI 103I General Biology-Endangered Animals and Their Environment 4 credits
This course will focus on concepts dealing with evolution and ecology and relate these concepts to endangered animals and their environment. This class will target specific endangered animals from various animal groups both in Oregon and from around the world. An emphasis in the class will focus on the problems the animals face and possible solutions. Students will learn through lectures, labs, slides, group work, computer work, guest lecturers, and optional weekend field trips.
BI 103J General Biology: Forest Ecology.
4 credits
Basic ecological and evolutionary processes and interrelationships in our local forests and their importance to humans will be explored. Identification of major trees, shrubs and wildlife through extensive field work will increase the student's awareness of ecosystems. Old Growth forest ecosystems and current forest issues will also be explored. Field trips are required.
BI 103K General Bio-Animal Behavior .4 credits Students will explore the interesting and sometimes bizarre behavior of animals in both an ecological and evolutionary context. The study of behavior will lead to a consideration of evolutionary mechanisms and the ways that behaviors may represent adaptations to the environment. Students will gain an appreciation for behavioral conservation and will learn to critique popular literature about animal behavior. Classroom activities will be supplemented with visits to zoological centers, laboratories and field work.
BI 103L General Biology: Evolution \& Diversity. $\qquad$ .4 credits Scientific advances over the past century have made evolution theory one of most grand and unifying theories in the biological sciences. It not only provides an explanation for the radiation of species on our planet, but also allows critical advances in our
understanding of many areas of science including ones of agricultural and medical relevance. The layout of the course will utilize a backward chronology of the history of the Earth, that begins with a study of humans and modern mammals and ends with investigations into the origins of life. This framework will explore the diversity of life by using examples from the different Kingdoms of Life to explain more complex biological topics, such as methods of speciation, molecular genetics/inheritance, adaptive radiation, plate tectonics, and ecological concepts. This course may be offered through Distance Learning.

BI 103M General Biology: Biodiversity\&Sustainability $\qquad$ .4 credits This course uses the biological principles associated with evolution, taxonomy and ecology to frame the principles of biological environmental sustainability, with frequent reference to social and economic issues associated with sustainability. Students will discover how the negative human impacts on biological ecosystems leading to the current mass extinction event may have long-term effects on global nutrient cycles. Exploring the evolutionary principles of natural selection and speciation will explain how the ecological damage of habitat fragmentation, edge effects and disruption of predator-prey and symbiotic relationships substantially endangers the nutrient cycles on which humans depend for their own survival. Unlike many of the other BI 103 emphasis courses, this course will place humans within the taxonomic realm of living organisms that may be facing endangerment or extinction.

BI 112 Cell Biology for Health Occupations $\qquad$ 3 credits Corequisite: CH 112This course introduces the Health Occupations student to the generalized human cell including its structure, function, cellular respiration and reproduction. Genetic concepts include DNA replication, transcription, translation, genes and inheritance. The chemistry of the cell and its components are examined as we build upon basic chemical concepts explored in CH 112. This class and CH 112 prepare students for the study of human organ systems in Human Anatomy and Physiology BI 231, 232, 233. Laboratories integrated with presentations and group activities include use of the microscope and examination of cells. This course combined with Chemistry for Health Occupations CH 112 satisfies the prerequisite for Human Anatomy and Physiology BI 231.

BI 211 Principles of Biology $\qquad$ .4 credits
BI 211 is the first course in a sequence and provides a foundation and a pre-requisite for the subsequent courses BI 212 and in BOTH Botany 213 and Zoology 213 at LCC. This sequence is designed for Science majors planning to transfer to a four-year institution. There is no Math, Chemistry or Writing requirement currently in place; however, college level Writing and Math abilities will be an advantage to success in this course. BI 211 is designed for biology majors as an introduction to the study of cellular form and function. The course will emphasize the interactions between cell structures and their chemical composition to understand biological processes and the evolution of life. Topics include study of natural selection and origin of cells, cell structures, biochemical pathways, energy flow and molecular genetics. The process of scientific investigation is experienced through participating in laboratory activities and reading and analyzing current scientific articles. Note: BI 211 was formerly named BI 201 Cellular Foundations. A student who has taken this class under previous names may not take it again under this new name and receive duplicate credit.
BI 212 Principles of Biology. ... 4 credits Prerequisites: Grade of C - or better in BI 201 or Bl 211 or grade of A or better in BI 101 F or Bl 112 or instructor consent. Background knowledge of cell biology and biochemistry, specifically familiarity with metabolic pathways (especially aerobic cellular metabolism \& photosynthesis), cell division and genetics is required. There is no Math, Chemistry or Writing requirement currently in place however college level writing and math abilities will be an advantage to success in this course. BI 212 is designed for biology majors as an introduction to the study of organism form and function. The emphasis will be on comparisons of 2 major kingdoms of organisms: Plants \& Animals. The topics of evolution, diversity, anatomy and physiology of tissues, organs, and organ systems will be studied in both plants and animals. The course will include considerable lab work, including microscopic study of cells, tissues and organs and dissection of plant and animal material. This course replaces both BOT 202 and Z 202 in the Biology majors' sequence.

## BI 280 Co-op Ed: Biology

 1-12 creditsThis course provides the student with biology-related field experience. 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.
Bl 297 Advanced Seminar in Biology 3 credits
Prerequisite: BI 211, BI 212, and BOT 213 or Z 213, equivalent courses or instructor consent. Advanced Seminar in Biology provides a small group setting for Biology majors to investigate one or more complex problems in biology through in-depth reading and research, group discussion, fieldwork, reflection, and presentations. The course provides structured preparation for advanced college research in the sciences.

## BI 298 Independent Study

$\qquad$ 1-3 credits
A variable credit course based on independent study contracted between an instructor and a student.

BI 299 Trends $\qquad$ 4 credits
See department for topic.
BOT 213 Principles of Botany. $\qquad$ 4 credits
Prerequisite: Grade of 'C-' or better in Bl 211 and Bl 212 or BI 201 and BOT 202 or Z 202 or instructor consent. This course or Z 213 completes the Life Science Majors sequence. There is no Math, Chemistry or Writing requirement currently in place; however, college level writing and math abilities will be an advantage to success in this course. Concepts of phylogeny, evolution and ecology will be explored using flowering plant (angiosperm) examples. We study major evolutionary trends in flowering plants and explore ecological mechanisms and selective pressures that underlay those trends. At least half the instruction takes place in the field examining plant associations in a variety of local ecosystems. We identify plants using field characteristics to become proficient in the use of botanical keys. These skills and concepts inform our phylogenetic studies. NOTE: BOT 213 was formerly named BOT 203 General Botany. A student who has taken this class under the previous name may not take it again under this new name and receive duplicate credit.
GS 101 General Science (Nature of the Northwest) $\qquad$ .4 credits This course explores the geology, plants and animals of Oregon in three geographical areas: Central Oregon, the Willamette Valley and the coast. A comparison of these different habitats is made by discovering the similarities and differences in the geology, flora, and fauna. By going on field trips to each areas, students will learn how to identify various plants, fish, birds and mammals.
Environmental awareness of local problems and possible solutions will be discussed especially with the Northwest-related problems of salmon decline and cutting of the old growth forests. Class discussions, student research and field trips will be a major part of this class.

## Z 213 Principles of Zoology

$\qquad$ .4 credits Prerequisite: Grade of 'C-' or better in Bl 211 and Bl 212 or Bl 201 and Z 202 or instructor consent. This course or BOT 213 completes the Life Science Majors sequence. There is no Math, Chemistry or Writing requirement currently in place; however, college level writing and math abilities will be an advantage to success in this course. Concepts of phylogeny, evolution and ecology will be explored using vertebrate animal examples. These themes will be examined through studies of comparative anatomy and physiology, natural selection, population genetics, phylogeny and evolution. There is a strong emphasis on activity-based learning, including data collection, analysis and presentation. Note: Z 213 was formerly named Z 203 General Zoology. A student who has taken this class under the previous name may not take it again under this new name and receive duplicate credit.

> Botany - See Biology
> Broadcasting - See Audio and Video Production

## Course Fees

Many courses may have additional fees. Please refer to the web class schedule credit listings and registration information for updated fee information and fee amounts.

## Business

Also see Accounting, Administrative Assistant, Computers
For information, contact the Business Department, Bldg. 2/Rm. 141, (541) 463-5221.
BA 101 Introduction to Business .4 credits A basic introductory survey course which explores business topics such as economics, social responsibilities and ethics, business organizations, entrepreneurship, management, marketing, accounting and finance, and international business topics. May be offered through Distance Learning.

BA 195 Service \& Ethics in Business $\qquad$ 1 credit Prerequisite: BA 101, BT 114 or BT 117, BT 120, and BT 146, or instructor consent. This first year capstone course is an opportunity for students to explore the role of business concepts and skills in the social economy. Students will gain insights into the application of common business skills and experience in organizations. Each student will participate in an administrative service learning experience for up to 15 hours during the term and share their experience with peers through reflective presentations and papers. Students will also attend a series of Friday seminars and workshops. May be offered through Distance Learning.
BA $\mathbf{2 0 6}$ Management Fundamentals. $\qquad$ .. 4 credits Prerequisite: BA 101 or instructor consent. This course is a survey of management and what successful managers do. Course content includes planning, decision making, organizing, leadership, motivation, communication, control, and a thorough overview of the field of management. 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 through Distance Learning.
BA 214 Business Communications $\qquad$ . 4 credits Prerequisite: Pass a Language Skills and Proofreading test in the Testing office or BT 180, and WR 121, or instructor consent. Introduction to communication theory and all forms of communication. Introduction to appropriate formatting of business documents. Emphasis in writing direct, indirect, and persuasive letters, and research and production of a formal report using word processing software. Emphasis is on grammar, formatting, tone, effectiveness, and overall mailability. Students will give businessrelated presentations that inform, recommend, and train. Students will be introduced to business presentation software and will use the software when giving presentations. May be offered through Distance Learning.

BA 215 Accounting: Language of Business Decisions.......... 4 credits Prerequisite: BA 101 or instructor. Accounting: Language of Business Decisions is a survey of financial and managerial accounting topics. The course is designed for non-business majors (business minors) who may find themselves in entrepreneurial or executive leadership roles within an organization. Topics include overview of the accounting cycle; accounting principles; creation, review and interpretation of financial statements; using financial data for business decisions; cost behaviors; cost-volume profit analysis; and differential analysis. Because of the overlap between BA 211 and BA 215 only one of these courses will be counted toward a degree or certificate. May be offered through Distance Learning.
BA 217 Budgeting for Managers $\qquad$ .4 credits Prerequisite: BT 165 or BA 211, or instructor consent. Recommend BT 114. This course is designed to introduce the purpose and value of budgets, budget development, and budget implementation. Course topics include: the steps of creating a budget, the parts of a budget, gathering needed information for budgets, creating a product budget, planning and budgeting a project, presenting the budget, spending and tracking the budget, use of an HR budget, a small business budget, budgeting and human behavior, and mastering the overall budgeting process. May be offered through Distance Learning.

BA 218 Personal Finance .4 credits
This course is a comprehensive introduction to personal finance. Class emphasis is on personal budgets, real estate ownership, intelligent use of consumer credit, credit institutions, insurance, personal investing, stocks, bonds, retirement planning, and mutual funds. The course is designed to provide an understanding of personal topics and the analytical tools necessary to optimize personal decision making in the subject area. May be offered through Distance Learning.

## BA 223 Marketing

 .4 creditsAs an initial study of the principles of marketing in our socioeconomic 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 through Distance Learning.
BA 224 Human Resource Management.. .4 credits
Prerequisite: BA 101 or instructor consent. This course is an introduction to business responsibilities in the area of Human Resources. The course is designed to explore the many functions and importance of what HR does. Discussion subjects include the many laws, human resource planning, recruitment, selection, performance appraisal, training, pay systems, health and safety, wellness, unions, discipline, and modern changes in the workplace. May be offered through Distance Learning.
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 through Distance Learning.
BA 242 Fundamentals of Investments $\qquad$ . 4 credits
This course provides an overview of the fundamentals of investments for individuals. Topics include risk/return relationships, economic indicators, characteristics of fixed income securities, stocks and derivatives, fundamental and technical analysis, taxation of investments and mutual fund evaluation. Students should have basic proficiency in MS Word and MS Excel; and math skills including fractions, decimals, ratios, and simple algebra. May be offered through Distance Learning.

## BA 249 Retailing

... 4 credits
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 through Distance Learning.
BA 251 Supervisory Management . $\qquad$ .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 through Distance Learning.

BA 261 Consumer Behavior .4 credits
Consumer behavior is one of the most exciting areas in the study of marketing. Everyday, all around us, the use of various media to inform, persuade, and influence our purchase decisions competes with other stimuli for our attention-and our hard earned money! In studying consumer behavior, you will learn how marketers identify and exploit these sources of influence-from learning about the way we process information and think how our relationships with others, even our dreams and aspirations, help shape our product choices and purchase decisions. May be offered through Distance Learning.
BA 278 Leadership \& Team Dynamics. $\qquad$ .4 credits
This course focuses on developing the leadership potential and ability of emerging and future student leaders. The course also enhances students' understanding of teams and thus increases their effectiveness as team members. Participants will explore personal leadership philosophies, ethical issues related to leadership, strategies for identifying and articulating vision, and ways to empower effective teams. Students will gain a theorybased understanding of leadership topics and will work on practical leadership applications such as goal setting, evaluation and decision-making. May be offered through Distance Learning.
BA 280 Co-op Ed: Business Management..........................3-12 credits
This course provides the student with work experience related to supervision, management, and business operations. The student will have the opportunity to integrate theory and practice, develop skills and expand career knowledge.
BA 280RM Co-op Ed: Retail Management $\qquad$ .3-12 credits This course offers students relevant work experience related to retail management. Students will have the opportunity to integrate theory and practice, develop skills, and expand career knowledge.
BA 280SM Co-op Ed: Sales and Marketing
3-12 credits
This course offers students relevant work experience related to sales and marketing. Students will have the opportunity to integrate theory and practice, develop skills and expand career knowledge.
BA 298 Independent Study: Business. $\qquad$ .1-3 credits A variable credit course based on independent study contracted between an instructor and a student.

## BT 146 Team Building Skills.

$\qquad$ .4 credits This course examines the fundamentals of team building within the business environment in a global society. Topics include: stages of team development, team communications, problem-solving and decision-making, self-directed teams and motivation. In addition, students will focus on team roles, individual responsibility as a member of a team, building effective teams, managing team conflict, working in teams in a changing environment, and taking advantage of team diversity. May be offered through Distance Learning.
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 through Distance Learning.

## CAD, CADD - See Drafting <br> CAM - See Manufacturing <br> 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 provides a systematic approach to researching and applying for scholarships. Topics include: creating a scholarship portfolio, Oregon Student Assistance Commission application, Lane Foundation application, print and internet resources, research strategies, and tips for effective scholarship interviews. You will identify your skills, accomplishments, life experiences, values, and goals, then learn strategies to communicate them effectively on scholarship applications. Panels and guest speakers will share their perspectives on the scholarship process.
CG $\mathbf{1 4 0}$ Career and Life Planning. $\qquad$ $1-3$ credits
Students learn a process for planning their lives and careers. Attention is given to self-assessment (What are my skills, interests, values, attitudes, motivational patterns?), decision making (How do I make decisions and what are some other ways of making them?), and the work world (How do I find what is available, and what do I need to do to pursue my goal?). Most students develop a personal action plan as an outcome of the class. May be offered through Distance Learning.
CG 180 Co-op Ed: Extended Career Exploration. $\qquad$ .3 credits Prerequisite: CG 140 or instructor permission. This course is a special section of Cooperative Education designed for students who have narrowed their interests to a few careers and want to receive credit for investigating them and working toward a decision. Students work individually using a wide variety of activities ranging from internet research, reading, talking to people currently working in jobs of interest, to participating in actual work settings. This course can be a good continuation of Career and Life Planning CG 208. Access to a computer and internet is essential.

## Chemistry

For information, contact Science, Bldg. 16/Rm. 156, (541) 463-5446.
CH 104 Introductory Chemistry 1 $\qquad$ 5 credits
Prerequisite: MTH 052 or above with grade of 'C-' or better or pass placement test. This three term sequence (CH 104, CH 105, CH 106) must be taken in order. It is designed for students who are in the health care fields and other non-science major programs and who need only an introduction to chemistry. This sequence acquaints students with the quantitative aspects of chemistry, and the foundation concepts/practices of inorganic, organic, and biological chemistry. The laboratory part of the course supports concepts addressed in the classroom and introduces standard laboratory procedures, safety considerations, and conservation principles. The laboratory and lecture/discussion sessions are taught by the same instructor in groups of approximately 24-30 students to provide for considerable individual assistance. The credits for CH 104 usually DO NOT count toward a science major's degree after the General Chemistry sequence is completed. An online version of Introductory Chemistry 1 may be offered through Distance Learning. Requirements include ready access to a computer with modem or other internet access, and working knowledge of keyboard/mouse functions, plain text format. Students will have electronic contact with one another and with the instructor. While the online format allows much of the work to be done any time of day and any day of the week, a total of four on-campus sessions will be held on the LCC main campus for labs, and exams. CH 104 course topics include beginning terminology, symbols, concepts, problem-solving techniques, and lab techniques for inorganic chemistry, the foundation of other branches of chemistry. The student who earns credit with a grade of 'C-' or better should be prepared to continue into CH 105 . This course does not serve as a prerequisite for second year chemistry courses such as Organic Chemistry numbered 200's or 300's.

CH 105 Introductory Chemistry 2 5 credits
Prerequisite: Grade of 'C-' or better in CH 104 Second course in three term sequence described under CH 104. CH 105 topics include beginning terminology, concepts, and laboratory techniques for organic/carbon chemistry. Also covered are the special nature of carbon bonding and the functional groups of organic compounds. Note: CH 105 is sometimes used as a preliminary course for those who need the Organic Chemistry sequence but want to start at a more elementary level. However, the credits for CH 105 usually do not count toward a science major's degree after the Organic Chemistry sequence is completed.
CH $\mathbf{1 0 6}$ Introductory Chemistry 3 $\qquad$ 5 credits
Prerequisite: Grade of 'C-' or better in CH 105 Third course in three term sequence described under CH 104. Beginning terminology, concepts, and laboratory techniques for biological chemistry and biochemistry. Also covered are the structures of carbohydrates, lipids, proteins, enzymes, and nucleic acids, as well as some aspects of their functions in living systems.
CH 112 Chemistry for Health Occupations $\qquad$ 3 credits Prerequisite: MTH 052 or above with grade of 'C-' or better or pass placement test. Corequisite: BI 112. This course will introduce Health Occupations students to the chemistry of human cells and their components. Organic and biochemistry concepts will be explored to develop and support understanding of cellular structure, function, and genetics, including cell reproduction and specialization within tissues of the human body. Lecture and laboratory will be integrated with group work and computer activities to provide the chemical foundation necessary for understanding the biology of cells. This course combined with Cell Biology for Health Occupations BI 112 satisfies the prerequisite for Human Anatomy and Physiology 1 BI 231.

CH 112S BioBonds Study Skills $\qquad$ .1 credit
BioBonds Study Skills (BBSS) for the BioBonds Learning Community is intended to help improve student success in BI112 and CH112. BBSS will provide students with an additional structured classroom environment to improve skills required for success in science courses, including test taking skills, reading scientific text books, and participating in class activities. BBSS will not present new science topics, but will help students study more effectively. BBSS will benefit students with little or no previous experience in science as well as students hoping to improve their class success.
CH 114 Introduction to Forensic Chemistry $\qquad$ .4 credits
Introduction to Forensic Chemistry is designed to provide nonscience majors an introduction to chemistry in a forensic context. Topics may include measurement, density, soil analysis, chromatography, organic and inorganic analysis, chemistry of fire and DNA. This course focuses primarily of the chemistry aspect of gathering scientific information in the context of forensics and may also demonstrate the interrelationships of chemistry, physics and biological sciences.
CH 150 Preparatory Chemistry $\qquad$ .. 3 credits Preparatory Chemistry is designed for students with little or no previous chemistry experience preparing to take General Chemistry (CH 221-223). This course will focus on the specialized language of chemistry, the methods of solving problems used by chemists, and calculations important in general chemistry. Topics covered will include measurement, significant figures, dimensional analysis, density, the language of chemistry (nomenclature), quantitative composition of compounds, stoichiometry, gases, solutions and heat. Note: MTH 095 is a prerequisite for CH 221 and may be taken concurrently with CH 150.This course may be offered through distance learning.
CH 199 Special Studies:
1-3 credits
See department for topics.

## Course Fees

Many courses may have additional fees. Please refer to the web class schedule credit listings and registration information for updated fee information and fee amounts.

CH 221 General Chemistry 1. $.0-5$ credits
Prerequisite: MTH 095 or above with grade of ' C -' or better or pass placement test. This three term sequence (CH 221, CH 222, CH 223) is for college transfer science and engineering majors. It must be taken in order. The classes are designed to prepare the student for further work in chemistry, biology, physics, many engineering fields, pre-medicine, and some allied health fields. General Chemistry focuses on inorganic chemistry and provides a basic understanding of the structure of matter, the changes matter undergoes, and the energy associated with those changes. Laboratory activities are designed to acquaint the student with standard laboratory procedures and to illustrate concepts discussed in lecture while emphasizing safety and conservation principles. Topics covered in General Chemistry include: basic concepts of chemistry, systems and units of measurement, chemical nomenclature, stoichiometry, thermochemistry, behavior of gases, atomic structure, chemical bonding and molecular structure, solution chemistry, condensed phases, acid base chemistry, kinetics, equilibrium, thermodynamics, electrochemistry, nuclear chemistry, and organic chemistry. The lab explores chemical safety and risk assessment, methods of measurement, chemical changes, separations, volumetric (titrametric) analysis, synthesis, spectroscopy and calorimetry. The current order of presentation is available at: http://www.lanecc.edu/science/chemistr/chemis.htm. General Chemistry 1 is the first term of a three term sequence. NOTE: Preparatory Chemistry, CH 150 is recommended as a preparatory course for those who have little or no chemistry background.
CH 221S Chemistry Problem Solving 1 credit Co-requisite: CH221 Chemistry Problem Solving (CHPS) is intended to improve student success in CH221. CHPS will provide students additional, structured practice with topics discussed in CH 221 lecture and lab. Study skills and problem solving strategies important to student success will also be discussed. CHPS will benefit students with little or no previous experience in chemistry as well as students wanting additional practice outside of class.
CH 222 General Chemistry 2. $\qquad$ ..0-5 credits Prerequisite: Grade of 'C-' or better in CH 221 General Chemistry 2 is the second term of the sequence described under CH 221.
CH 223 General Chemistry 3. .0-5 credits
Prerequisite: Grade of 'C-' or better in CH 222 General Chemistry 3 is the third term of the sequence described under CH 221.
CH 241 Organic Chemistry. $.0-5$ credits
Prerequisite: Grade of 'C-' or better in CH 222 This three-term sequence is intended for science majors and health science students. It is a systematic coverage of aliphatic and aromatic chemistry. A survey of selected biologically important compounds is included during part of CH 243. There are three main areas of study.1) Structure determination by use of spectroscopic data and characteristic reactions of functional groups. 2) Reaction mechanisms, wherein reaction feasibility and rates are related to molecular structure. 3) Synthetic sequences in which complex molecules are built up from simple precursors. Labs are designed to acquaint the student with typical organic preparative procedures. Most of the compounds prepared in lab are analyzed by infrared spectroscopy. The low student/instructor ratio in lab allows considerable personal assistance. CH 241 is the first course in a three term sequence designed for science and health science majors. This course is designed to introduce students to organic functional groups with an emphasis on hydrocarbons and their reactions. Topics will also include bonding theory, nomenclature, and spectroscopy. Considerable time is spent on the fundamentals of reaction mechanisms. The laboratory introduces organic synthesis techniques and products are analyzed using various techniques.

## CH 242 Organic Chemistry

 ..0-5 creditsPrerequisite: Grade of 'C-' or better in CH 241 This is the second course in a three term sequence described under CH 241, designed for science and health science majors. Topics will typically include nomenclature, structure, and reactions of alcohols, ethers, aromatics, conjugated systems, aldehydes, and ketones. The laboratory focuses on organic synthesis techniques and products are analyzed using various techniques.

CH 243 Organic Chemistry
Prerequisite: Grade of 'C-' or better in CH 242 This is the third course in a three term sequence described under CH 241, designed for science and health science majors. Topics will typically include nomenclature, structure, and reactions of carbonyl containing compounds, nitrogen containing organic compounds, and conjugated/aromatic systems. A significant emphasis will also be made on organic compounds of biochemical significance. The laboratory focuses on organic synthesis techniques with products analyzed using various techniques.
CH 280 Co-op Ed: Physics-Chemistry. $1-12$ credits
This course provides the student with chemistry-related field experience. 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.
CH 298 Independent Study $\qquad$ 1-3 credits A variable credit course based on independent study contracted between an instructor and a student.

GS 105 Physical Science .4 credits Prerequisite: MTH 052 or above with grade of 'C-' or better or pass placement test. In the GS 104, GS 105 and GS 106 course sequence for non-science majors, emphasis is placed on basic principles that tie the physical sciences together. GS105 topics are selected from the standard first year of chemistry, such as periodic table of the elements, chemical formulas, chemical reactions including acids and bases, energy, entropy, gas laws, solutions and simple organic structures. This class includes several standard chemistry labs, plus demonstrations in the classroom and some work with molecular models. It is not necessary to take all three, GS 104, 105 and 106, nor is it necessary to take these classes in order.

## Architecture - See Drafting

## 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.
This course presents a systematic approach to solving the problems that interfere with student success and satisfaction. Using an experiential format, students will apply proven techniques and strategies to academic and personal situations they experience during the term. The resulting acquisition of new self-management skills will enhance school performance. May be offered through Distance Learning.
CG 100A College Success. 1 credit 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 areTools, Finding the Time, Looking Ahead, You've Got a Great Memory and Muscle Reading.
CG 100B College Success. . 1 credit 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. $\qquad$ 1 credit 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 - See Speech Communication Computer Hardware Repair - See Electronics

## Computers: Introduction/Information <br> Systems/Computer Science

For information about classes with course numbers that begin with:
CIS or CS - Contact Computer Information Technology, Bldg. 19/Rm. 137, (541) 463-5826.
BT - Contact the Business Department, Bldg. 2/Rm. 141, (541) 463-5221
EL or SKD - Contact Academic Learning Skills, Center Bldg./Rm. 210, (541) 463-5439.

## BT 250 Automated Accounting Systems

$\qquad$ 4 credits Prerequisites: BA 211, BT 114 or BT 117, and 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 learn to document and flowchart an accounting system.

## BT 251 E-Business Fundamentals

$\qquad$ .3 credits
Prerequisite: Previous experience with Web browsers and e-mail. A critical thinking course requiring students to determine how Internet tools can be applied to business situations. Students will learn how the Internet has changed traditional business activities and business communications. They will explore the differences between Intranets, Extranets, and the Internet. They will discover the security risks from inside and outside the company and explore how to create security policies to help protect the organization. Students will collaborate to complete research projects and present their results, and will focus on company objectives, marketing and public relations, and commercial viability. May be offered through Distance Learning.
BT 252 Web Tools: Photoshop \& Dreamweaver $\qquad$ 4 credits Learning the basics of the Web tools Photoshop and Dreamweaver to facilitate the retail/wholesale aspects of Internet business. Photoshop and Dreamweaver software required, or access to the computer programs to complete assignments. May be offered through Distance Learning.
CIS 100 Computing Careers Exploration $\qquad$ .2 credits This course introduces the field of computer technology through the introduction of fundamental technical skills and concepts. Students will understand how hardware, software and networks are organized to create computer information systems; how these systems are used by organizations; and the roles of information technology professionals in creating and maintaining these systems. This course provides an orientation for students who are considering programs of study and careers in the computing field. Students will learn about the degree and certification programs available, the knowledge and skills needed for entry level positions, the computer industry job market, current trends in the computer industry, and professional development and ethical issues that confront information professionals.
CIS 101 Computer Fundamentals $\qquad$ .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 through Distance Learning.

CIS 102 Problem Solving with Computers. .4 credits
CIS 102 introduces students to methods and tools for solving problems in an information systems environment. Although designed as an introductory course in the CIT Dept.'s degree programs, the course may be useful to anyone who wishes to pursue an information technology career. Students practice identifying problems and then finding solutions, using known problem-solving methods (heuristics), and become proficient in using spreadsheet and drawing software programs as problemsolving tools. Students will obtain knowledge and skills in problem solving and in the spreadsheet and drawing software that will be called upon and reinforced throughout the CIT degree programs.

CIS 103 Computer Fundamentals: Systems at Work ............ 4 credits An introductory course in computer technology. Provides a general overview of computer hardware and software. Hands-on training for performing computer maintenance, such as backing up, cleaning and de-fragmenting hard disks; doing basic hardware upgrades; protecting a computer system from outside intruders; installing new software; and setting up a peer-to-peer network for file and printer sharing.

CIS 125G Software Tools 1: Game Development $\qquad$ 4 credits 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 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 135 Software Tools 2: Integrating Applications $\qquad$ .4 credits
Prerequisite: CIS 102, or CIS 125D, or instructor consent. Course is designed to give students hands on experience on how to use an integrated software applications package to create small solutions for common business problems using spreadsheet, database, word processor, desktop publishing, VBA macro editor, and Web based tools. The course material is useful for students who will provide user support for applications software packages.
CIS 135G Software Tools 2: Game Development. .4 credits Prerequisite: CIS 125G and CS 133G, or instructor consent. 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 platform and will design and create several games.

CIS 135W Advanced Computer Applications: Web 2.0........... 3 credits This course provides a hands-on introduction to Web 2.0 technolgies, including blogs, forums, wikis, podcasting and videocasting. Students learn the principles and technologies behind Web2.0, and also learn about online Web2.0 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 computerbased collaboration.

CIS 140 Operating Environments: Managing Windows ....... 4 credits Introduction to Windows and operating system components. Provides hands-on experience maintaining and configuring Windows, sharing folders, assigning permissions, managing users and groups, and using administrative tools. In addition, file and disk management, file compression, and backup software are covered. This course has a hands-on focus. May be offered through Distance Learning.
CIS 140B Operating Environments: Macintosh $\qquad$ .1 credit Introduction to use of the Apple Macintosh computer. Provides a study of the Macintosh operating system from the end-users point-of-view. Provides experience with system commands and options, file and folder (subdirectory) management, how to run application programs, the use of common utility programs and tools, and how to make effective use of the operating environment on the computer.
CIS 140S Operating Environments: Windows
Introduction to using Windows Vista. Provides a study of the Windows Vista 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.

## Course Fees

Many courses may have additional fees. Please refer to the web class schedule credit listings and registration information for updated fee information and fee amounts.

CIS 140 U Introduction to Unix/Linux. .4 credits
This course introduces the student to the Unix/Linux operating system. It provides experience using the graphical user interface as well as the command line to run applications, do file management, and to do basic system administration. Students will learn the fundamental Unix/Linux command set, editors, scripting, and will install the operating system and be introduced to file system security.
CIS 178 Introduction to the Internet 4 credits
Prerequisite: Previous Windows-based computer experience is required, or instructor consent. The course provides a background to the nature and history of the Internet, hands-on experience using a variety of Internet tools, and opportunity to practice the development of on-line search skills. May be offered through Distance Learning.

CIS 199 Special Studies: .4 credits
See department for topics.
CIS 199OL Special Studies: .. 3 credits See department for topics.
CIS 225 Computer End-User Support .4 credits Prerequisite: CIS 102, CIS 125D, and CS 179, or instructor consent. Course prepares students to support end-users in a variety of organizational settings. Topics include the end-user support function in an organization, techniques to develop and deliver training modules, and strategies to provide ongoing technical support to end-users. Emphasis is on solving problems with users, needs analysis, troubleshooting, and interaction with users. Taught in a workbench lab environment.

CIS 226 Advanced Computer User Support .4 credits
Prerequisite: CIS 225 or instructor consent. A capstone course for majors in the Computer User Support program, this course provides students the opportunity to demonstrate their readiness for the workforce through a series of activities designed to set up and operate a simulated Help Desk for a business. Course activities build on those learned in earlier user support courses and enable students to build their skills prior to entry into the job market. Taught in a workbench lab environment.
CIS 227 Systems Support. .4 credits
Prerequisite: CIS 135, CIS 225, and ELT 287 or instructor consent. This course is taught in a workbench environment and emphasizes troubleshooting and problem solving, and building End User support skills. The course provides practical experience with common computer applications software problems and hardware problems.
CIS 227N Systems Support: Network and
Operating Systems.
.4 credits
Prerequisite: CIS 140 and CS 179, or instructor consent. Focuses on the support of MS Windows. Topics discussed include installation, TCP/IP, system policies, the Windows Registry, monitoring the computer, and performance tuning. Troubleshooting network boot up and printer problems are also discussed. The course has a hands-on emphasis using Windows Administrative tools to manage the workstation.

CIS 243 Essentials of Information Technology .4 credits
Prerequisite: CIS 125D or CS 179, and CIS 102 or CS 160. This course covers information systems theory, application of information technology in today's organizations, responsibilities of information technology professionals, and how information technology specialists enhance organizational performance. Additionally, approaches to information systems analysis, design, and implementation are described. Classroom emphasis is on theory and concepts, while lab assignments introduce students to flow diagrams and project management software.
CIS 244 Systems Analysis.. .4 credits
Prerequisite: CIS 125D or instructor consent. This course provides students with an introduction to the concepts, skills and tools used in Systems Analysis. A systems analyst participates in the process of understanding and creating a detailed specification of the functionality that must be provided by an information system. Students will develop systems analysis skills by completing a small group case project.
CIS 247 Information Analysis and Visualization $\qquad$ .4 credits
Prerequisite: MTH 065, and GIS 245 or CIS 125D, or instructor consent. CIS 247 introduces the field of information analysis: how information is designed, organized, analyzed, visualized, used and
misused. The course emphasizes the use of software tools to work with data to communicate information effectively through descriptive statistics and narratives, graphical visualization and map applications. The course assumes participants have taken CIS 101 Computer Fundamentals, or CS 120 Concepts of Computing, or have an equivalent understanding of basic computer literacy concepts, and have experience as a user of the Windows operating system and applications software.
CIS 297 Programming Capstone. .5 credits Prerequisite: CS 296 and CIS 244, or instructor consent. This course is an advanced course in programming methods with an emphasis on development of database related applications for the web. The course ties together topics covered in the first and second year of the programming curriculum. It emphasizes practical application and working knowledge and is project oriented. One modern and representative web server/web development technology will be used for implementation. PHP and MySQL will be used in 20092010.

CS 120 Concepts of Computing: Information Processing ..... 4 credits This course surveys the fundamental concepts and principles of computer systems and information processing. It is intended as a first course for those interested in a general survey of the computer science and information technology field. Students will become conversant with a wide range of topics in the 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 computers on individuals and society. May be offered through Distance Learning.

CS 133 Beginning Programming $\qquad$ .4 credits
Prerequisite: Previous Windows-based computer experience is required, or instructor consent. The course is intended as an introduction to programming for those with little or no previous experience. The language used is selected from Visual BASIC, Visual BASIC for Applications, Prolog, C++, Java, JavaScript, and others.
CS 133G Beginning C++ Programming for Games .4 credits This course provides an introduction to programming using the C++ language in a game development environment. You will be exposed to the concepts and tools involved in C++ software development. Most of the programming assignments for the class involve relatively simple games. There are no explicit pre-requisites for the course, but you are expected to be familiar with general computer usage and the Windows environment.
CS 133JS Beg. Programming: JavaScript $\qquad$ .4 credits Prerequisite: CIS 125 H or instructor consent. This course provides students with the concepts and skills required to create dynamic, interactive Web pages using client side JavaScript. Students will learn the Document Object Model (DOM), event handlers, rollovers, arrays, functions, string manipulation, dates, and form validation. May be offered through Distance Learning.
CS 160 Orientation to Computer Science $\qquad$ .4 credits This course explores the discipline and profession of computer science. It provides an overview of computer hardware and software architecture, the study of algorithms, software design and development, data representation and organization, problemsolving strategies, 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 through Distance Learning.
CS 161 Computer Science 1. .4 credits Prerequisite: CS 160 or CS 133JS or MTH 111 or higher, or previous programming experience, or instructor consent. This course is an introduction to the application of the principles of software design, development and testing. It includes problem solving, algorithm and program design, data types, and program control structures. It introduces the development tools and object-oriented programming using the JAVA language.

CS 162 Computer Science 2 .4 credits
Prerequisite: CS 161 or instructor consent. This course is a continuation of Computer Science 1. Topics covered include more advanced Object-Oriented programming concepts, searching and sorting, linear data structures, stream and file I/O, recursion, exception handling, and graphical user interface programming.

CS 179 Introduction to Computer Networks .4 credits
Prerequisite: CIS 140 or instructor consent. 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 through Distance Learning.
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). Students will learn the basic concepts and terminology of WLANs and will learn how to configure the hardware components to make a wireless network functional. 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 199 Special Studies .1-4 credits See department for topics.
CS 199B Special Studies:. s:.....

CS 233 Intermediate Programming dits See departments for topics.
..................................... 4 credits
Prerequisite: CS 133 or instructor consent. This course provides experienced web programmers with the concepts and skills necessary to develop larger scale applications. One modem and representative web server/web development technology will be used for implementation. Object oriented development in PHP will be used.

CS 233G Intermediate C++ Programming for Games............ 4 credits Prerequisite: CS 133G or instructor consent. This course builds upon CS 133G, covering more advanced programming concepts while providing the opportunity to further develop C++ programming skills. Students will develop games working with an industry standard game engine or support library. Object oriented concepts will be used in programming exercises.
CS 234G Advanced C++ Programming for Games $\qquad$ .4 credits
Prerequisite: CS 233G or instructor consent. This is the final course in the C++ programming sequence. It builds on the other two courses by teaching concepts in systems design and integrated project development. Students will learn the tools that are required for larger projects and how to design for quality and performance. Students will work in groups with an industry standard game engine or graphics library. They will design and code a non-trivial project.
CS 235G SW Tools 3: Game Development $\qquad$ 4 credits Prerequisite: CIS 135G and CS 234G. This is the final course in the Game Development Sequence. Students will focus on designing and developing a non-trivial project in a team environment. This course will merge programming skills with the use of a game development environment. Topics covered will include graphics, sound, animation, object oriented programming, user interface, and software engineering.
CS 240 U Advanced Unix/Linux: Server Management.......... 4 credits Prerequisite: CIS 140 U and CS 179, or instructor consent. The course covers network administration of Unix/Linux. Topics include: operating system installation, configuration, troubleshooting, user and group account management, network printing, application installation and sharing, network server configuration (for example: DHCP, DNS, NFS, and Apache), and interoperability with other network operating systems.

CS 253 Computation for Computer Graphics $\qquad$ .. 4 credits Prerequisite: MTH 111 and CS 233G. This course introduces students to the computational methods used for displaying and rendering graphical images in computer simulations and games. The course will combine a discussion of each method with programming exercises demonstrating how to apply it. Students will both create programs and work with graphical display engines in their exercises.

CS 260 Data Structures 1 .4 credits
Prerequisite: CS 162 or CS 233G, and MTH 111 or higher, or instructor consent. This course is intended primarily for students seriously interested in computer science. Students will demonstrate the usage of using advanced data structures, including linked-lists and tree structures using pointers, and advanced structure programming methods through a variety of programming projects.
CS 271 Computer Architecture and Assembly Language...... 4 credits Prerequisite: CS 161 or CS 133G or CS 227N, or instructor consent. An introductory course in computer architecture and programming in assembly language. Topics include computer organization, microprocessor design, logic gates and boolean algebra, data representations and manipulation, arithmetic operations, branching instructions, data editing, and input/output. Lab work provides experience working with an assembly language performing arithmetic, input/output, and table look-ups.
CS 275 Database Program Development $\qquad$ . 4 credits Prerequisite: CIS 125D or instructor consent. This is an introduction to production-scale, back-end relational database environments. Included in the course are discussion and application of data structures, database models, database design, and program and query development using an Oracle relational database environment.

CS 279W Windows Server Administration $\qquad$ 4 credits Prerequisite: CIS 227N and CS 179, or instructor consent. This course introduces concepts of Windows Server and network administration. Topics include server installation, Active Directory, network printing, user account and group management, web services, network troubleshooting, group policy objects, and server and network monitoring. This course has a hands-on focus.

CS 280CN Co-op Ed: Computer Network Operations ......3-12 credits 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 in the computer network field. Cooperative Education is a required course for the Computer Network Operations degree.
CS 280DP Co-op Ed: Data Processing $\qquad$ ..1-12 credits
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.
CS 280GD Co-op Ed: Simulation \& Game Development3-12 credits Cooperative Education is an important part of the 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. Cooperative Education is a required course for Simulation and Game Development degree.
CS 280PR Co-op Ed: Programming .3-12 credits 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 in the programming field. Cooperative Education is a required course for the Computer Programming degree.
CS 280US Co-op Ed: Computer User Support $\qquad$ .3-12 credits 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 in the computer user support field. Cooperative Education is a required course for the Computer User Support degree.

## Course Fees

Many courses may have additional fees. Please refer to the web class schedule credit listings and registration information for updated fee information and fee amounts.

CS 284 Network Security Fundamentals $\qquad$ .4 credits
Prerequisite: CS 279W, or instructor consent. This course covers fundamental computer and network security concepts from the security and certification material. It emphasizes securing the operating system, applications, media, network devices, web pages, e-mail, and other network services. In addition, types of attacks, digital certificates, keys, and designing and implementing security policies and procedures are discussed. This course has a hands-on focus.
CS 285 Operating System Hardening .4 credits Prerequisite: CS 240U, CS 279W, and CS 284, or instructor consent. This course gives the students a real world understanding of the vulnerabilities that exist in today's operating systems and gives practical, hands-on experience resolving and/or mitigating the vulnerabilities. We will use real systems (like Windows Server and Linux), the latest security resolution guidance, industry accepted tools to apply the resolutions, and industry accepted tools to measure the effectiveness of the resolutions. When the student finishes this course, they will have a solid understanding of actual threats to computer systems and the resolutions to mitigate those threats and vulnerabilities. This course has a hands-on focus.
CS 286 Firewalls and VPNs. .4 credits
Prerequisite: CS 284 and CS 289, or instructor consent. This course gives the students a real world understanding of how firewalls and VPNs can be used to enhance the protection of internal networks. It gives hands-on experience installing, configuring and managing firewalls and VPNs. Commercial firewalls, VPNs, security configuration guidance tools, and tools to monitor the effectiveness of the solutions will be used. You will implement multiple commercial firewalls and examine best practices for protecting DNS services, HTTP, and SMTP. You will explore proven strategies for defending your networks against unauthorized access, denial-ofservice, the weaknesses of firewall architectures, security processes, address translation, content filtering, spoofing, and other advanced issues. This course has a hands-on focus.
CS 289 Cisco Router and Switch Administration ................... 4 credits Prerequisite: CS 179, and CS 279W or CIS 140U, or instructor consent. This course primarily covers configuring and managing Cisco routers and switches. It deals with modern networking processes and protocols emphasizing protocols used at the OSI models data link, network, and transport layers. Functions of internetworking devices will be discussed such as hubs, bridges, routers, and switches with particular emphasis on routers. Wide area networking technologies will also be covered. Students will learn to configure and manage routers and switches through hands-on lab work and learn to use protocol analysis software.
CS 295 Web Development 1. $\qquad$ . 4 credits
Prerequisite: CS 133JS or instructor consent. This course provides students who have working knowledge of XHTML and client-side JavaScript with an introduction to server-side web programming. Students will begin to develop the concepts and skills necessary to develop dynamic, data driven web sites. One modern and representative web server/web development technology will be used for implementation. PHP will be used in 2009-2010. May be offered through Distance Learning. Note: CS 295 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 296 Web Development 2 4 credits
Prerequisite: CS 295 or instructor consent. This is the second course in the (server-side) Web Development sequence. It provides students who have working knowledge of server-side web programming with the concepts and skills necessary to develop dynamic, data driven, object oriented web based applications. One modern and representative web server/web development technology will be used for implementation. PHP and MySQL will be used in 2009-2010. Note: CS 296 was formerly named CS 295 Web Development 2. A student who has taken this class under previous names may not take it again under this new name and receive duplicate credit.

CS 297G Simulation \& Game Development Capstone ......... 4 credits Prerequisite: CS 234G and CS 235G. This is the final course in the Simulation and Game Development Program. This course ties together the topics covered in the first and second year courses of the computer simulation and game development program. It emphasizes the application of this knowledge in a project oriented environment. Students will work in teams creating a working, nontrivial simulation or game built on an industry standard engine programming in C++ and using industry standard tools.
CS 298 Independent Study: Computer Science.. .1-4 credits A variable credit course based on independent study contracted between an instructor and a student.
CS 299 Trends: ...1-5 credits
See department for topics.
SKD 030 Using Computers to Write 1 ...1-3 credits Prerequisite: Keyboard familiarity. This course introduces students to word processing on the PC as well as basic grammar concepts. Concurrently, students will improve and enhance their academic writing skills using the word processor as a tool. Adaptive technology may be used for students with physical or learning disabilities. For a description of this ALS class in Spanish, see http://www.lanecc.edu/als/classesenspanol.htm.
SKD 035 Using Computers to Write 2. $\qquad$ .1-3 credits Prerequisite: Keyboard familiarity, skills taught in SKD030. Course continues the instruction of word processing on the PC. Students learn intermediate techniques they can use when producing papers for college. Concurrently, students improve and enhance their academic writing and research skills using the word processor as a tool. Skills necessary for students electing to take on-line courses are included.
SKD 040 Using Computers to Map Concepts. $\qquad$ .3 credits
Prerequisite: Keyboard familiarity. This course introduces students to computer-based strategies that will allow them to represent information visually in meaningful formats. They will also learn to use the computer to organize and synthesize information from multiple sources.

## Computers: Keyboarding

For information, contact the Business Department, Bldg. 2/Rm. 141, (541) 463-5221.
BT 010 Computer Keyboarding 1-3 credits
Introduction to the computer keyboard with mastery of the alphabetic, punctuation, and numeric keys by way of the touch system. Very basic introduction on using the computer and keyboarding software. Basic formatting of personal business letters, reports, and title pages. May be offered through Distance Learning.
BT 015 Keyboard Skillbuilding 1. .1-3 credits
Prerequisite: Typing with 20-34 wpm on a three-minute timing. Development of speed and accuracy utilizing a diagnostic approach to individual skill assessment and prescribed drill work. May be offered through Distance Learning.
BT 016 Keyboard Skillbuilding 2. $1-3$ credits
Prerequisite: Typing with $35-44 \mathrm{wpm}$ on a three-minute timing. Development of speed and accuracy utilizing a diagnostic approach to individual skill assessment and prescribed drill work. May be offered through Distance Learning.
BT 017 Keyboard Skillbuilding 3 1-3 credits
Prerequisite: Typing with $45+$ wpm on a three-minute timing. Development of speed and accuracy utilizing a diagnostic approach to individual skill assessment and prescribed drill work. May be offered through Distance Learning.
SKD 025 Keyboarding for Personal Use $\qquad$ 3 credits This course teaches keyboarding basics in order to develop appropriate speed and accuracy to meet personal academic goals. Adaptive technology may be used for students with physical or learning disabilities. This course is intended as a one-term introduction to keyboarding. For a description of this ALS class in Spanish, see http://www.lanecc.edu/als/classesenspanol.htm.

## Computers: Software Application

For information about classes with course numbers that begin with:
CIS or CS - Contact Computer Information Technology, Bldg. 19/Rm. 137, (541) 463-5826.
BT - Contact the Business Department, Bldg. 2/Rm. 141, (541) 463-5221.
BT 113 QuickBooks
3 credits
This course introduces students to the use of QuickBooks as an organizational accounting software. Attention is given to the application of the entire accounting cycle from the creation of a company file, to and including, the end-of-period closing for both service providers and merchandisers with an emphasis on planning and analysis. Students will also be introduced to report systems, manufacturing issues, payroll, client management, job tracking and other features of QuickBooks. May be offered through Distance Learning.

BT 114 MS EXCEL for Business. $\qquad$ 4 credits
Prerequisite: Recommend familiarity with Windows operating system, ability to accurately type by touch, and MTH 020 or higher, or instructor consent. 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 through Distance Learning.

BT 115 MS ACCESS for Business. 3 credits
Prerequisite: BT 114 or BT 117, and MTH 060 or higher, or instructor consent. Recommend familiarity with Windows operating system and the ability to accurately type by touch. This hands-on application-oriented database course is designed to provide students with the basic functions and business applications of Microsoft Access. This course gives students the skills required to extract the data they need (queries), build efficient front-ends for that data (forms), and publish the results in an attractive and easy-to-read format (reports). May be offered through Distance Learning.
BT 118 MS POWERPOINT for Business $\qquad$ 3 credits
Prerequisite: Recommend familiarity with Windows operating system and the ability to accurately type by touch. Using PowerPoint software, students create, modify, customize and preview slide show presentations. Students manage documents, work with text, visual elements, and program features that enhance slide shows. Design principles are applied to create professional looking presentations. May be offered through Distance Learning.
BT 120 MS WORD for Business. 3 credits
Prerequisite: Recommend familiarity with Windows operating system and the ability to accurately type by touch approximately 25 words per minute. As an introduction to the entry-level business word processing objectives of MS Word, this course emphasizes information and training on working with the Windows operating environment; creating, editing, formatting, paginating, and printing documents; applying document refinements; using templates; working with graphics; and managing documents. Application of a variety of documents includes letters with envelopes/labels, memos, reports, tables, and newsletter-style columns with headers and footers. May be offered through Distance Learning.
BT 125 WordPerfect for Business.
.3 credits
As a comprehensive introduction to WordPerfect, this course emphasizes information and training on creating, editing, formatting, and printing documents; managing and enhancing documents using fonts, document properties, tab settings and correction tools; manipulating and organizing text using headers and footers, tables, and mail merge; and using special features and graphic elements. A variety of practical applications include letters, memos, reports, tables, resumes, and other business-related documents. May be offered through Distance Learning.

BT 129 Business Web Pages
3 credits
Introduction to creating and maintaining business web pages, including business web concepts, use of XHTML, CSS, and incorporating business graphics into a business web page. Focus will be on project completion for a local business, not-for-profit agency, or a web project for the school. May be offered through Distance Learning.

BT 217 MS EXCEL for Business - Expert.
Prerequisite: BT 114 or BT 117 or CIS 125S, and MTH 060 or higher, or instructor consent. Advanced Excel functions for business problem solving. Focus on creation of effective business spreadsheets to assist managers in decision making. May be offered through Distance Learning.
BT 220 MS WORD for Business - Expert. $\qquad$ 3 credits Prerequisite: BT 120 or instructor consent. As an extension of MS WORD for Business, the expert course focuses on the application of advanced word processing features in the development of professional business documents. Topics include using workgroup collaboration and file sharing features; applying program features for lengthy, in-depth business documents; and learning methods for visually enhancing business documents. May be offered through Distance Learning

CIS 125D Software Tools 1: Databases $\qquad$ .4 credits Prerequisite: Basic computer literacy. This course provides students with the concepts and skills required to use relational databases in the solution of non-trivial problems. Students will be introduced to fundamental relational database concepts, vocabulary and functionality. Through hands-on exercises, students will demonstrate the implementation of those concepts in a representative relational database package. Students will review computer related problem solving skills and will apply those skills by designing, implementing, testing, debugging and documenting relational database solutions to case problems.
CIS 125H Software Tools 1: XHTML .3 credits
Prerequisite: Basic computer literacy. This class provides basic internet concepts, XHTML syntax and coding, an introduction to Cascading Style Sheets (CSS) code and layout techniques, basic web media and interactivity using dynamic methods (DHTML), and information on web page promotion. This is a hands-on class in which students use lab time to work through textbook examples and then complete end-of-chapter case studies for homework. Systematic instruction is provided on all of the fundamental XHTML, CSS, and DHTML elements required to build web pages. Students use a file transfer protocol (FTP) client program to edit and update online web pages. May be offered through Distance Learning.

## Construction

For information, contact Advanced Technology, Bldg. 12/Rm. 201, (541) 463-5380.
CST 110 Blueprint Reading 1 .3 credits
Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Provides skills in understanding blueprints. Emphasizes fundamentals of blueprint reading, including development of skills in understanding basic lines, views, dimensions, symbols, and notations.

CST 111 Construction Orientation and Environment $\qquad$ .2 credits Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Introduction to the construction industry. Economic and environmental influences affecting the construction industry. Material will be presented covering the work in the construction field and professional opportunities open to construction graduates.

CST 116 Construction Estimating .4 credits
Prerequisite: CST 110 Study of techniques used to estimate construction materials and costs for residential and small commercial structures.
CST 118 Building Construction $\qquad$ .1-5 credits Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Project work required to plan, design, and construct building structures. A variety of elements and topics related to the materials and methods used in the construction of buildings, including planning the site, foundation, framing, and interior and exterior finishing. This course through project work provides an orientation to electrical, mechanical, and plumbing systems. CST 118 consists of a total of 15 credits (264 hours). Majors should enroll in 5 credits per term for three terms to satisfactorily complete CST 118.

CST 119 Building Construction Surveying. 3 credits A beginning course in surveying concepts and techniques with application to building construction. Fundamentals of surveying methods and the use and care of surveying equipment as related to surveying tasks involved in building construction. Emphasis is placed on field practice. CONSTRUCTION MAJORS ONLY.

CST 122 Construction Codes $\qquad$ .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 211 Blueprint Reading 2 3 credits
Prerequisite: CST 110 Advanced study related to the needs of the individual in the understanding and interpretation of blueprints for special features of design, fabrication, construction, and assembly.

CST 280 Co-op Ed: Construction $3-12$ credits
This course provides the student with construction-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 college credit.
LAT 131 Introduction to Landscape Construction $\qquad$
This course introduces common landscape construction techniques. Students will study fundamental concepts of soils, basic plant needs, irrigation, paving, and plant installation, and will apply their understanding in actual construction projects.
LAT 141 Principles of Nursery Operations. $\qquad$ Introduces all phases of nursery operations. Subjects covered will include: propagation techniques, container culture, field stock culture, and retail garden operations.
LAT 155 Landscape Plants 1 .4 credits
Identification, characteristics, appropriate uses, and cultural requirements of plants used in landscaping in the Pacific Northwest. Students will become familiar with typical Pacific Northwest plant communities and basic ecological relationships; will learn to identify native and ornamental plants; and will learn how to select the right plant for the right place. Fall term course focuses on deciduous trees and shrubs.

LAT 156 Landscape Plants 2 4 credits
Prerequisite: LAT 155. Identification, characteristics, appropriate uses, and cultural requirements of plants used in landscaping in the Pacific Northwest. Students will become familiar with typical Pacific Northwest plant communities and basic ecological relationships; will learn to identify native and ornamental plants; and will learn how to select the right plant for the right place. Winter term course focuses on evergreen trees and shrubs.
LAT 157 Landscape Plants 3. $\qquad$ 4 credits
Prerequisites: LAT 155. Identification, characteristics, appropriate uses, and cultural requirements of plants used in landscaping in the Pacific Northwest. Students will become familiar with typical Pacific Northwest plant communities and basic ecological relationships; will learn to identify native and ornamental plants; and will learn how to select the right plant for the right place. Spring term course focuses on flowering trees and shrubs, vines, and ground covers.

LAT 199 Special Studies:. .3 credits See department for topics.
LAT 280 Co-op Ed: Landscape .1-12 credits
Prerequisite: Instructor approval. This course provides the student on-the-job learning experiences related to the landscape field in community businesses and organizations. The student will have the opportunity to integrate theory and practice gained in the classroom with the 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.

## Cooperative Education/nternships

For information, contact Cooperative Education, Bldg. 19/Rm. 231, (541) 463-5203.
AB 280 Co-op Ed: Auto Body and Fender See page 162
AIL 280 Co-op Ed: American Indian Language See page 207
AM 280 Co-op Ed: Automotive See page 163
ANTH 280 Co-op Ed: Anthropology See page 157
ART 280A Co-op Ed: Art and Applied Design See page 161
ART 280GD Co-op Ed: Graphic Design See page 200
AV 280 Co-op Ed: Aviation Maintenance See page 163
BA 280 Co-op Ed: Business Management See page 167
BA 280AA Co-op Ed: Administrative Assistant See page 156
BA 280AC Co-op Ed: Accounting See page 156
BA 280L Co-op Ed: Legal Assistant See page 209
BA 280SM Co-op Ed: Sales and Marketing See page 167
BI 280 Co-op Ed: Biology See page 166
CA 280 Co-op Ed: Culinary Arts, Second Year See page 178
CG 180 Co-op Ed: Extended Career Exploration See page 168
CG 280HS Co-op Ed: Human Services See page 205
CH 280 Co-op Ed: Physics-Chemistry See page 169
CJA 280 Co-op Ed: Criminal Justice See page 176
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. This course provides students work experience with community partners in addressing real community needs. Students will use skills acquired at Lane in an instructional program designed to promote critical thinking, citizenship and civic responsibility. Students identify learning objectives and engage in faculty-led guided reflection activities. In this course students may develop skills, explore career options, and network with professionals while earning college credit.
CS 280CN Co-op Ed: Computer Network Operations See page 172
CS 280DP Co-op Ed: Data Processing See page 172
CS 280GD Co-op Ed: Simulation \&
Game Development See page 172
CS 280PR Co-op Ed: Programming See page 172
CS 280US Co-op Ed: Computer User Support See page 172
CST 280 Co-op Ed: Construction See page 175
DA 280 Co-op Ed: Dental Assisting See page 182
DH 280 Co-op Ed: Dental Hygiene See page 183
DS 280 Co-op Ed: Diesel See page 184
ED 280 Co-op Ed: Education See page 189
ED 280EC Co-op Ed: Early Childhood Education See page 189
ED 280SE Co-op Ed: September Experience See page 189
EMT 280P1 Co-op Ed: EMT Internship Part 1 See page 191
EMT 280P2 Co-op Ed: EMT Internship Part 2 See page 191
ENGR 280 Co-op Ed: Engineering See page 193
ENGR 280D Co-op Ed: Drafting See page 185
ENGR 280E Co-op Ed: Electronic Technology See page 189
ENGR 280M Co-op Ed: Manufacturing Technology See page 212
ENGR 280W Co-op Ed: Welding See page 195
ES 280 Co-op Ed: Ethnic Studies See page 195
FL 280IW Co-op Ed: International Work Experience See page 207
FR 280 Co-op Ed: French See page 208
FT 280 Co-op Ed: Flight Tech See page 199
G 280 Co-op Ed: Geology See page 188
G 280ES Co-op Ed: Enviornmental Studies See page 188
GEOG 280 Co-op Ed: Geography See page 199
GS 280ST Co-op Ed: Science Technology See page 188
GWE 280 Co-op Ed: General Work Experience See page 226
HE 280 Co-op Ed: Health Occupations See page 201
HIT 280 Co-op Ed: Health Records See page 202
HRTM 280 Co-op Ed: Hospitality Management See page 179
HST 280 Co-op Ed: History See page 204
J 280 Co-op Ed: Journalism See page 207
LAT 280 Co-op Ed: Landscape See page 175
MA 280 Co-op Ed: Medical Office Assistant See page 219
MDP 280 Co-op Ed: Multimedia See page 220
MTH 280 Co-op Ed: Mathematics See page 218
MUS 280 Co-op Ed: Music See page 222
NRG 206 Co-op Ed:Energy Mgmt. Seminar See page 193
NRG 280 Co-op Ed: Energy Management See page 193
NRS 280 Co-op Ed: Nursing See page 225
OST 280 Co-op Ed: Occupational Skills See page 226
PE 280 Co-op Ed: Physical Education See page 197
PE 280A Co-op Ed: Athletics See page 197
PE 280AR Co-op Ed: Aerobics See page 197
PE 280AT Co-op Ed: Athletic Training See page 197

PE 280C Co-op Ed: Coaching See page 197<br>PE 280F Co-op Ed: Fitness See page 197<br>PE 280H Co-op Ed: Community Health Contact Department<br>PE 280M Co-op Ed: Fitness Management See page 197<br>PE 280R Co-op Ed: Recreation See page 197<br>PE 280RT Co-op Ed: Rehabilitation Therapies See page 197<br>PE 280W Co-op Ed: Wellness See page 197<br>PS 280 Co-op Ed: Political Science See page 234<br>PS 280LW Co-op Ed: Pre Law See page 234<br>PSY 280 Co-op Ed: Psychology See page 235<br>RE 280 Co-op Ed: Real Estate See page 235<br>RT 280 Co-op Ed: Respiratory Therapy See page 237<br>SOC 280 Co-op Ed: Sociology See page 238<br>SP 280 Co-op Ed: Speech See page 239<br>SPAN 280 Co-op Ed: Spanish See page 209<br>TA 280 Co-op Ed: Performing Arts See page 240<br>WR 280 Co-op Ed: English/Writing See page 244

## Criminal Justice

For information, contact Social Science, Center Bldg./Rm. 403, (541) 463-5427.
CJA 100 Introduction to Criminal Justice 1. $\qquad$ 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 $\qquad$ 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 199 SS: 3 credits
See department for topics.
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 $\qquad$ 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 corrections officers in one-to-one contacts with clients. To prepare the student for practice in the field of corrections, both adult and juvenile.
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. $\qquad$ ..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 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.

## Culinary Arts and Hospitality Management

For information, Contact Culinary Arts and Hospitality Management, Bldg. 19/ Rm. 202, (541) 463-3503.

CA 110 Culinary Adventuring: Local Guest Chef Series........ 2 credit This course is 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 This course is open to the public. It is designed to introduce students to the "rebirth" of regional cuisines and apply techniques in baking and pastry which reflect the local produce. Students will learn the history of seasonal fruits and vegetables and their local availability as well as Oregon agriculture and its organic and sustainable values. Holidays and cultural traditions are explored through seasonal recipes, and the local "flavor" is enhanced with studies of farms, markets, companies, and restaurants that support sustainable cuisine. With guided, hands-on instruction, students will acquire the fundamentals of baking with this season's fruits, vegetables, and herbs as well as prepare for the next season's offerings.
CA 121 Culinary Adventuring: The Composition of Cake ..... 2 credits Cake in all its glory has been a celebratory symbol of religious and social traditions in all cultures since the Egyptians. Its history ranges from simple to the ornate and themed in endless variations like no other baking medium. This class is designed to teach the classical fundamentals of baking and decorating cakes that taste great and look fabulous. With the demand in the food service industry for experienced and skilled cake bakers and decorators, students will learn essential skills to advance in the workforce. All components of making and decorating a cake will be covered such as cake layers, fillings, frostings, assembly, piping and decoration. Students will be introduced to working with specialty cake ingredients such as fondant and marzipan as well as become familiar with cake baking and decorating equipment. With regard to Oregon's culinary "terroir", this class will focus on using the finest in local, regional and organic products to support sustainability.

CA 122 Artisan Breads 2 credits
This course is open to the public.t You will be inspired, challenged and learn all about Artisan Breads. $\dagger$ You will roll up your sleeves and mix, ferment, punch down, shape, score, finish and bake doughs into delicious loaves.

## CA 123 Culinary Adventuring:

International Baking \& Pastry .................................................. 2 credits
This course is open to the public. Interested in the history of a particular country's cuisine and cultural food traditions? Creating a repertoire of baked goods has been an art and skill since the age of the Pharoahs. The travels and landings of ingredients, plants, and spices across the entire world have inspired countries to celebrate their uniqueness with great cuisine and exceptional baked goods and fine pastry. This class will focus on learning the history of baking and pastry from a variety of global regions and countries as well as creating their authentic and traditional recipes, both sweet and savory. The evolution of food fusions, current global culinary trends, and food history from our beloved Pacific Northwest region will also be studied. A great class for your curious, culinary palate!
CA 130 Culinary Adventuring: Oregon Wine Country . . 2 credits This course is open to the public 21 years or older. The course introduces students to the process of winemaking as it relates to Oregon, especially the Willamette Valley. Over the eleven weeks class period, winemakers from the Willamette Valley will discuss their wines and demonstrate how they complement foods. Students will taste wines with appropriate foods and evaluate the pairings. Local foods will be used whenever possible. One class will feature wine writers and what they look for in evaluating wines.
CA 159 Kitchen Operations
3 credits
This course will give hospitality students an appreciation for the operation of a foodservice kitchen. The students will enjoy a handson experience including the fundamentals of food safety, sanitation, tools and equipment, basic cooking techniques, and fundamental skills that are found in kitchen operations.

CA 160 Cooking Theories 1 .0-5 credits
Co-requisite: HRTM 105 and CG 203 and MTH 025. In this class students will learn and practice the fundamentals of food safety and sanitation, tools and equipment identification and safe use, and proper kitchen and personal hygiene. Introduction to key culinary concepts, terminology and history as well as an overview of kitchen food products and their uses. Fundamental culinary math in relation to recipe comprehension, conversion and costing will be practiced from the point of view of menu types and basic understanding of menu concepts. Basic cooking theory, applications and techniques will be practiced in the preparation of stocks, soups and sauces.

CA 160A Food Preparation and Production 1 $\qquad$ .3 credits
In this class students will be introduced to the fundamentals of food safety and sanitation; tools and equipment identification and safe use; proper kitchen and personal hygiene; key culinary concepts, terminology and history. Students will receive an overview of kitchen food products and their uses; the fundamentals of culinary math in relation to recipe comprehension, conversion and costing from the point of view of menu types and basic understanding of menu concepts; and will be introduced to basic cooking theory, including applications and techniques in the preparation of stocks, soups and sauces.
CA 160B Food Preparation and Production 2 .2 credits In this class, which is a continuation of CA 160 A, students will learn and practice: the fundamentals of food safety and sanitation; tools and equipment identification and safe use; proper kitchen and personal hygiene; key culinary concepts, terminology and history. Students will further review kitchen food products and their uses; the fundamentals of culinary math in relation to recipe comprehension, conversion and costing from the point of view of menu types and basic understanding of menu concepts; and will apply basic cooking theory, including in the preparation of stocks, soups and sauces.
CA 162 Cooking Theories 2 $\qquad$ . $0-6$ credits Prerequisite: CA 160 and HRTM 105. Co-requisite: CA 184. In this class students will continue to learn and practice key food safety and sanitation techniques and principles, tools and equipment identification and safe use, and proper kitchen and personal hygiene as it applies to a food service production setting. Introduction to key concepts, terminology and history of meat fabrication, charcuterie, and garde manger/buffets, as well as an
overview of products and their uses in these settings. Intermediate culinary math in relation to recipe comprehension, conversion and costing will be practiced from the point of view of recipes used in a meat fabrication production setting including cutting and cooking yield tests. Basic meat fabrication, charcuterie and garde manger/buffet theory, applications and techniques will be presented and practiced in the identification, breakdown, preparation and finishing of a variety of meat, fish, poultry and vegetarian items.
CA 163 Cooking Theories 3. .. 6 credits Prerequisites: CA 160 and CA 162. Corequisite: CA 185. In this class students will learn and practice the fundamentals of food safety and sanitation, tools and equipment identification and safe use, and proper kitchen and personal hygiene as it applies to a bakeshop setting. Introduction to key baking concepts, terminology and history as well as an overview of bakeshop products and their uses. Fundamental culinary math in relation to recipe comprehension, conversion and costing will be practiced from the point of view of baker's percentages. Basic baking theory, applications and techniques will be practiced in the preparation of yeast goods, quick breads, cookies, pies, cakes, and desserts.
CA 163A Beginning Baking and Pastry. $\qquad$ 3 credits In this class students will be introduced to the fundamentals of food safety and sanitation, tools and equipment identification and safe use; proper kitchen and personal hygiene as it applies to a bakeshop setting; key baking concepts, terminology and history. Students will receive an overview of bakeshop products and their uses; fundamental culinary math in relation to recipe comprehension, conversion and costing will be learned from the point of view of bakeries percentages; basic baking theory, applications and techniques will be learned in the preparation of yeast goods, quick breads, cookies, pies, cakes and desserts.

CA 163B Intermediate Baking and Pastry $\qquad$ .3 credits In this class, which is a continuation of CA 161 A, students will practice the fundamentals of food safety and sanitation, tools and equipment identification and safe use; proper kitchen and personal hygiene as it applies to a bakeshop setting; key baking concepts, terminology and history. Students will further review bakeshop products and their uses; fundamental culinary math in relation to recipe comprehension, conversion and costing from the point of view of bakeries percentages; basic baking theory, applications and techniques will be practiced in the preparation of yeast goods, quick breads, cookies, pies, cakes and desserts.
CA 163 C Advanced Baking and Patry. $\qquad$ .3 credits
Pre-requisites: CA 161A, CA 161B; or instructor approval. In this class, which is the final class following the sequence of CA 161A and CA 161B, students will practice the fundamentals of food safety and sanitation techniques and principles, tools and equipment identification and safe use; proper kitchen and personal hygiene as it applies to a bakeshop setting; key baking concepts, terminology and history. Through lectures, demonstrations, and participation, students learn the practice and development of techniques and skills expected of a working pastry chef in the industry. Under the direction of the instructor, the student will create custards, mousses, soufflés, frozen desserts, fruit desserts, chocolate and sugar techniques, dessert presentation, and specialty dessert techniques.
CA 175 Foodservice Sanitation and Safety $\qquad$ .2 credits
This course presents the basics of food service and hospitality sanitation. The text examines a systematic approach to sanitation management by the use of control points and effective use of four basic resources. The National Restaurant Association (NRA) certificate exam will be issued upon completion of the course.

CA 176 Concepts of Taste and Flavor .2 credits
Prerequisite: CA 161, CA162, CA 163, CA 184, and CA 185. Corequisite: CA 186. This class is designed to explore, examine and develop an understanding of the basics on how we taste foods. This class will cover the fundamentals, vocabulary and nuances of the taste, aroma, flavor, and texture of foods, and how these concepts interplay between food items and between food and wine.

CA 184 Dining Room and Kitchen Lab $\qquad$ .0-3 credits Prerequisite: CA 160, MTH 025, HRTM 105, CG 203. Dining Room and Kitchen Lab 1 is designed to create authentic working conditions of a food service operation. It offers students learning experiences involving food preparation skill development, food theory, management and personnel responsibilities, and a progressive attitude toward food preparation and service. Students will be exposed to all aspects of restaurant work by rotating through at least 11 different job positions.
CA 185 Dining Room and Kitchen Lab 2 $\qquad$ .4 credits Prerequisite: CA 184 and CA 162. Beginning and intermediate level of line preparation. Preparation of menu items that are indigenous to the cultures of American, Continental and Asian cuisine. Line cooking, table service and organization of student restaurant. Participation in main kitchen in a variety of large scale food production activities.
CA 186 Dining Room and Kitchen Lab 3 $\qquad$ 4 credits Prerequisite: CA 185 and CA 160, CA 162, CA163. A continuation of Dining Room and Kitchen Lab 2. Intermediate level of line preparation and dining room service. In this second term the student will gain more hands-on-experience with American, Continental, and Asian cuisines. The focus is on planning, production, preparation, and presentation of these dishes and an emphasis on speed and skills in main kitchen production activities

CA 187 Dining Room and Kitchen Supervision .0-4 credits Prerequisite: CA 160, CA 162, CA163, CA 184, CA 185, and CA 186. Corequisite: CA 176. The last module of restaurant lab gives the second-year student an opportunity to manage the restaurant. Students will put their menu project to work and learn how to effectively manage first-year students. Emphasis will be on organizational skills, planning, advanced a la carte dining techniques, and training beginning students.

CA 199 Special Studies:...............................................................1-3 credits See department for topics.
CA 199A Special Studies: $1-3$ credits
See department for topics.
CA 200 Restaurant and Menu Management. . 3 credits Co-requisite: CA 185. This course will enable the student to apply menu planning principles as an indispensable management tool for a variety of food service operations. The student will learn the fundamentals of dining room supervision, designation of responsibilities, organization, and customer relations. In addition, students will learn the basic setup and operation of a fully equipped bar with emphasis on wines, liquors, and special drinks.
CA 225 Catering Lab. 2 credits
Prerequisite: Second year standing, Culinary Arts. Catering Lab is designed to create authentic working conditions in a catering environment. It offers student learning experiences involving running a full-service conference center catering operation, using the Center for Meeting and Learning and actual scheduled events. It includes: learning activities involving customer service,event menu planning, organizing catering workflow and production, plate and menu design, buffet presentation, safe food handling and sanitation, effective communication skills and evaluation for continuous improvement. Students will be involved in all aspects of the catering operation in the Center for Meeting and Learning
CA 277 Culinary Competition Lab 2 credits
Prerequisite: Instructor permission. This course provides an overview of the current standards of modern culinary competitions. Students create a competion standard judges packet, including recipes, equipment lists, photographs and timetable. Students will also participate in creating the project under three competition standard settings and once as a judge for other students in the lab. Students who meet the criteria may have the opportunity to compete in an American Culinary Federation sanctioned competition.

CA 279 Buffet and Banquet Planning .2 credits Prerequisite: Second year standing, Culinary program or previous experience, both with department permission. This course covers the basics of planning, organizing, preparing and serving large dinner parties and buffets, including wine and beverage service. A heavy emphasis is placed on student participation and creativity.

Students are involved in executing at least one major special event per term in coordination with the Hospitality portion of this class.. This course is primarily open to Culinary Arts students and the focus is on back-of-the-house activities.
CA 280 Co-op Ed: Culinary Arts, Second Year $\qquad$ 3-12 credits This course provides the student with food service-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 college credit.
CA 292 Advanced Cooking Theories 1 (Garde Manger) ......... 3 credits Co-requisite: CA 186. This course will examine the principles of successful buffet management with particular emphasis on presentation, selection and purchase of foods and utilization of sanitation and storage techniques. Students will also develop garnishing skills and be introduced to the modern and traditional techniques in the preparation of cold entrees, pates, terrines, galantines, chaud-froid and ice carving.

CA 293 Advanced Cooking Theories 2 (International) .. 3 credits Prerequisite: CA 292. Corequisite: CA 187. Advanced cooking and baking techniques used in dinner restaurants, featuring international cuisine. Techniques for set up and service of large functions involving participation in personnel assignment, food purchasing, dining room layout, table setting, and different table services. Students will prepare and serve two six-course meals.
CA 294 Advanced Cooking Theories 3 ( American Regional) 3 credits Prerequisites: Ca 292, CA 293. This course covers advanced cooking and baking techniques used in dinner restaurants, featuring regional American cuisine. Students learn techniques for set up and service of large functions involving participation in personnel assignment, food purchasing, dining room layout, table setting, and different table services. Students will prepare and serve a six-course meal.

CA 297 Culinary Leadership: Principles and Practices.......0-3 credits Prerequisite: CA 160, CA 162, CA 163, CA 184, CA 185, CA 186, CA 200, CA 292, CA 293, HRTM 265, HRTM 275, MTH 025, and CG 203. Co-requisite: CA 294. This class is the culinary capstone for second year culinary students to be administered in the last term of their degree program. It is intended that this class be composed of three elements: a) final competency test to qualify as an ACF 'Certified Culinarian' upon graduation, b) final content evaluation on core abilities, leadership principles and practices and c) a service learning component.
CA 297L Culinary Leader: Principles and Practices-Lab........ 0 credits
CA 299 Trends: $\qquad$
CA 299A Trends: $\qquad$ .1-3 credits See department for topics.
HRTM 104 Introduction to Travel and Tourism . 3 credits This course is designed to provide students with a basic knowledge of tourism-related concepts and the kind of practical experience, which will enable them to effectively apply those concepts to the hospitality industry.
HRTM 105 Restaurant Operations. $\qquad$ . 3 credits
The course gives the student an overview of the hospitality industry; safety and sanitation; and the basics of French, American, English, and Russian-type table services.

HRTM 106 Introduction to Hospitality Management $\qquad$ .3 credits
A general overview of hospitality management. Covers the growth and development, organization and structure, and all functional areas of the lodging and food service industry. Explains both management and operational functions of hospitality operations. Discusses the personal and professional demands of hospitality management, managing human resources and the future industry.

## Course Fees

Many courses may have additional fees. Please refer to the web class schedule credit listings and registration information for updated fee information and fee amounts.

HRTM 109 Principles of Meetings and

## Convention Management

Students will identify the elements and techniques used in obtaining convention business. This course describes the different types of corporate meetings, the personnel who control these meetings, and the management skills and methods required to communicate with company executives.
HRTM 110 Hospitality Sales and Marketing .. 3 credits
This course is designed to provide students with basic knowledge and practical experience by identifying the type of products and services consumers want. In-depth look at strategies and tactics specific to hospitality services. The course will demonstrate how hotels, motels and resorts can play up their unique features to compete more effectively in their market.
HRTM 120 Communications and Guest Relations. $\qquad$ 3 credits
This course covers management of the total hospitality guest experience, from proper service techniques to motivating and empowering employees. It serves as a strong introduction to developing and maintaining quality customer service. The text book is an excellent source for helping the student learn how an organization is managed to meet or exceed guest expectations.
HRTM 130 Hospitality Information Systems. $\qquad$ 3 credits
This course will cover the technological side of the hospitality industry. Restaurant management systems (POS) and hotel property management systems (PMS) will be accessible to the students through the computer lab (hands-on) and the strategies for business intelligence and system procurement decisions will be discussed.

HRTM 140 Security in the Hospitality Industry $\qquad$ 3 credits This course summarizes issues surrounding the security needs of travelers, hotel guests, restaurant patrons, and ancillary business involved with the hospitality industry. The student will compare and contrast a wide variety of security and safety equipment and procedures. Guest protection, internal security for asset protection and OSHA regulations will be described as they relate to the hospitality industry.
HRTM 150 At Your Service $\qquad$ .. 2 credits Would you like to enhance your serving skills? Perhaps you would like to begin a career in the hospitality industry. At Your Service will help you develop the skills to become a professional server. Topics include exceeding guest expectations, suggestive selling techniques, wine and beverage service, and much more. All restaurant employees are encouraged to attend, including kitchen employees. Upon completion of this course the student will have a comprehensive knowledge of how to professionally serve the public in a restaurant setting.
HRTM 199 SS:
.. 2 credits
See department for topics.
HRTM 225 Hospitality Management Lab $\qquad$ .2 credits
Hospitality Management Lab is designed to create authentic working conditions of a hospitality environment. It offers student learning experiences involving running a full-service conference center operation, using the Center for Meeting and Learning and actual scheduled events. It includes learning activities involving customer service, event planning, meeting with clients, arranging for auxiliary services, catering planning, room set-up, day-of-event management, and evaluation for continuous improvement. Students will be involved in all aspects of the Center for Meeting and Learning.
HRTM 230 Hotel Operations 1 3 credits
This course will introduce the hotel front office operations, housekeeping, property management, and food and beverage operations. Particular attention will be focused on guest quality and its relationship to the various hotel departments.
HRTM 231 Hotel Operations 2 .3 credits
Prerequisite: HRTM 230. This course will continue hotel operations with emphasis on the gaming industry, hotel law, the unique aspects of resort management, and trends in the hotel business. Accounting systems, especially dealing with yield management, will be discussed. Students will practice on an actual property management system.
HRTM 260 Supervision in the Hospitality Industry. .3 credits New and aspiring supervisors will find practical advice for dealing effectively with people in a hospitality work environment. Topics include effective communication, orientation and training,
managing productivity, coaching, discipline, team building, managing conflict, and professional development. New topics including using e-mail and voice mail effectively and updated information on training methods and team development.
HRTM 265 Hospitality Financials 1 $\qquad$ .3 credits
This course presents an overview of cost-control procedures including purchasing, storage, issuing, production, and financial topics for food and beverage, labor, and other expense areas in the hospitality industry. The curriculum will emphasize a hands-on approach to the subject.
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 recipe and menu costing, will be discussed. Industry financial statements will be discussed and analyzed.

HRTM 279 Buffet and Banquet Planning .2 credits This course covers the basics of planning, organizing, and serving large dinner parties and buffets including wine and beverage service. Students are involved in executing at least one major special event per term in coordination with the Culinary section of this class. The students perform all front-of -the-house activities including advertising and promotion, dining room management, entertainment, reservations and seating, dining room service, and post event critique.
HRTM 280 Co-op Ed: Hospitality Management.
3-12 credits
This course provides the student with hospitality managementrelated 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 college credit.
HRTM 281 Restaurant Ownership 3 credits
This course will discuss and develop systems and procedures for opening a restaurant. All essential elements for developing a restaurant concept including finding a location, negotiating a lease, financing, menu development, and staffing will be covered. This information will benefit the student in the development of a business plan.

HRTM 286 Fundamentals of Wine, Spirits, and Beer $\qquad$ 3 credits
This course will introduce students to the world of wines, spirits, and beers. The history of beverages will be discussed with emphasis on the wine-making areas of the world with special attention to Oregon wines and food pairings. Students will learn how to cost alcoholic beverages and prepare a wine list. Beverage controls and Oregon Liquor Control Commission laws will be highlighted.
HRTM 290 Hospitality Leadership $\qquad$ .4 credits Prerequisite: HRTM 120 and HRTM 260. This course is the hospitality management capstone for second-year students to be administered in the last term of their degree program. The course will explore the leadership qualities of successful operators in the hospitality industry. It will also discuss the key elements of management theory and practice, including delivering quality service, communications, power and empowerment, team-building, diversity, coaching, and conflict management. A community service requirement of 20 hours is included.

## Dance

## Also see Physical Education

For information about classes with course numbers that begin with:
D - Contact Music, Dance and Theatre Arts, Bldg. 6/Rm. 205, (541) 463-5209.
PE - Contact Health and PE, Bldg. 5/Rm. 205, (541) 463-5545.
D 152 Dance Basics .2 credits Introducing basic techniques of dance, for students who have never taken a technique class. The class presents alignment principles, weight shifts, level changes and elements of movement such as use of space, shape and dynamics. Students develop a strong foundation in dance so they can proceed in their training in ballet, modern or jazz. Class is repeatable up to 12 credits.

D 153 Pilates Mat Work 2 credits This class explores the Pilates method of body conditioning, a unique system of stretching and strengthening exercises developed over ninety years ago by Joseph H. Pilates. Pilates strengthens and tones muscles, improves posture, increases flexibility and balance. The Pilates method unites the body and the mind and and positively affects body awareness self-image, and posture. Class is repeatable up to 12 credits.

D 154 Pilates Mat Work 2 2 credits
This course builds on the fundamentals of Pilates with more advanced exercises. Pilates is a unique system of stretching and strengthening exercises developed over ninety years ago by Joseph H. Pilates. Pilates strengthens and tones muscles, improves posture, increases flexibility and balance. The Pilates Method unites the body and the mind and positively affects body awareness, self image and posture.
D 160 Dance Composition
3 credits
Prerequisite: D 257. Composition techniques are learned and applied, with specific emphasis on form, quality, spatial relationships, and rhythmic manipulation. Students in this course can present their work in the annual production of "The Works" Student Dance Concert. This is a required course for dance majors, and meets the Arts and Letters requirement for the AAOT degree. Class is repeatable up to 12 credits. Offered winter term only.
D 172 Dancing the Fluid Body. 2 credits
This course explores the concepts of Continuum Movement, a somatic approach to understanding the body and its capacities. Specific breath and sound techniques will be introduced to stimulate the fluidity of the body. Students will explore wave motion and spiral movements varying from subtle micromovements to dynamic full-bodied expression. Discussions of the body in relation to culture, anatomy, and ecology will be springboards for movement explorations.
D 173 African Dance.
2 credits
This class is an introduction to African dance. Students will learn contemporary and traditional dances from Guinea while exploring rhythm and movement within the cultural context of community. Relevant history will be explored through assigned readings, video, and class discussions. Class is repeatable up to 12 credits.

D 175 Tap Dance Beginning 2 credits
This class is an introduction to the technique of tap dance. Students learn the basic vocabulary and technique of the form in both individual exercises and in integrated choreographed sequences. The course will cover the basics of rhythm, including tempo, beat, meter, accent, syncopation, and musical structures. Improvisational skills will be be developed as students integrate the understanding of tap technique with a sense of musicality and performance. The course will include a historical overview of the development and evolution of the form, in film, lectures, experientials and performance.
D 176 Fluid Yoga 2 credits
This Yoga class will explore yoga postures, breath, and will cultivate an inner listening to the waves and spirals present in our primarily fluid bodies. Emphasis will be placed on developing a yoga practice that encourages creativity and fluidity. The history of Yoga and its evolution into western culture will be examined. Class is repeatable up to 12 credits.
D 180 Modern Dance 1 2 credits This beginning level class for dancers with little or no previous dance experience, accommodates the pre-major and non-major student. Modern dance technique is introduced with focus on threedimensional use of the spine and torso, joint articulation and mobility, core strength, expressivity and spatial awareness. Given realistic progressive development, students will repeat this level three times before advancing to Modern 2. Second and third terms offer an accelerated introduction to accomodate newcomers yest sustains the development of returning students. Class is repeatable up to 12 credits.

D 181 Modern Dance 2 2 credits
This intermediate level class accommodates the pre-major and non-major student. This class further develops the student's awareness of modern dance technique and vocabulary. Training continues with dance movements that incorporate: threedimensional use of the spine and torso, joint articulation and mobility, core strength, expressivity and spatial awareness. Students will deepen their understanding of these concepts while
developing more sophisticated connections both in the body and in relation to space. Given realistic progressive development, students will repeat this level for a full year or more. Class is repeatable up to 12 credits.
D 182 Modern Dance 3. .2 credits
This intermediate-advanced level class accommodates the dancemajor and non-major student. This class further develops the students awareness of modern dance technique and vocabulary. Training continues with more complex dance movements that incorporate: three-dimensional use of the spine and torso, joint articulation and mobility, core strength, expressivity and spatial awareness. Students will deepen their understanding of these concepts while developing more sophisticated connections both in the body and in relation to space. They will learn longer movement sequences, which will involve a more complex use of space, weight, time, and dynamic effort and quality variations. Given realistic progressive development, students will repeat this level for three terms. Class is repeatable up to 12 credits.
D 183 Body/Mind Stretch and Relaxation. $\qquad$ .2 credits This course explores the body-mind connection through stretch and relaxation exercises and techniques. The course is designed to increase one's personal awareness of their body and to integrate the body and the mind in movement. Study of the skeleton, muscle, organ, fluid and nervous systems will enhance one's ability to stretch efficiently. There is an emphasis placed on the parasympathetic nervous system, which is activated by internal focusing, eyes half-closed and slow, fluid movement.

D 184 Hip Hop 1
.2 credits
This introductory course explores elements of Hip-Hop, Jazz Dance and Street Dance. It is a fun, high-energy class. Students should be in good condition without chronic injuries. Class is repeatable up to 12 credits.

D 185 Ballet 1 .2 credits
For dancers with little or no previous dance experience. This beginning level class accommodates the pre-major and non-major student. This class develops the student's awareness of the fundamental principles of classical ballet. Second and third terms offer an accelerated introduction to accomodate newcomers yet sustain the development of returning students. Given realistic progressive development, students will repeat this level three times before advancing to Ballet 2. Class is repeatable up to 12 credits.
D 186 Ballet 2 .2 credits
This intermediate level class accommodates the pre-major and non-major student. This class develops the student's awareness of alignment in basic ballet vocabulary. Barre work builds understanding of ballet vocabulary that incorporates: use of the spine and torso; outward rotation of the legs; articulation of the feet and use of the arms in port de bras. This class introduces more challenging center floor phrases, adagios, petit allegros and grande allegros. Given realistic progressive development, students will repeat this level three times before advancing to Ballet 3. Class is repeatable up to 12 credits.
D 187 Ballet 3 .2 credits
This intermediate-advanced level class accommodates the dance major and non-major student. This class develops the student's strength in centered-alignment. Barre work builds on the student's ballet vocabulary. Focus is on technical execution, musicality, and line. This work gives the student a broad base for center floor phrases, adagios, petit allegros and grande allegros. Given realistic progressive development, students will repeat this level for three terms. Class is repeatable up to 12 credits.
D 188 Jazz Dance 1.
.2 credits
This beginning level class accommodates the pre-major and nonmajor student. This class develops the student's awareness of alignment in basic jazz dance vocabulary. Jazz movements are introduced which incorporate: isolations of shoulders, hips, ribs, head, arms and legs; spatial awareness and rhythmic variations. Students are encouraged to take ballet and modern to augment their jazz training. Class is repeatable up to 12 credits.
D 189 Jazz Dance 2. .... 2 credits
This beginning-intermediate level class accommodates the premajor and non-major student. This class develops the student's awareness of alignment in jazz dance vocabulary. Training continues with jazz movements that incorporate syncopation of body parts, dynamics, and spatial and rhythmic variations. Students are encouraged to take ballet and modern to augment
their jazz training. Class is repeatable up to 12 credits.
D 190 Jazz Dance 3. $\qquad$ .. 2 credits This intermediate level class accommodates the dance major and non-major student. This class continues to develop the student's understanding of jazz vocabulary and technique. Training continues with more complex jazz phrases that incorporate: syncopation of body parts, dynamics and spatial and rhythmic variations. Students are encouraged to take ballet and modern to augment their jazz training. Class is repeatable up to 12 credits.
D 194 Hip Hop 2 . 2 credits
This intermediate level course explores the elements of Hip-Hop, Jazz Dance, Street Dance and Funk. It is a fun high-energy class where students learn discipline and professionalism. With emphasis on athleticism in dance, students are expected to be in good condition free of chronic injuries. Class is repeatable up to 12 credits.
D 199 Special Studies .............................................................. 2 credits
See department for topics.
D 199A Special Studies:.. .1 credit
See department for topics.
D 251 Looking at Dance.. 4 credits
This fun and enriching course focuses on various cultural and historical pespectnes of dance. From Hip Hop to Classical Ballet, from Folk dance to World dance, the course explores dance as an art form, in its expressive, communicative, and aesthetic aspects. Enhances the student's understanding and enjoyment of this performing art. Meets Arts and Letters requirement for the AAOT degree. Writing 121 recommended.
D 256 Body Fundamental/Body as Knowledge. $\qquad$ . 4 credits This course introduces students to body systems including muscular, skeleton, organ, fluid, nervous, fascial and endocrine system. Re-patterning movement is introduced through various somatic disciplines such as: Bartenieff fundamentals, Laban Movement Analysis, Ideokinesis, and Body Mind Centering including Developmental Movement. Value is placed on embodiment of anatomy through movement, touch and imagination to gain insight into functions and movement potential. A required course for dance majors and a beneficial class for everyone. Meets Arts and Letters requirements for the AAOT degree and satisfies a University of Oregon dance major prerequisite. Required for Dance majors.

## D 257 Dance Improvisation.

 . 2 credits This course is an introduction into dance improvisation and the elements of dance composition. Students develop creative invention, sponteneity, confidence in self expression, concentration, and movement range and possibilities. Explorations will include solo, duets, and group dances. This course is a pre-requisite for D160 and D260.Class is repeatable up to 12 credits. Offered fall term only.D 260 Group Choreography .3 credits
Prerequisite: D 257. Group Choreography tools and techniques are learned and applied including canon, ground bass, antiphonal, and chance. Emphasis is placed on dynamics, special relationship, clarity and form. May be used to meet Arts and Letters requirement for the AA/OT degree Class is repeatable up to 12 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 a dance concert or theatrical production of the department scheduled for public performance. May be repeated for maximum of nine credits. Class is repeatable up to 12 credits.

## D 288 Jazz Dance 4.

 2 creditsThis is an advanced level class that accommodates the dance major and non-major student. This class continues to develop the student's understanding of alignment in intermediate jazz dance vocabulary. Training continues with complex jazz movements that incorporate syncopation of body parts, dynamics, spatial and rhythmic variations. Emphasis is placed on technical proficiency and performance. Students are encouraged to take ballet and modern to augment their jazz training. Class is repeatable up to 12 credits.
D 298 Independent Study.. 1-6 credits
A variable credit course based on independent study contracted between an instructor and a student.

## PE 187B Ballroom Dancing Beginning

$\qquad$ 1 credit
Ballroom dance styles emphasizing the 'basics' and partnering techniques of social dance forms including foxtrot, swing, waltz, rumba, and cha-cha.
PE 187M Latin Dancing Beginning .1 credit
Introduction to basic Latin dances: Salsa, Cha-Cha, Rumba, American Tango, Cumbia and Merengue. Emphasis on good lead and follow and dance style technique.
PE 187P Salsa Dancing
.. 1 credit
Learn the basic steps of salsa, intermediate and advanced combinations, spins and turns, and individual footwork. Emphasis on the basics of lead and follow, Latin hip motion, proper technique, and styling.
PE 187S Swing Dancing 1 credit Introductory course will include basic instruction in single-time and triple-time East Coast swing, introduction to 8-count Lindy Hoop, and standard FoxTrot. Emphasis will be placed on leading and following, stylistic differences between the dances, and linking the different dances together. Open to all students; no prior experience in dance is necessary.

## Dental Assisting

For information, contact Health Professions, Bldg. 4/Rm. 222, (541) 463-5617. You must be accepted into the Dental Assisting program to take these classes.

## DA 102 Advanced Clinical Experiences.

 .3 credits Prerequisite: Currently enrolled in the Dental Assisting Program. Knowledge, techniques and communication skills for client management. Course will simulate a work day, and provide the student an opportunity to demonstrate a variety of expanded function chairside assisting and client care skills.DA 103 Dentistry Law and Ethics .2 credits
Course content includes the development of dentistry and its related professions. Covers ethics and jurisprudence for dental professionals. A study of the Oregon Dental Practice Act, roles of the dental health team and an introduction to the dental office environment are also included in this course. This course may be taught online. May be offered through Distance Learning.
DA 107 Dental Health Education 1. 1 credit
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.
DA 108 Dental Health Education 2 .3 credits Prerequisite: DA 107 LvI:CR Grd:C Must be taken in sequence. This course covers the practical application of preventive dentistry concepts. Topics will include patient motivation, coronal polishing, fluoride application, nutritional counseling, the recognition of normal and abnormal oral conditions and community service programs.

## DA 110 Health Sciences.

$\qquad$ . 3 credits
The study of structure and function of the human body. Bacteriology and microbiology, are discussed. *The first two terms of Anatomy and Physiology (passed with a grade of C or better) can be substituted for this course.

## DA 115 Dental Anatomy

 . 3 creditsPrerequisite: Currently enrolled in the Dental Assisting Program This course covers the study of head \& neck anatomy with an emphasis of individual teeth and tooth surfaces using the universal numbering system.

## DA 192 Dental Materials

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.

## Course Fees

Many courses may have additional fees. Please refer to the web class schedule credit listings and registration information for updated fee information and fee amounts.

DA 193 Dental Materials 2 $\qquad$ 3 credits
Prerequisite: Currently enrolled in the Dental Assisting Program. Completion of laboratory procedures, such as amalgam and composite, die construction, Hawley retainer, bleaching trays, temporary crown construction, temporary restorations, and custom trays associated with specialties covered in Chairside Procedures 2 DA196.
DA 194 Dental Office Procedures. $\qquad$ 3 credits
Prerequisite: Currently enrolled in the Dental Assisting Program. Principles of appointment planning, telephone techniques, case presentation, and management of client accounts. Teaching is done in a computer lab to support computerized instruction.
DA 195 Chairside Procedures 1 $\qquad$ .6 credits
Prerequisite: Currently enrolled in the Dental Assisting Program. Basic chairside assisting procedures, such as preparation of client, oral evacuation techniques, instrument exchange, placement and removal of rubber dam, dental examination procedures, sterilization procedures, operative dentistry. Covers asepsis and infection control, and contains an introduction to clinical procedures used at Lane.
DA 196 Chairside Procedures 2. $\qquad$ 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 are also included.

DA 210 Dental Radiology 1. ... 4 credits
Prerequisite: Currently enrolled in the Dental Assisting Program. Course covers historical background, terminology, and basic physics associated with x-ray generation and exposing radiographs. Radiological health and safety measures and legalities are included. Film technique, including exposing, processing, mounting and critiquing are covered in lecture and lab.
Radiographic exposures on Dexter.
DA 211 Dental Radiology 2. 2 credits
Prerequisite: Currently enrolled in the Dental Assisting Program. Continuation of Dental Radiology 1 (DA 210). Provides basis for occlusal film projections and various extra-oral radiographs, including panoramic radiography. Students apply all skills learned in Fall term, and progress to exposure of radiological films on clinical patients. By the end of Winter Term, students may produce and submit the required State Board full mouth set of radiographs.

DA 280 Co-op Ed: Dental Assisting .6-12 credits
Prerequisite: Must be enrolled in the Dental Assisting Program. This course provides the student with dental assisting work experience in community businesses. 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 certificate. Course content includes instruction on professional resumes, cover letters, interviewing and job search skills.
DA 298 Independent Study: 1-3 credits Prerequisite: admission to the Dental Assisting Program or consent of the instructor and program coordinator.A variable credit course based on independent study contracted between an instructor and a student.
EL 115H Effective Learning: Health Science Majors $\qquad$ 3 credits
This course is designed for health occupation majors reading at a college level who wish to strengthen their study skills and strategies. Students will learn how to take notes from lectures and textbooks, study for tests, improve memory, read and study from textbooks, manage time effectively, and use the library.

## Dental Hygiene

For information, contact Health Professions, 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 credit 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 through Distance Learning.

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 through Distance Learning.
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 through Distance Learning.
DH 118B Clinical Dental Hygiene 1 Lab..................................... 2 credits Clinical Lab required for DH 118A.
DH 119A Clinical Dental Hygiene 2-Lecture Seminar............. 3 credits Prerequisites: Admission to program or instructor consent. Corequisites: DH 119 A and DH 119 B 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 through Distance Learning.
DH 119B Clinical Dental Hygiene 2-Lab .4 credits Clinical Lab required for DH 119A.
DH 120A Clinical Dental Hygiene 3:Lecture/seminar. $\qquad$ .3 credits Prerequisites: Admission to DH Program or instructor consent. Corequisites: DH220A and DH220B are taken together and require simultaneous registration Lecture, instructional lab and clinical course focusing upon the dental hygiene process of care, advanced instrumentation techniques and treatment of the slight to moderate periodontal patient. May be offered through Distance Learning.
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 through Distance Learning.
DH 139 Special Needs Dental Patient. .2 credits
Prerequisite: Enrolled in D H Program/Instructor Permission. Knowledge and skill development in assessment, diagnosis, planning and treatment of dental patients with developmental disabilities, complex medical problems and significant physical limitations. Development of critcal thinking and problem solving skills in the care of patients with special needs, prevention of emergencies and selection of treatment. May be offered through Distance Learning.
DH 220A Clinical Dental Hygiene 4-Lecture/seminar. $\qquad$ . .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 through Distance Learning.
DH 220B Clinical Dental Hygiene 4- Clinical Lab .5 credits
Clinical Lab required for DH220B. This version of the course will be offered beginning Summer 2008.
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 through Distance Learning. This version of the course will be offered beginning Summer 2008.

DH 221B Clinical Dental Hygiene 5 Clinic Lab. $\qquad$ 6 credits Clinical Lab required for DH221A. This version of the course will be offered beginning Summer 2008.

DH 222A Clinical Dental Hygiene 6 $\qquad$ .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 through Distance Learning. This version of the course will be offered beginning Summer 2008.
DH 222B Clinical Dental Hygiene 6 Clinic Lab. $\qquad$ 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 through Distance Learning.
DH 229 Oral Pathology for the Dental Hygienist. $\qquad$ 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 through Distance Learning.
DH 233 Anesthesia/Analgesia for Dental Hygiene Therapy .. 3 credits Prerequisites: Admin. in DH Program or instructor Permission. The theories and practices of local anesthesia and nitrous oxide/oxygen concious sedation. Review of anatomy, physiology, pharmacology, and emergency procedures associated with local anesthesia and NO2/O2 conscious sedation. Preparation for the administration of infiltration and block anesthesia in dental hygiene procedures. Laboratory and clinical experience in administration of local anesthesia and N2O/O2. May be offered through Distance Learning.

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 through Distance Learning.
DH 237 Community Dental Health. $\qquad$ 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 through Distance Learning.
DH 238 Community Dental Health. $\qquad$ . .1 credit 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 through Distance Learning.
DH 243A Oral Roentgenology .................................................. 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 through Distance Learning
DH 243B Oral roentgenology: Lab .. 1 credit
Clinical Lab. Lab required for DH 243A.
DH 244A Oral Roentgenology. 1 credit
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 through Distance Learning. Lab required for DH 244A.
DH 244B Oral Roentgenology: Lab .. 1 credit 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, containdications, and effects of pharmacologic compounds. May be offered through Distance Learning.
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 through Distance Learning.
DH 271 Periodontology 2 1 credit
Full Prerequisites: Accepted in DH Program or instructor permission Treatment of the moderate to advanced periodontal patient, selection of surgical procedures and maintenance. The course reviews periodontal and restorative considerations, occlusion and TMJ disorders, periodontal surgery, dental implant and maintenance, periodontal emergencies and a review of evidence based periodontal research. Specialty office visit to observe treatment modalities. May be offered through Distance Learning.
DH 275 Dental Hygiene Restorative Functions 1. $\qquad$ . 2 credits
Admission in Dental Hygiene Program or Instructor Permission Restorative Functions 1 content includes tofflemier placement, wedge, etiology of the decay process, cavity preparation, properties of amalgam, maintenance of dental anatomy, occlusal considerations, and amalgam placement and finishing. Laboratory and clinical practice for skill development. May be offered through Distance Learning.
DH 276 Restorative Functions 2. 1 credit
Prerequisites: Admission in Dental Hygiene Program or Instructor Permission. Restorative Functions 2 content includes amalgam polishing; direct placement esthetic materials composition and classification; handling, placement and finishing; light cure techniques; and anatomical considerations for anterior and posterior composite placement. Laboratory and Clinical Practice for skill development. May be offered through Distance Learning.
DH 280 Co-op Ed: Dental Hygiene. $\qquad$ .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.
DH 298 Independent Study 1-4 credits
Prerequisite: Admission to the DH Program or consent of instructor See department for topics.A variable credit course based on independent study contracted between an instructor and a student.

EL 115H Effective Learning: Health Science Majors $\qquad$ 3 credits This course is designed for health occupation majors reading at a college level who wish to strengthen their study skills and strategies. Students will learn how to take notes from lectures and textbooks, study for tests, improve memory, read and study from textbooks, manage time effectively, and use the library.

## Design - See Art, Studio and Graphic Design

## Diesel and Heavy Equipment

For information, contact Advanced Technology, Bldg. 12/Rm. 201, (541) 463-5380.
DS 154 Heavy Duty Braking Systems $.1-12$ credits Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Operation, diagnosis, testing, failure analysis, and repair of heavy duty braking systems. Technical information and shop projects to apply and understand theories and principles include: fundamentals of braking and applied preventive maintenance program - trucks/tractors; disk/cam brake systems; anti-lock air brake systems; heavy duty wedge brakes; power assist units; truck/tractor air brake system components; and diesel engine and exhaust brakes and retarders in on and off highway heavy duty equipment.
DS 155 Heavy Equipment Hydraulics $\qquad$ ..1-12 credits Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Operation, diagnosis, testing, failure analysis, and repair of on and off highway heavy equipment hydraulics. Technical information and shop projects to apply and understand theories and principles include: introduction to hydraulics; electro-hydraulic systems, pilot controlled hydraulic systems, hydraulic system components; reservoirs, hydraulic seals, filters, pumps, accumulators, oil coolers, valves, actuators, connectors, conductors, circuits, fluid couplings, and torque converters; and on and off highway automatic transmissions
DS 158 Heavy Equipment Chassis and Power Trains........1-12 credits Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Operation, diagnosing, testing, 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; tracktype undercarriages; final drives and steering mechanisms; clutches; standard transmission; on and off highway automatic transmissions; drive lines; front- and rear-drive carrier units ; heavy duty tires, wheels, and rims; and wheel hubs, dead and live axles of on and off highway diesel equipment.
DS 256 Diesel and Auxiliary Fuel Systems 1-12 credits Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Operation, diagnosis, testing, failure analysis, and repair of diesel and auxiliary fuel systems. Technical information and shop projects to apply and understand theories and principles include: alternative type fuel systems; diesel fuel systems including mechanical and electronic diesel engine controls; and diesel engine performance analysis of on and off highway current model engines.

DS 257 Diesel Electrical Systems $\qquad$ 1-12 credits Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Operation, diagnosis, testing, failure analysis and repair of heavy duty diesel electrical/electronic systems. Technical information and shop projects to apply and understand theories and principles include: electrical fundamentals, batteries, starting, charging, lighting, and electronic control systems, multiplexing, heavy duty electrical circuits, electrical connectors, conductors, and air conditioning systems of on and off highway diesel equipment.
DS 259 Diesel Engines and Engine Overhaul. 1-12 credits Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Operation, diagnosing, testing, failure analysis overhaul and repair of on and off highway diesel engines. Technical information and shop projects to apply and understand theories and principles include: the development of the diesel engine; diesel engine operating principles; failure analysis; the cylinder block and components; cylinder head and components; crankshaft, main, rod and cam, bearings, vibration damper, flywheel, and flywheel housing; pistons, rings, and connecting rod assembly; camshaft and timing gear train; lubrication systems and lube oil; cooling systems and coolant; intake systems; exhaust systems; turbochargers and superchargers; hand tools, precision measuring tools, fasteners, and shop equipment.

DS 260 Lift Truck/Material Handling Equipment. .1-12 credits
Prerequisite: Instructor Consent. Operation, diagnosing, testing, and repair of lift trucks and other material handling equipment. Technical information and shop projects to apply and understand theories and principles include mast/upright mechanisms, diesel, gas, electric, and L.P. lift trucks, periodic maintenance, and schematics.
DS 280 Co-op Ed: Diesel 3-12 credits
This course provides the student with diesel-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 college credit.
TTL 101 Introduction to Transportation and Logistics. $\qquad$ .4 credits
This course provides an overview and introduction to the safe operation of a commercial vehicle and the field of logistics. Includes the operation of basic and secondary control systems, coupling and uncoupling a tractor and trailer, cargo handling, and the proper method of conducting a pre-trip inspection. Covers applicable federal regulations including hours of service requirements and Commercial Driver's Licensing (CDL) requirements and distribution channels. Also includes methods of managing speed effectively, responding to road and weather conditions, and accident scene management. Safety is a key component.

## TTL 121 Practical Applications in

Transportation and Logistics. $\qquad$ 6 credits This course provides demonstrations and opportunities to develop skills related to the basic maneuvers involved in the safe operation of a commercial vehicle. It also provides more in-depth coverage of logistics business processes and communication skill development. Delivery vehicle basics such as: backing, visual search, shifting, turning, space and speed management are covered.
TTL 141 Transportation Customer Service Skills . $\qquad$ . 3 credits This course focuses on building the knowledge, attitudes, and skills necessary for delivering outstanding customer service, employing public relations skills, applying effective listening skills, resolving conflict, and using on-board communication devices. The course helps employees identify external and internal customers, learn how to handle potentially unproductive interactions, and create positive experiences for all customers.
TTL 280 Co-op Ed: Transportation and Logistics .1-12 credits
This course is intended to provide the student with a learning experience related to his/her course of study and career goal. Major emphasis will be given to on-the-job experience and training. Weekly seminars will focus on individualized projects, small and/or large group projects and presentations, problem solving sessions, and discussion, all related to on-the-job problems and procedures. Supervision and evaluation of the student's job performance will be provided by qualified staff of the College and employing institution. Mary Brau

## Drafting

For information, contact Advanced Technology, Bldg. 12/Rm. 201, (541) 463-5380.
DRF 100 Reading and Conference ........................................ 1-3 credits
Prerequisite: Instructor consent A flexible course, offering all students in drafting classes an opportunity for remedial, supplemental, and developmental training.
DRF 121 Mechanical Drafting .4 credits Prerequisite: DRF 167 And DRF 142. An introduction to the current ASME Y14.5M 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.

## Course Fees

Many courses may have additional fees. Please refer to the web class schedule credit listings and registration information for updated fee information and fee amounts.

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 creditsPrerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. An introductory course in drafting graphic concepts for the drafting program and transition to the CAD courses. Course includes Windows file management, measuring and sketching techniques, geometry of objects, drafting standards, lettering, and project setup procedures.
DRF 167 CAD 1 .4 credits
Prerequisite: Basic computer literacy and minimum reading score of 68 OR RD 080 OR Prior College. Introduction to computer-aided drafting using AutoCAD or equivalent software in architectural and mechanical drafting. Basic drawing, dimensioning, editing, and setup commands to produce working drawings. May be offered through Distance Learning.
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 through Distance Learning
DRF 205 Drafting: Structures. .. 4 credits
Prerequisite: MTH 076 And MTH 086 or instructor consent. Graphical methods to investigate forces applied to rigid bodies at rest, including beams and trusses. The course covers types of structures, how structures carry loads, vectors, moment, equilibrium, and the construction of load, shear, and moment diagrams for simple beams. Students will use CAD for graphical solutions; students without CAD skills who are able to use trigonometry for problem solving may also enroll in this class.
DRF 206 Co-op Ed: Drafting Seminar. $\qquad$ . 2 credits
The Drafting Cooperative Education Seminar will provide ways for students to increase their understanding of industry expectations, as well as develop job search tools and skills. The content 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 $\qquad$ . .4 credits
Prerequisite: MTH 076, MTH 086, and DRF 205. Stresses and strains that occur within bodies; material properties including elasticity; shape properties including centroids, moments of inertia, and section modulus; flexural stress in beams; and buckling in columns.
DRF 208 Residential Buildings ..................................................... 4 credits Prerequisite: DRF 167. An investigation of light frame construction techniques and the production of residential construction drawings. Topics: residential construction materials, components and systems related to wood frame structures. Students will work from sketches of a residential structure to produce detail drawings.
DRF 210 Commercial Buildings. .4 credits
Prerequisite: DRF 137, DRF 167, and DRF 208. Fundamentals of building materials, construction techniques, processes and procedures used in commercial structures. Students examine the creation of construction documents and working drawings for a light commercial building project.
DRF 211 Mechanical Systems and Environmental Design.... 4 credits Prerequisite: DRF 137, DRF 167, and DRF 208. This course studies the fundamental principles, technologies, and drawings related to building plumbing and heating, ventilating and air conditioning (HVAC) systems in buildings. Emphasis is also on energy-efficient design and construction.
DRF 220 Building Information Modelling $\qquad$ .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 American Society of Mechanical Engineers (ASME Y14.5M) 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.
DRF 298 IS: Technical Drafting. 1-12 credits
Prerequisite: Instructor consent. An individualized study experience designed to allow the student with basic skills to initiate individual projects, with instructor approval, which will enable him/her to explore further some specific design, method, construction, project or medium-repeatable. Maximum 12 credits.

ENGR 280D Co-op Ed: Drafting .3-12 credits This course provides students on-the-job learning experience in business, industry and governmental sites in the community. Students will have the opportunity to integrate theory and practice gained in 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 college credit. Cooperative Education is a required class for the Drafting AAS degree.

## Drama - See Theatre Arts

## Early Childhood Education

For information, contact Child and Family Education, Bldg. 24, (541) 463-5619.
ECE 110 Observing Children's Behavior.. $\qquad$ Study of objective techniques for observing and recording children's behavior. Some focus on linkages between observing and curriculum planning. Class is primarily a lecture format that includes on-site observations.
ECE 120 Introduction to Early Childhood .2 credits Required course for ECE majors-no prerequisite. Course is designed to overview the field of early childhood education. It explores career options, types of programs, history, advocacy and personal qualities of successful child care professionals.
ECE 130 Child Care and Guidance. $\qquad$ .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 child management techniques will be given through lectures, visual presentations, and classroom discussions.

ECE 140 Theory \& Supervised Teaching 1 $\qquad$ .3 credits
Co-requisites: ECE, 110, 130 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 laboratory experiences in the use of various media.

ECE 160 Exploring Early Childhood Curriculum $\qquad$ 4 credits Students will gain understanding and experience in planning daily and weekly program activities for young children. There is an emphasis on planning appropriate experiences based on observation of children and knowledge of early childhood learning strategies. Students will plan a variety of curriculum experiences which are developmentally appropriate for preschool-age children. Included will be a study of the theories, types and benefits of play as the basis of curriculum planning.
ECE 170 Infants and Toddlers .4 credits
The course is designed to examine the growth and development of infants and toddlers in a group setting. Optimum infant and toddler development and safety will be studied. Lectures, in-class discussions, and visual media offer a varied presentation.
ECE 199 SS:
2 credits
See deparment for topic.
ECE 210 Applying Early Childhood Curriculum $\qquad$ 4 credits Prerequisites: ECE 160. Study and evaluation of various approaches to Early Childhood Education, including cognitive, emergent, and unit-based programs. Practice in planning and teaching based on a variety of developmental theories and methods. Study of science and math methods and materials, movement and outdoor games is included. This is an advanced course in Early Childhood Education curriculum focusing on group care for young children. The prerequisite course is Exploring Early Childhood Curriculum: ECE 160. If this class is taken out of sequence, please see the instructor before continuing with the course.
ECE 230 Parent-School-Community Relations 3 credits Designed to help the student understand and develop methods and procedures for fostering effective parent, school and community relations: development of methods and techniques in preparation for and delivery of a parent conference, understanding how community agencies can best serve parents and children in relation to school programs, and practical experience in communication skills with parents. Laws covering child abuse and signs of child abuse are covered. Medical aspects of child care, including understanding and preventing the spread of infectious disease and management and prevention of accidents and injuries are also covered.

ECE 240 Theory \& Supervised Teaching 2. 4 credits Prerequisite: ECE 140. Theory \& Supervised Teaching 1. Designed to provide the student with actual experience in the supervision, guidance and care of young children based on the standards of NAEYC for Early Childhood Professional Preparation. This is work experience in a lab school child care. Students have specific assignments and responsibilities and must demonstrate competencies for a grade. They are given the opportunity to observe appropriate curriculum and have increasing responsibility to plan and carry out age-appropriate curriculum activities. They learn to demonstrate consistent appropriate guidance and developmentally appropriate curriculum.

ECE 250 Infant and Toddler Environments $\qquad$ 3 credits Prerequisite: ECE 170 - Infants and Toddlers. For prospective infanttoddler caregivers. 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 overview of infant-toddler development ; d) basic care giving techniques; e) how to plan activities; and f) resources and references.

ECE 253 Diversity Issues in Early Childhood Education........ 3 credits This course explores the concept of human diversity in early childhood settings. It will specifically include an awareness and appreciation of issues of ability, belief, class, culture, gender, language, race, and family experiences as they affect the development of the young child and his or her family. An exploration of how children develop awareness and attitudes regarding diversity will be included. Students will also evaluate and develop appropriate materials and methods to increase children's awareness and appreciation of diversity.

## ECE 260 Administration of Child Care Centers

$\qquad$ .4 credits
An overview of administrative management issues in the establishment and operation of child care centers, with an emphasis on full day programs. Overall program planning, organizational structure, budgeting, personnel management, and legal aspects of child care. State licensing rules are included.

ECE 298 IS: Early Childhood .1-2 credits See department for topics.
HDFS 226 Child Development $\qquad$ .3 credits
Study of the physical, social-emotional, and intellectual development of the child from birth through adolescence. Some emphasis on prenatal 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. Required for ECE majors.
HDFS 227 Children Under Stress. $\qquad$ .3 credits Prerequisite: HDFS 226. Designed to acquaint the student with the social, economic, and cultural factors which contribute to a child's developmental experiences in such a way as to inhibit or enhance his/her best growth. Emphasis will be placed on the family, the educational system, and socio-cultural environments. Required for Early Childhood Majors
HDFS 228 The Exceptional Child .3 credits
The development, needs, and behavior of preschool aged children with special needs. Generalizations and practical hints to help integrate children with special needs into childcare programs. An overview of inclusion, along with a focus on specific disabilities is covered, including autism spectrum disorder, speech and language, and attention deficit disorder.

HDFS 229 Middle Childhood - Ages 6-12 .3 credits A program elective for Early Childhood majors. This course is a study of the physical, psychosocial, and cognitive development of the child in the middle years of childhood, ages six through twelve. Attention is given to the subculture of the society of children with the impact of peers and family. The development of moral and religious judgment is studied, as well as the accompanying attitudes toward specific problems such as death, politics, and prejudice. School programs are examined with implications of matching skills to be taught with a child's learning style. Curriculum methods and learning activities in appropriate content areas are explored.

HDFS 233 Parenting
.3 credits
Provides an introduction to the many aspects of parenting including advantages and disadvantages, parenting roles, stages of parenthood, and special situations (single and step-parenting, extended families, and parenting exceptional children). The course format includes reading assignments from the textbook, forum discussions of reading, group project.

HDFS 298 IS: Child Development
.1-6 credits
Prerequisite: HDFS 226 - Child Development

## Earth and Environmental Science

For information, contact Science, Bldg. 16/Rm. 156, (541) 463-5446.
ENVS 181 Terrestrial Environment. $\qquad$ . 4 credits
The Environmental Science sequence ENVS 181, 182 and 183 studies how humans interact with natural systems and explores environmental sustainability. Students may take these courses in any order. The courses satisfy the lab science requirement for the AAOT degree. Sections may offer field trips with fees. ENVS 181 emphasizes the interactions between humans and natural landbased systems. Students study terrestrial ecology and biodiversity, agriculture, soil resources, waste disposal, urbanization, and the economics of sustainability. The course examines environmental degradation, but stresses solutions such as conservation, making waste into resources, and making production sustainable. Students study how to improve collective and personal effects on terrestrial systems that help sustain life.

## Course Fees

Many courses may have additional fees. Please refer to the web class schedule credit listings and registration information for updated fee information and fee amounts.

ENVS 182 Atmospheric Environment and Population........... 4 credits Environmental Science 182 is a lab course that stresses the interactions between humans and the atmosphere. Students study weather, climate, sustainability of plant and animal biomes, population, and human influences on climate change. Topics also include air pollution, ozone depletion, global warming, and ice and glacier loss. Students study how to improve shared and personal effects on atmospheric systems that help sustain life. More information about the course sequence is at ENVS 181.
ENVS 183 Aquatic Environment .4 credits Environmental Science 183 is a lab course that studies the interplay between humans and the freshwater and marine environments. It emphasizes the biological, geological, chemical, and human connections in aquatic environments. The course explores the diversity of aquatic life, sustainability of fisheries and water resources, ocean circulation and climate, stream runoff, and water pollution. Students investigate improving combined and individual effects on aquatic systems that help sustain life. More information about this sequence is at ENVS 181.
ENVS 184 Global Climate Change. .4 credits
Environmental Science 184 is a lab course that surveys the scientific basis of global climate change. Students analyze the geologic history and scientific data of past and present climate change and review climate models, future predictions, human contributions to and consequences of climate change. They study factors that influence the climate system, like sun-Earth cycles, greenhouse effect, coal and energy options, carbon sequestration, glaciers, the ocean/atmosphere system, feedbacks, and tipping points. Students investigate how to reduce collective and personal effects on the climate. This course satisfies lab science requirements for the AAOT degree. Students may take ENVS courses in any order; however, they are strongly recommended to take ENVS 182, G 102, GS 106 or GEOG 141 prior to taking this course.
ENVS 199 SS:........................
See department for topics.

## G 101 Earth's Dynamic Interior

 4 credits............................................ 4 credits
The Geology 101, 102, 103 sequence is an introduction to physical and historical geology. The courses fulfill the AAOT science with laboratory requirements for non-science majors. G 101 and 102 can be taken in either order. Students are strongly advised to complete G 101 or G 102 before enrolling in G 103. Sections may offer a field trip, with a fee. Geology 101 explores the geology of Earth's internal structure, how rocks and minerals form, and how plate interactions cause earthquakes, create volcanoes and build mountains. In labs students describe and identify minerals and rocks, use earthquake data, and interpret simple geologic maps and structures.

## G 102 Earth's Dynamic Surface

 .4 creditsGeology 102 is an introduction to environmental geology and landscape development. It examines the interactions among humans and geologic processes that actively shape Earth's surface and the hazards and environmental problems they create. These involve erosioin, deposition, weathering, soils, landslides, floods, groundwater, oceans, coastal erosion, melting glaciers, desertification, and climate changes. Students study the sustainability of human activities in light of these processes. In labs students work with common minerals and rocks, use physical and/or computer models to understand these surface processes, and use topographic maps and air photos to identify landforms. More information about this sequence is at G 101.
G 103 Evolving Earth. .4 credits
Geology 103 surveys the geologic history of the Earth and life through time, and includes the topics of sedimentary environments, fossilization, plant and animal evolution. Students will also study how plate tectonics helped to build the North American continent. In labs students study fossils, interpret the ages and relationships of rock layers, and use geologic maps and cross-sections to decipher Earth's history. Students are strongly advised to complete G 101 or G 102 before taking G 103. More information about the sequence is at G 101.

G 146 Rocks and Minerals 4 credits Geology 146 examines the relationships among rocks, minerals, gems and society. In lecture and lab sessions, students explore how rocks, minerals and gems form, their classification, symmetry, textures and structures, how to recognize them and how they are used. Students learn how to use rocks to decipher geologic history. The course also covers economic geology-resources that come from rocks, minerals and fossil fuels. It reviews mining methods including strip and mountain-top removal mining and their environmental impacts. Students explore energy alternatives and resource conservation options. A local field trip is included. Sections may have additional field trips with fees. G 146 meets AAOT requirements as a laboratory science course. Students may take G 146 as a stand-alone course or following G 101 or G 102 or G 103.

G 147 National Parks Geology. ... 4 credits National Parks Geology emphasizes the geologic setting, history, plate tectonics, and landform development in selected national parks and monuments. The class presents topics accessible to nonscience majors that extend from the roots of ancient (Precambrian) mountain ranges, through the multiple layers in the Grand Canyon, to the recent eruptions of the Cascade Range and Yellowstone, with many parks in between. In labs students examine rock samples and use topographic and geologic maps. G 147 meets AAOT requirements as a laboratory science course. Sections may have a field trip with a fee. Students taking G 147 will benefit from having completed at least one term of geology prior to taking this course.
G 201 Earth Materials \& Plate Tectonics $\qquad$ .4 credits The Geology 201, 202, 203 sequence is intended for science majors planning to transfer to a four-year institution or other students with a strong interest in geology. In each course, students complete individual and team case studies and presentations of selected geological regions, along with additional problem-solving activities. Sections may offer a field trip, with a fee. Students may take either G 201 or G 202 as their initial course. G 201, 202 and 203 meet AAOT requirements as laboratory science courses. Geology majors should enroll in G 201, 202, 203. Geology 201 emphasizes the formation of minerals and the origins of igneous, sedimentary and metamorphic rocks. The course investigates how plate tectonics influences the structure of the Earth, mountain building, rock deformation, magnetism, earthquake activity, and volcanism. In labs students identify and describe minerals and rocks, use earthquake and other geophysical data, interpret geologic structures and geologic maps, and apply plate tectonics theory to settings around the world.
G 202 Earth's Surface Systems $\qquad$ . 4 credits Geology 202 analyzes the geologic processes that shape the Earth's surface and human interactions with them. Topics include erosion, deposition, weathering, soil formation, mass wasting, streams, groundwater, coastal processes, glaciers, deserts, and climate. The course emphasizes a systems approach, connecting surface processes, plate tectonics and global climate changes. Students evaluate the sustainability of human activities influencing these systems. In labs students review rocks and minerals, and use analytical tools to identify landforms and understand depositional systems and hazardous geological processes. Tools include geologic and topographic maps, aerial photos, and computer simulations. More information about this sequence is at G 201.

## G 203 Evolution of the Earth.

$\qquad$ .4 credits Prerequisite: Grade of C- or better in G 101 or G 102 or G 201 or G 202. Geology 203 applies geologic principles of plate tectonics, surface processes and evolution to interpret Earth's geologic history. The course emphasizes how plate motions have built and rearranged continents, changed environments through geologic time. The course also explores how plate motions and other factors influence the distribution, evolution and extinction of plants and animals over time. In labs students recognize and describe fossils, interpret age relationships and stratigraphy, and use geologic maps and cross-sections to interpret complex regions. Students use principles of historical geology to develop geologic case studies from around the world. Students must have completed at least one previous term of geology or have permission from the instructor to enroll. More information about the sequence is at G 201.

## G 280 Co-op Ed: Geology

 1-12 credits This course provides relevant field experience that integrates theory and practice while providing opportunities to develop skills, explore career options and network with professionals in the geology field.G 280ES Co-op Ed: Enviornmental Studies 1-12 credits 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 in the environmental studies field.

G 298 Independent Study 1-3 credits
A variable credit course based on independent study contracted between an instructor and a student.

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. The General Science 104, GS 105, and GS 106 course sequence satisfies AAOT Iab science requirement for non-science majors. The sequence emphasizes basic principles that tie the physical sciences together. GS 106 introduces topics from the Earth and space sciences. Students study Earth science topics such as atmosphere, weather, climate and its changes, geologic time, geologic hazards, Earth's surface processes and interior structure, and surface features such as rivers, glaciers, earthquakes and volcanoes. Students explore topics from space sciences and cosmology, from small moons and planets to giant galaxies and beyond. Labs include graphs, maps, cross-sections, rocks, minerals, and imagery. Students may take GS 104, 105 and 106 in any order.
GS 142 Earth Science: Earth Revealed .3-4 credits General Science 142 Earth Revealed is an introductory geology course that integrates topics of Earth's history, plate tectonics, rock types, minerals, volcanism, earthquake activity, weathering, rivers, groundwater, glaciers, and coastal landforms. Students may earn a fourth credit by doing laboratory exercises designed for completion at home. This course is offered through Distance Learning.

GS 147 Oceanography
3-4 credits
General Science 147 Oceanography provides an overview of the basic physical, chemical, and biological processes that occur in the world ocean. Topics include geology of the seafloor, plate interactions, seawater properties, waves, currents, tides, ocean life and biodiversity, and marine pollution. Students may earn a fourth credit if they complete laboratory exercises designed to do at home. This course is offered through Distance Learning.
GS 280ST Co-op Ed: Science Technology $\qquad$ 1-12 credits
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 in the science technology studies field.
SUST 202 Fostering Sustainable Behavior.............................. 3 credits Course description is under development.

## Economics

For information, contact Social Science, Center Bldg./Rm. 403, (541) 463-5427.
ECON 200 Principles of Economics:
Introduction to Economics. $\qquad$ .3 credits
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. MTH 111 College Algebra and sophomore standing recommended. May be offered through Distance Learning.

## ECON 201 Principles of Economics:

Introduction to Microeconomics 3 credits
Prerequisite: ECON 200 or ECON 202. 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. MTH 111 College Algebra and sophomore standing recommended. May be offered through Distance Learning.

ECON 202 Principles of Economics: Introduction to
Macroeconomics. $\qquad$ .3 credits
Prerequisite: ECON 200 or ECON 201. 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. MTH 111 College Algebra and sophomore standing recommended.
ECON 204 Introduction to International Economics $\qquad$ .4 credits Introduces principles of international development, trade, and finance. Topics include: history of international development, alternative trade theories, trade restrictions, trade liberalization, free 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 promise of 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: costbenefit 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 Cooperative Education, Bldg. 19/Rm. 231, (541) 463-5203.
ED 100 Introduction to Education. $\qquad$ .3 credits
Students will learn about teaching as a career and education as a discipline. They will focus on the philosophy and history of education in a limited way, completing projects connected with both as they work with the instructor, one another, and at the computer to learn about teaching and learning.
ED 130 Comprehensive Classroom Management. $\qquad$ .3 credits This course provides a foundation in comprehensive classroom management theory and application. Students will gain an understanding of appropriate techniques for managing a classroom as well as problem solving for effective handling of unproductive student behaviors both in the classroom and in other settings such as the playground, assemblies, cafeteria, and field trips.
ED 131 Instructional Strategies for Education Professionals3 credits This three-credit course provides the learner with instructional strategies that research shows can have a positive impact on K-12 student achievement. Guiding principles based on validated instructional research, case studies, and classroom examples are provided to give learners tools to use in the classroom. This course provides valuable instructional pedagogy for paraprofessionals, current, teachers, and prospective teachers.

## Course Fees

Many courses may have additional fees. Please refer to the web class schedule credit listings and registration information for updated fee information and fee amounts.

ED 200 Foundations of Education Seminar 3 credits The Foundation of Education Seminars are designed for students considering careers in elementary or secondary education. They are taught in a two-term sequence, generally in conjunction with a practicum in an elementary, middle, or high school classroom. Students learn about classroom management, the history of education as a discipline, and curriculum design.
ED 201 Foundations of Education Seminar Part 2: Instructional Strategies Language Arts . 3 credits
The Foundation of Education Seminars, designed for students considering careers in elementary or secondary Education, are taught in a two-term sequence (generally in conjunction with a practicum in an elementary, middle, or high school classroom). Students learn about: classroom management, educational philosophy, and the legal, political and economic foundations of education. They participate in literacy circles, learning how to teach language arts through reading and writing in the content areas. They are introduced to the nature of the reading process and learn how to link literacy instruction and assessment to state content standards.

ED 225 Multiple Intelligences-Motion. 3 credits Using the latest findings in brain research, this dynamic teaching intensive challenges participants to approach creative movement as an essential tool for cognitive, social and emotional learning for children of all abilities. With a focus on sequential, comprehensive and integrative curriculum, this workshop bridges the gap between arts and academia. In daily hands-on brain-compatible conceptbased dance activities, participants define, explore and create best practices in education for every child. No prior dance experience necessary.
ED 258 Multicultural Education $\qquad$ 3 credits
This course addresses the philosophy, activities, and methodologies to create a culturally sensitive and responsive classroom, school, and district. This class will enable students to meet the needs of all students from a variety of backgrounds. Students will develop an understanding of the impact of culture on individual perception, learning, and group dynamics. Students will be exposed to areas of multicultural education, equity, and diversity appropriate for working with students at all levels.
ED 280 Co-op Ed: Education $\qquad$ 3-12 credits
In this course students explore teaching as a career while working with mentor teachers in elementary, middle, or high school classrooms. Students may take this course for multiple terms and work with different age groups in different school cultures.
Students serve teachers and children by putting up bulletin boards, grading papers, attending meetings, preparing art projects, working with individuals, working with small groups, assembling science and art kits, and even by teaching occasional whole class lessons.

ED 280EC Co-op Ed: Early Childhood Education $\qquad$ .3-12 credits This course offers students an opportunity to gain work experience in Early Childhood Education, and is for students with sixth term standing in the ECE degree program. Cooperative Education offers internship opportunities in a variety of early childhood settings. Students 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 college ECE faculty and qualified staff at the site, and includes a required weekly seminar.
ED 280SE Co-op Ed: September Experience. 3-12 credits Students begin the school year with a cooperating teacher during the last week of August (end of summer term) and help set up the classroom and its routines for the year that follows. During the three weeks they spend together, students and classroom teachers develop strong bonds as they begin the year with children who see them as an integral part of their classroom communities. Students earn three credits for three weeks of work when they can focus on the creation of the classroom environment. For most education majors, this is their favorite practicum. Students should take one term of seminar ED 200, ED 130, or ED 131 before beginning this practicum.
ED 299 Trends:
$1-3$ credits
See department for topics.

## Electronics

For information, contact Advanced Technology, Bldg. 12/Rm. 201, (541) 463-5380.
ENGR 280E Co-op Ed: Electronic Technology 3-12 credits This course provides the student on-the-job electronics learning experiences in business and industrial sites in the community. The student will have the opportunity to integrate theory and practice gained in the classroom with the 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. Cooperative Education is a required class for the Electronic Technology Program.
ET 100 Reading and Conference .1-3 credits
Prerequisite: Instructor consent A flexible course offering all students in electronics classes an opportunity for remedial, supplemental, and developmental training.

ET 121 Shop Practices. .2 credits
Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. This class addresses aspects of industrial and work site safety, introduces concepts in power distribution systems and focuses on identifying discreet components used in the electrical and electronic trades. In addition to identification, the student will learn the skills necessary to use vendor catalogues and/or websites to procure several different types of components. Those parts will be used, along with common and trade specific tools, in order to complete a final fabrication project.
ET 129 Electrical Theory 1 $\qquad$ .4 credits Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. First course of a two-term sequence in electrical theory. The first term defines the basic electrical units, the basic laws of electrical theory as they apply to DC circuits such as series, parallel, and series-parallel circuits. AC waveforms and AC circuit components are introduced. Electronic test equipment such as the digital multimeter, oscilloscope and function generator is used to measure electrical signals and troubleshoot basic electrical circuits.
ET 130 Electrical Theory 2 ... 4 credits
Prerequisite: ET 129 Second course of a two-term sequence in electrical theory. This course covers basic AC circuits and components, right triangle mathematics, RLC circuits, filters, and resonant circuits and RL/RC transient circuits. In the lab students will build and troubleshoot basic AC circuits using the oscilloscope, function generator, and DMM. May be offered through Distance Learning.
ET 145 Semiconductor Devices 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
.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

$\qquad$ .4 credits Prerequisite: ET 129 And MTH 060 Introduction to digital techniques, with emphasis on number systems, binary arithmetic, elements of logic, analysis and synthesis of combinational logic circuits, implementation of logic circuits using the MSI basic and/or/not building blocks. The last part of the course introduces Flip, Flop and Latch Memory components, FFs and methods of analyzing and troubleshooting, clocked sequential circuits.
ET 152 Digital Electronics 2.. $\qquad$ ... 4 credits Prerequisite: ET 129 And ET 151 Second of a two-course sequence in basic digital theory, using the fundamental building blocks learned in ET 151 to develop more complex circuits. The course is laboratory-focused to build, test and troubleshoot digital systems. A car warning system, adder/subtractor circuits, and a digital function generator are examples of laboratory projects that develop an understanding of more, advanced digital principles.

ET 201 Industrial Instrumentation $\qquad$ .4 credits Prerequisite: Second year standing. Course covers the elements that define a manufacturing controlled process. The course begins at the system level with basic statistical terms and spreadsheet data analysis. The second part discusses physical transducers and signal conditioning. The third part introduces analog to digital data conversion topics and the final part covers DC and stepper and motors.

ET 229 Motors 4 credits
This class addresses the theory, operation and control of AC and DC motors. Emphasis will be placed on the use of motors in manufacturing and HVAC industries. Line diagram logic, starters and frequency drives will be studied along with techniques in accelerating and decelerating motors.
ET 232 Process Control Systems. $\qquad$ .4 credits
Prerequisite: Second year standing introduction to the robot and its capabilities. This class explores the various tasks that robots are programmed to perform. Interfacing between robots, microcontrollers and PLC's are practiced with an emphasis on troubleshooting.

ET 234 Programmable Controllers $\qquad$ 4 credits Prerequisite: Second year standing The 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 ionterfacing I/O devices to the PLC. More advanced topics such as timers, counters, and sequencers are also covered.

ET 239 Microprocessor Applications 4 credits
Prerequisite: Second year standing Microcontroller structure and usage. Microcontrollers are computers on a chip. Their use becomes more common as digital techniques become more common. ET 239 uses a microcontroller and Basic as the programming language. Tops down programming techniques are used to control processes to measure distance, temperature, drive motors and convert signals to digital levels.

ET 241 Electro-Mechanical Troubleshooting 4 credits
This class prepares the student to troubleshoot various types of electrical problems through the use of standard test equipment, interpretation of schematics, and the development of analytical skills. Several common types of electro-mechanical failures will be emulated in a classroom environment with emphasis being placed on control circuitry common to the manufacturing and HVAC industries. In addition, standard mechanical maintenance practices will be examined.

ET 281 Radiotelephone. 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. 4 credits
Prerequisite: Instructor Consent. Current technology of specific PC hardware components. Installation and troubleshooting of these components include memory, video display, clock speeds, microprocessor differences, disk drives, input devices, and ports. The physical connection within a network, including cabling and installation of Network Interface Cards, is introduced. Hardware troubleshooting techniques emphasized.

ET 298 Independent Study: 1-12 credits Prerequisite: Instructor consent An individualized study experience designed to allow the student with basic skills to initiate individual projects, with instructor approval, which will enable him/her to explore further some specific design, method, construction, project or medium. Repeatable. Maximum 12 credits.

## Emergency Medical/Paramedic

For information, contact Health Professions, 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 $\qquad$ 3 credits
This course is designed for health occupation majors reading at a college level who wish to strengthen their study skills and strategies. Students will learn how to take notes from lectures and textbooks, study for tests, improve memory, read and study from textbooks, manage time effectively, and use the library.

EMT 151 Emergency Medical Technician Basic Part 1............ 5 credit This course is part 1 of an Emergency MedicalTechnician - Basic level. Successful completion of this two part course gains eligibility to sit for the Oregon State EMT-B certification exam and/or the National EMT-B certification exam. This course provides instruction in a variety of medical and trauma related emergencies. This is a demanding course designed for those who will function within an emergency medical services system. Supplies and equipment used is consistent with the tools of the trade. Fire departments and private ambulance services that respond to 911 emergencies carry very specific equipment and operate within very specific parameters. Students are taught how to apply their skills within this structure. This course is also a required component of the Associate of Applied Science Degree in Emergency Medical Technology.
EMT 152 Emergency Medical Technician Basic Part 2............ 5 credits Prerequisite: EMT 151. This course is Part 2 of an Emergency MedicalTechnician - Basic level. Successful completion of this two part course gains eligibility to sit for the Oregon State EMT-B certification exam and/or the National EMT-B certification exam. This course provides instruction in a variety of medical and trauma related emergencies. This is a demanding course for those who will function within an emergency medical services system. Supplies and equipment used is consistent with the tools of the trade. Fire departments and private ambulance services that respond to 911 emergencies carry very specific equipment and operate within very specific parameters. Students are taught how to apply their skills within this structure. This course is also a required component of the Associate of Applied Science Degree in Emergency Medical Technology.
EMT 169 Emergency Medical Technology Rescue. $\qquad$ .. 3 credits Elementary procedures of rescue practices, systems, components, support, and control off rescue operations including ladder procedures and basic rescue tools. Introduction to techniques and tools of patient extraction, emphasizing application to traffic assistance, as required for paramedic certification.

## EMT 170 Emergency Response Communication/

## Documentation

.2 credits
Covers principles of therapeutic communication, verbal, written, and electronic communications in the provision of EMS, documentation of elements of patient assessment, care and transport, communication systems, radio types, reports, codes, and correct techniques.
EMT 171 Emergency Response Patient Transportation ......... 2 credits Covers ambulance operations, laws, maintenance and safety, emergency response driving and route planning.
EMT 175 Introduction to Emergency Medical Services......... 3 credits Explores the role and responsibilities of a paramedic, to include: different kinds of emergency medical services systems, applicable Oregon law, relationship with governmental regulatory agencies, exposure risk to infectious disease and exposure to critical incident stress.

EMT 196 Crisis Intervention 3 credits
Designed to provide students pursuing a degree in Emergency Medical Technology with the knowledge to effectively manage psychological emergencies. Included in this course: understanding and managing acute stress reactions, suicide, rape and sexual assault, child abuse, death and dying, drug and alcohol emergencies, burnout of the emergency worker and coping with job-related stress.

## Course Fees

Many courses may have additional fees. Please refer to the web class schedule credit listings and registration information for updated fee information and fee amounts.

EMT 270 Emergency Medical
Technology-Paramedic Part 1 $\qquad$ 10 credits Corequisite: EMT 271. Course is part 1 of a 3 part course in paramedic education. This course covers the knowledge, skill and behaviors necessary to function effectively as a member of an emergency response team at the EMT-Paramedic level. This course focuses on general principals of pathophysiology, airway management and ventilation, venous access, pharmacology, patient assessment, clinical decision making and cardiovascular emergencies. Cognitive and psychomotor objectives are measured for competency by a combination of written and/or practical exams Affective objectives are evaluated throughout the course by using the Professional Behavior Evaluation instrument and, when necessary, Professional Behavior Counseling. Successful completion is required for entry into EMT272. Successful completion is required to meet AAS/EMT-P requirements. Program graduates are eligible to take the Oregon State/Nat EMT-Paramedic exam.

## EMT 271 Emergency Medical

Technology-Paramedic Clinical Part 1
1 credit
Corequisite: EMT 270. This course is part 1 of a 3 part clinical experience that includes direct patient care related outcomes necessary for completion of program objectives. The use of multiple departments within the hospital enables the student to see a wide distribution of patient situations. In the emergency department, which most closely approximates the types of patients that paramedics see, students are presented with a variety of patient presentations and complaints, important eliments in building up a ìlibraryî of patient care experiences to draw upon in future clinical decision making responsibilities. This experience takes place within a hospital/clinical environment and under direct supervision. All skills are first taught in the classroom before being performed in the clinical setting. Criminal background check and drug testing required.

## EMT 272 Emergency Medical

Technology-Paramedic Part 2
10 credits
Prerequisite: EMT 270, EMT 271. Corequisite: EMT 273. Course is part 2 of a 3 part course in paramedic education. This course covers the knowledge, skill and behaviors necessary to function effectively as a member of an emergency response team at the EMT-paramedic level. This course focuses on prehospital trauma care, medical emergencies, emergency childbirth, care of the newborn, neonate and pediatric patient. Cognitive and psychomotor objectives are measured for competency by a combination of written and/or practical exams. Affective objectives are evaluated throughout the course by using the Professional Behavior Evaluation instrument and, when necessary, Professional Behavior Counseling. Successful completion is required for entry into EMT274. Successful completion is required to meet AAS/EMT$P$ requirements. Program graduates are eligible to take the Oregon State/National EMT-Paramedic Certification Exam.

## EMT 273 Emergency Medical

Technology-Paramedic Clinical Part 2 $\qquad$ 3 credits
Prerequisite EMT 270, EMT 271. Corequisite: EMT272This course is part 2 of a 3 part clinical experience that includes direct patient care related outcomes necessary for completion of program objectives. The use of multiple departments within the hospital enables the student to see a wide distribution of patient situations. In the emergency department, which most closely approximates the types of patients that paramedics see, students are presented with a variety of patient presentations and complaints, important eliments in building up a ìlibraryî of patient care experiences to draw upon in future clinical decision making responsibilities. This experience takes place within a hospital/clinical environment and under direct supervision. All skills are first taught in the classroom before being performed in the clinical setting. Criminal background check and drug testing required.

## EMT 274 Emergency Medical

Technology-Paramedic Part 3 $\qquad$ .4 credits Prerequisites: EMT 272, EMT 273. Corequisite: EMT 275. Course is part 3 of a 3 part course in paramedic education. This course covers the knowledge, skill and behaviors necessary to function effectively as a member of an emergency response team at the EMT-Paramedic level. This course focuses on prehospital toxicological emergencies, environmental emergencies, and geriatric emergencies. This course also teaches how to integrate the principles of assessment based management to perform an appropriate assessment and implement the management plan for
patients with common complaints. Cognitive and psychomotor objectives are measured for competency by a combination of written and/or practical exams. Successful completion is required for entry into EMT280P2. Successful completion is required to meet AAS/EMT-P requirements. Program graduates are eligible to take the Oregon State/National EMT-Paramedic Certification Exam.

## EMT 275 Emergency Medical

## Technology- Paramedic Clinical Part 3

$\qquad$ . 4 credits Prerequisites: EMT 272, EMT 273. Corequisite: EMT 274. This course is part 3 of a 3 part clinical experience that includes direct patient care related outcomes necessary for completion of program objectives. The use of multiple departments within the hospital enables the student to see a wide distribution of patient situations. In the emergency department, which most closely approximates the types of patients that paramedics see, students are presented with a variety of patient presentations and complaints, important eliments in building up a ìlibraryî of patient care experiences to draw upon in future clinical decision making responsibilities. This experience takes place within a hospital/clinical environment and under direct supervision. All skills are first taught in the classroom before being performed in the clinical setting. Criminal background check and drug testing required.
EMT 280P1 Co-op Ed: EMT Internship Part 1 $\qquad$ 3 credits Prerequisite: EMT 2792 EMT 273 Corequisite EMT 274. Course is part 1 of a 2 part paramedic field internship. During the field internship the student is assigned to a 911 ambulance under the close supervision of a paramedic preceptor. The course begins as a field clinical experience where the student learns to synthesize cognitive and psychomotor skills learned earlier in the program. An assigned paramedic preceptor helps the student identify pertinent findings and how to prioritize treatment and transport decisions. The second phase of this course is an evaluative phase of the program. Field internship provides the student with an opportunity to serve as team leader in a variety of prehospital advanced life support emergency medical situations. The student is evaluated as to their ability to integrate all of the didactic, psychomotor skills, and clinical instruction into the ability to integrate all of the didactic, psychomotor skills, and clinical instruction into the ability to serve as an entry level paramedic.
EMT 280P2 Co-op Ed: EMT Internship Part 2. $\qquad$ .5 credits Prerequisite: EMT 274, EMT 275. Course is part 1 of a 2 part paramedic field internship. During the field internship the student is assigned to a 911 ambulance under the close supervision of a paramedic preceptor. The course begins as a field clinical experience where the student learns to synthesize cognitive and psychomotor skills learned earlier in the program. An assigned paramedic preceptor helps the student identify pertinent findings and how to prioritize treatment and transport decisions. The second phase of this course is an evaluative phase of the program. Field internship provides the student with an opportunity to serve as team leader in a variety of prehospital advanced life support emergency medical situations. The student is evaluated as to their ability to integrate all of the didactic, psychomotor skills, and clinical instruction into the ability to integrate all of the didactic, psychomotor skills, and clinical instruction into the ability to serve as an entry level paramedic.

## Energy Management

For information, contact Science, Bldg. 16/Rm. 253, (541) 463-3977
NRG 101 Introduction to Energy Management. $\qquad$ .3 credits Prerequisite: Program Admittance. This course defines the need for energy management as an integral part of society at all levels. Students will understand basic energy accounting and analysis protocol. The course will also present the various vocational opportunities available to energy management students through lectures, video and guest speakers.
NRG 102 Blueprint Reading: Residential and Commercial... 3 credits Basic Blue Print Reading for residential and commercial buiildings is designed to deal with the reading of commercial architectural plans, examining their characteristics, service, and maintenance of electrical, plumbing, HVAC, and energy management related design and materials. Introductory drafting and plans drawing skill will be presented including sketches, free hand and cutting plan methods.

NRG 103 Sustainability in The Built Environment $\qquad$ 3 credits Prerequisites: Entry into the Energy Management Program. This course will help students understand the relationship of sustainability and buildings by addressing the "Three Es of Sustainability" in the built environment. Students will explore the ENVIRONMENTAL influence of buildings on air and water quality and waste streams; discover the ECONOMIC benefits of reduced operating costs, improvement of occupant productivity, optimization of life-cycle economic performance; and SOCIAL EQUALITY benefits by enhancing occupant comfort and health, heighten aesthetic qualities, minimizing strain on local infrastructure, improving overall quality of life. The course will use the Leadership in Energy and Environnmental Design framework education.

NRG 111 Residential/Light Commercial Energy Analysis...... 3 credits Corequisite: PH 101 .Topics include the following: residential/light commercial heating systems; heat transfer through building envelope; degree days; sources of internal heat gains; heat loss calculations, indoor air pollution; codes and regulations.
Spreadsheets will be used
NRG 112 Commercial Energy Use Analysis............................. 4 credits Prerequisite: NRG 111 and NRG 121 and MTH 095 or Math Placement Test. Emphasis is on the analysis of energy use in commercial buildings. Topics include utility bill analysis, audit data, identifying energy efficiency measures, use of micro-dataloggers, energy savings and investment calculations, audit report writing. Students will complete a supervised field audit.

NRG 113 Building Energy Simulations $\qquad$ 4 credits Prerequisite: NRG 112 and MTH 095 or Math Placement Test The course covers the variety of computer programs available for analyzing commercial buildings. Topics include BIN methodology, hourly simulations and an overview of current programs on the market such as eQuest. Students perform supervised computer simulations.

NRG 121 Air Conditioning System Analysis $\qquad$ 3 credits Prerequisite: PH 101 Students will investigate the physical principles of heating ventilation, and air conditioning systems commonly found in the commercial setting. Topics will include: the energy equation, change of state, and refrigeration. The course will also cover sensible and latent heat equation, psychometrics, heat and cooling load equations, solar effects, effects of thermal mass, central forced air furnaces, SEERs, EERs, AFUEs, fuels, and unitary single zone and multi-zone secondary systems.
NRG 122 Commercial Air Conditioning System Analysis...... 3 credits Prerequisite: NRG 121 This course is the second class in a twocourse sequence. Students completing this course will be able to identify commercial HVAC system types and the general energy impact of each type. Calculations of system equipment efficiencies will be used to determine EER, SEER, AFUE, COP, combustion and seasonal efficiency in boilers, balance point partial load efficiency, and Bin analysis. Students will investigate HVAC delivery systems that will include fans pumps dampers, control valves, and ducting. The course will require field work where students will identify and perform calculations on equipment through nameplate and manufactures data takeoffs.

NRG 123 Energy Control Strategies. 4 credits
Prerequisite: NRG 122 and NRG 124. Topics include building system control theory and devices, including electric, pneumatic, and digital controls. An emphasis is placed on identifying and understanding control strategies related to energy using systems and methods to estimate energy savings. Hands on labs reinforce device identification and students complete an energy efficiency controls calculation project.

NRG 124 Energy Efficiency Methods .3 credits Prerequisite: BT 114 and NRG 111 and PH 101; Corequisite: PH 102. The class will emphasize energy management calculation methods focusing on conversion factors and specific fuel types.
Fundamental equipment efficiency calculations will be practiced for combustion, motors, and refrigeration. Field data collection and safety procedures will be reviewed. Spreadsheets will be used.

NRG 131 Lighting Fundamentals 3 credits Prerequisite: PH 101 or Instructor Consent; Corequisite: PH 102. 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. Course requirements include a directly supervised lighting audit project.
NRG 132 Lighting Applications. $\qquad$ 3 credits Prerequisite: NRG 131 and MTH 095 or Math Placement Test. Topics in this course will include a review of terminology and lighting fundamentals. Students will critically evaluate lighting systems, luminaries and associated components. Understand and perform various types of illuminance calculations, including point-by-point, lumen method, and computerized procedures. Students will become familiar with the IES Illuminance selection procedure and IES recommended practices for various space types. Formulate objectives and develop an understanding of lighting applications, issues and concerns. Students will work effectively as a member of a team in the development of lighting
NRG 141 Energy Investment Analysis 3 credits
Prerequisite: NRG 111 or Instructor Consent. Topics include: interest, simple payback and life-cycle cost analysis, time value of money, cash flow equivalence, cost-benefit analysis, effects of tax credits, depreciation, inflation and/or escalating fuel costs on energy investments, and cost estimating procedures. The emphasis will be on analysis of energy investments using spreadsheets to consider total cost-benefits over the life of the investment.

NRG 142 Energy Accounting. . 3 credits Prerequisite: BT 114 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. $\qquad$ 3 credits A survey of the sources of energy that may be used to increase energy supply in the Pacific Northwest. Included are geothermal, wind, low head hydro, solar and biomass. Environmental, social and economic advantages of each source are assessed.

NRG 155 PV System Design and Installation 1 $\qquad$ .4 credits Prerequisite: PH 101 and PH 102 and MTH 095 or Math Placement Test. Corequisite: NRG 157. This hands-on course will cover the National Electrical Code (NEC) specifics concerning photovoltaic (PV) installation article 690. Code compliant wiring of modules, inverters, charge controllers, and batteries will be explored in detail. Students will use materials designed for installation practice both indoors and out.
NRG 156 PV System Design and Installation 2. $\qquad$ . 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. Safety on the job will be emphasized.

## NRG 157 Renewable Energy Systems

 3 creditsPrerequisite: First Year of Energy Program; Corequisite: NRG 141 This course will provide an overview of the Solar PV and Solar Thermal industry. Topics include PV theory, an introduction to PV and thermal system types and efficiencies, solar site evaluation, available solar radiation, tools used in the solar industry, and the economics of solar.
NRG 158 Thermal Design and Installation 1 $\qquad$ .4 credits Prerequisite: PH 101 and PH 102 and MTH 095 or Math Placement Test. This hands-on course will first cover 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 $\qquad$ 4 credits Prerequisite: NRG 158 This hands-on course will continue the discussion from Thermal 1 regarding the Oregon Plumbing code as it relates to solar Domestic Hot Water (DHW) system installation. A continuation of the system type, tanks, controls, pumps, valves, mounting systems and installation safety discussion that began in Thermal 1 will be investigated in greater depth.

NRG 162 Solar Photovoltaics System Design and Installation 3. $\qquad$ 4 credits Prerequisites: NRG155 and NRG156. Students will understand the performance characteristics, applied electrical code, associated electrical equipment with an emphasis on battery electrical storage systems, and skills necessary for the design and installation of photovoltaic energy systems. Students will install s 2 kW system and obtain the North American Board of Certified Energy Practitioners Entry Level Certificate.
NRG 199 Special Studies:.
.1-4 credits
See Department for topics.
NRG 206 Co-op Ed:Energy Mgmt. Seminar. $\qquad$ 1 credit
The Energy Management Cooperative Education Seminar will provide ways for students to increase their understanding of industry expectations, as well as develop job search tools and skills. The content is designed to help students present themselves to employers in a competent and professional manner, and to move initially into their cooperative education internships; then into their professional careers.
NRG 280 Co-op Ed: Energy Management. $\qquad$ .3-12 credits
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 in the energy management field. This course is a required course in the Energy Management degree.
NRG 298 Independent Studies $\qquad$ 1-3 credits A variable credit course based on independent study contracted between an instructor and a student.

## Engineering Transfer

Also see Drafting, Electronics and Physics
For information, contact Science, Bldg. 16/Rm. 156, (541) 463-5446.
ENGR 101 Engineering Orientation $\qquad$ .3 credits Corequisite: MTH 251 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 include 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 115 Engineering Graphics

 .3 creditsCorequisite: MTH 112. 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 199 SS: 3 credits
See department for topics.
ENGR 211 Statics .4 credits
Prerequisite: MTH 252 and PH 211 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 . $\qquad$ .4 credits
Prerequisite: ENGR 211 and MTH 254 and PH 211 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 . $\qquad$ .4 credits Prerequisite: ENGR 211 and MTH 253 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, thinwalled pressure vessels, torsional and flexural loading, failure theory and column buckling.

ENGR 221 Electrical Fundamentals 1 .4 credits Prerequisite: PH 212. 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 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 in the engineering field.

## English - See Literature, Writing <br> English as a Second Language - See Study Skills <br> Environmental Science - See Earth and Environmental Science

## Ethnic Studies

For infomation, contact Social Science, Center Bldg./Rm. 403, (541) 463-5427.
ES 101 Historical Racial \& Ethnic Issues $\qquad$ .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. May be offered through Distance Learning.

ES 102 Contemporary Racial \& Ethnic Issues $\qquad$ .4 credits
This course explores the nature and complexity of racial and ethnic diversity in U.S. society. Using current developments in ethnic studies scholarship, we will examine multiple sources of discrimination, and how discrimination impacts self and society. We will also review the contemporary and experiences and issues facing various ethnic and racial groups. The course concludes with strategies for overcoming exclusion. ES 101 and ES 102 do not have to be taken in sequence. May be offered through Distance Learning.

## 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 sociohistoric 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信 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 199 Trends: Social Science
4 credits
ES 211 Chicano/Latino Experience: Historical and Idological Perspectives. $\qquad$
This course focuses on the historical origins of the largest Latino population in the U.S. The course begins with an exploration of the consequences of contact between the different worldviews of Mesoamericans and Europeans, and examines how Mexican natives and mestizos came to be viewed as 'foreigners' in their ancestral homeland. Throughout the course, we will review historical and contemporary indigenous cultural survival efforts.
ES 212 Chicano/Latino Experience: Political and Idological Perspectives............................................................................. 4 credits This course examines the efforts of Mexican Americans to achieve equality and self-determination through the twentieth century. Special attention will be paid to the emergence of multiple ideological and culturally nationalistic social justice movements that evolved into a unifying Chicano Movement of the late 1960s and early 70s. Finally, this course explores the continuing evolution and emergence of contemporary Chicano/Latino social justice movements.

## ES 213 Chicano/Latino Experience: Contemporary Identity and

## Cultural Issues

4 credits
This course explores the historical and contemporary identity/cultural issues affecting the largest Latino communities in the United States. We will review theories of ethnic identity development, as well as the social and political construction of 'race'. This course also examines how U.S. foreign policy in Latin America has influenced perceptions within and outside of the Latino community. Finally, we review the use of pan-ethnic labels and their function in the construction of an all-encompassing Hispanic Nation.
ES 221 African American Experience: Down From the Pyramids, Up From Slavery 10,000 BCE - 1877 4 credits The focus of this course is on African, Afro-European, Afro-Native American, Caribbean, South and North American Maroon societies. In this course we examine various cultural constructs through which Africans in America understand and influence the world. The chronology of this course encompasses Dynastic Egypt, preEuropean Conquest Africa, pre-Columbian America, to Post Reconstruction America 1877. ES 221, 222, and 223 examine culture, identity, gender and women's roles, economics, and African and Native American responses to systematic oppression towards goals of individual and group liberation. May be offered through Distance Learning

## ES 222 African American Experience:

Aspiration 1877-1945.
African, Afro-European, Afro-Native
American, and African-American contributions to various liberation movements in the Americas. We examine various cultural constructs through which Africans in the Americas understand and influence the world. The chronology of this course encompasses Post-Reconstruction America to the end of World War II. ES 221, 222, and 223 examine culture, identity, gender and women's roles, economics, and African and Native American responses to systematic oppression towards goals of individual and group liberation. May be offered through Distance Learning.
ES 223 African American Experience: A Luta Continua: The Struggle Continues 1945 to Present .4 credits Contemporary African, Afro-European, Afro-Native American, Caribbean, and Africans in South and North America are examined in this course. The chronology of this course encompasses World War II to the present and confronts issues such as prison
incarceration rates, the 'War on Drugs', Affirmative Action backlash, and Multiculturalism, as well as the cultural influences of gospel, jazz, rock and roll, and liberation movements. ES 221, 222, and 223 examine culture, identity, gender and women's roles, economics, and African and Native American responses to systematic oppression towards goals of individual and group liberation. May be offered through Distance Learning.

## ES 232 Asian American Experience:

Social Movements of the 20th Century
Throughout the 20th century, Asian Americans and Pacific Islanders have been discriminated against in various arenas (e.g., immigration, employment, political, education, housing, social, etc.). This course examines how Asian Americans and Pacific Islanders have responded to institutional forms of oppressions. Students will read and discuss works of various Asian American writers, scholars, and political activists to place Asian American social movements within a larger context of U.S. history.

## ES 233 Asian American Experience:

Contemporary Issues in Asian America $\qquad$ .4 credits Where and how do Asian Pacific Americans fit into contemporary U.S. society and culture? This course will examine current situations and issues faced by Asian Pacific Americans such as recent immigration trends, anti-Asian violence and anti-immigrant sentiment, the Hawaiian sovereignty movement, African American/Korean American conflict, LGBT issues, multiracial identities, and interracial marriage. This course will also examine contemporary cultural production by Asian Pacific Americans.

## ES 241 Native American Experience:

Consequences of Native American \& European Contact ...... 4 credits This course deals with Native Americans and Alaskan Native cultures and history, both prior to and immediately following, contact with Europeans during the past five hundred years. The course is divided into two general segments: First, the course will explore Native cultures in their traditional settings, before the arrival of outsiders. It surveys the great diversity of lifestyles, belief systems, languages, social and political structures, and creative expressions, which characterize the numerous tribal communities of the North American continent. Second, the course focuses on the major European encounters with native societies, beginning with the expedition of 1492 and extending into the Twentieth Century. The disparate responses and resistance strategies of various indigenous populations confronting the ideological and physical intrusion of Europeans is studied. ES 241, 242, or 243 courses may be taken at any time, in any order, with no prerequisites

## ES 242 Native American Experience:

Nineteenth Century Federal-Indian Relations. $\qquad$ .4 credits
This course focuses on nineteenth century United States and Canadian federal-native relations. In the nineteenth century, the United States and Canadian federal governments took different yet similar paths in how they dealt with the sovereign Native peoples within their borders. While no single course can adequately deal with the complexity of the subject matter surveyed, it is organized to help understand the public policies and events shaping tribal life in North America during this period. In the nineteenth century, paternalistic attitudes held by the dominant culture, created federal government policies whose effects can still be found today in the lived experiences of Native Americans.

## ES 243 Native American Experience:

Contemporary Native American Issues $\qquad$ .4 credits
This course explores contemporary relationships between the United States government, Native Americans, Alaskan Natives, and Native Hawaiians. Particular attention is paid to tribal sovereignty, treaty rights, land and resource ownership and use, religious and identity renewal, Native American political activism, education, and social and economic issues in contemporary rural and urban Native America. This course also focuses on various positive interactions and alliance-building relationships between Native Americans, the dominant society, and other groups of people of color in the U.S. ES 241, 242, or 243 courses may be taken at any time, in any order, with no prerequisites.
ES 244 Native American Story Telling $\qquad$ .. 4 credits This course is designed for students to experience the art of teaching and learning in the oral tradition adopted from the Native American traditions of the instructor. Students will be required to learn the socio/cultural context in which some Native American stories are based. Students will gain an understanding of the term "tribal" by doing some research on their own ethnic tribal roots
and compare it to the definition presented by the instructor. Rather than learning different tribal stories and discussing them, students will learn the social, cultural and environmental grounds for Native American stories, create their own stories, present them to class and the class will learn them (all done orally), and then discuss the stories.
ES 250 Class, Race and Gender in the US Economy ............. 4 credits This course examines the economic causes of social stratification within the labor market based upon class, race and gender. The course uses a political economy perspective to examine issues such as earnings and employment disparities, uneven poverty rates, differential access to housing, health and education. We will examine how the market both removes and produces obstacles, which restrict many social groups from fully participating in the promise of the 'American Dream.' We will examine the common goals, aspirations and struggles shared by diverse social groups, while recognizing that socio-economic discrimination is still an enduring and measurable characteristic of market economies. Attention will be placed upon gaining an understanding of the impact of discrimination from the perspective of the affected groups through firsthand accounts.
ES 280 Co-op Ed: Ethnic Studies .3-12 credits This course provides the student with ethnic studies-related work experience. The students will have the opportunity to integrate theory and knowledge gained in the classroom with practical experience in the field. Ethnic Studies co-op students are encouraged to work with local service agencies that serve underrepresented minority communities or organizations that operate from a social justice perspective. In this course a student may develop skills, explore career options, and network with professionals while earning college credit.

ES 298 Independent Study: $1-4$ credits
A variable credit course based on independent study contracted between an instructor and a student.

## Fabrication and Welding

For information, contact Advanced Technology, Bldg. 12/Rm. 201, (541) 463-5380.
ENGR 280W Co-op Ed: Welding $\qquad$ 3-12 credits
This course provides the student with welding-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 college credit toward a degree.
RTEC 100 Basic Career Technical Skills .2-6 credits
This course explores the basic skills for entering technical careers such as mechanics, manufacturing, aviation, electronics, etc. The course includes; safety, math, tools, basic electricity, basic hydraulics, employability skills, rigging, blue prints, and communication. Students may not receive credit for both RTECH 100 and APPR 101.
WLD 105 Fundamentals of Fabrications and Welding ......2-12 credits This course integrates the fundamentals of trade skills (safety, tools, employability skills, rigging, blueprints, electricity, mathematics and communications) with basic welding and metal fabrication skills. Students will study industrial level welding and fabrication techniques involving layout, form processing, fitting, welding and finishing.
WLD 111 Blueprint Reading for Welders $\qquad$ .3 credits Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. This course provides instruction necessary to interpret blueprints that are typically used by metal fabrication shops. Emphasis is placed on understanding types of lines, dimensioning, views, notations, abbreviations and welding symbols.

## Course Fees

Many courses may have additional fees. Please refer to the web class schedule credit listings and registration information for updated fee information and fee amounts.

WLD 112 Fabrication/Welding 1 12 credits Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Comprehensive skills necessary for the fabrication of metal products. This course introduces basic blueprint reading and shop fabrication techniques, shielded metal arc, wire drive, and gas tungsten arc welding processes. These skills are learned in the context of assigned and graded practice projects. Students may also have the opportunity to practice these skills in the production of actual metal products, some of which may be marketed.
WLD 113 Fabrication/Welding 2. $\qquad$ .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, wire drive, and gas tungsten arc welding is provided. In addition to practice projects, students may have the opportunity to fabricate actual metal products, some of which may be marketed. Under certain circumstances, this class may be taken as an introductory course.

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, wire drive welding, and gas tungsten arc welding. In addition to practice projects, students may have the opportunity to fabricate actual metal products, some of which may be marketed.

WLD 121 Shielded Metal Arc Welding 1 $\qquad$ .1-4 credits Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Skill development in electric arc welding, 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 $\qquad$ .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 and metal thicknesses. The student will be instructed in safe work habits and the optimum use of materials and equipment.

## WLD 139 Welding Lab

1-6 credits
Prerequisite: Instructor consent and minimum reading score of 68 OR RD 080 OR Prior College. Only available to students who have taken or are registered in the arc welding, wire drive processes, and/or fabrication/welding sequence. This is an opportunity for additional time in the welding lab.

WLD 140 Welder Qualification (Cert): Wire Drive $\qquad$ .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.
WLD 141 Welder Qualification (Cert): SMAW $\qquad$ .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.
WLD 142 Pipe Welding Lab: Carbon Steel .3 credits This is a hands-on course that instructs in set-up procedures and welding techniques required to weld carbon steel pipe in various positions. The code taught will be that of the American Welding Society (AWS). The scope of the course is limited to the practicing of pipe welding techniques. At additional cost, a student may take an AWS pipe welder qualification code test to be arranged with the instructor.

WLD 143 Wire Drive Welding 1 1-4 credits Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Skills development in gas metal arc welding (GMAW) of carbon steel. Students will be instructed in proper care, set-up and use of GMAW equipment. Preparing weld test specimens and performing weld tests is included in this course.
WLD 151 Fundamentals of Metallurgy $\qquad$ 1-3 credits Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Physical, chemical and mechanical nature of carbon and alloy steels. Includes study of the purpose and practice of various thermal treatments and cold working processes common to metal using industries.
WLD 154 Wire Drive Welding 2. 1-4 credits
Prerequisite: WLD 143 or instructor consent Technology and application of wire drive processes using gas shielded cored wire.
WLD 159 Wire Drive Welding 3. 1-4 credits
Prerequisite: WLD 143 or instructor consent. Technology and application of the wire drive processes using self shielded cored wire.

WLD 160 Wire Drive Welding 4. $\qquad$ 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 and 2. Instruction in material preparation and testing of coupons will also be provided.
WLD 165 Industrial Welding Practices. $\qquad$ 3 credits
Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. This course is designed for the advanced welder 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 evolve contaminates in the presence of welding heat.
WLD 215 Fabrication/Welding 4 .12 credits
Prerequisite: Second year standing or instructor consent This course instructs in the skills and technology associated with fabrication of metal products. Welding practice is provided in wire drive, SMAW and GTAW processes. Fabrication skills taught include blueprint reading, metal layout, part preparation and assembly and final finishing. Also studied are concepts in ferrous metallurgy and their applications. Products may be manufactured in the process of learning skills that may be sold.
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 and non-ferrous metallurgy and their applications especially pertaining to welding of stainless steel and aluminum alloys. Products may be manufactured in the process of learning skills that may be sold.

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 concepts in wear analysis and selection and application of wear or corrosion resisting surface treatments. Products may be manufactured in the process of learning skills that may be sold.
WLD 242 Gas Tungsten Arc Welding 1. $\qquad$ 3 credits
Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. This course teaches the technology of, and provides practice in, gas tungsten arc welding (GTAW) of carbon and stainless steel sheet material. Students will be instructed in proper care, set-up and use of GTAW equipment. Testing of weld coupons 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 coupons 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<br>Film - See Literature, Media Studies

## Fitness Training

For information, contact Health and PE, Bldg. 5/Rm. 205, (541) 463-5545.
PE 135 Applied Exercise Physiology 1. .. 3 credits Prerequisite: PE 295 and PE 194T. Exercise metabolism and fuel sources for energy, cardiovascular response to activity, basic functioning of physiological systems, and musculoskeletal adaptations to acute exercise, and long-term physical training. Designed for students preparing for the fitness industry, prephysical therapy, cardiac rehabilitation, teaching or coaching. Course content and information will also help prepare students for national certification exams. Students must be accepted into the Exercise and Movement Science Program and be in good academic standing to be eligible to take this course.

## PE 194F Professional Activity: Fitness Assessment and

Exercise Prescription-Field Techniques. $\qquad$ . 3 credits
Prerequisite: Program Admission. Basic fitness principles and techniques for physical fitness assessments including cardiovascular endurance, blood pressure, joint flexibility, body composition, muscular strength and endurance, and skill related fitness. ACSM exercise testing and prescription guidelines will serve as the foundation for this course. Topics include health screening, informed consent, field test protocols, data interpretation, and exercise prescription. Students will have opportunities for practical experience in assessing fitness levels and developing appropriate exercise prescription for apparently healthy individuals as well as special populations such as physically challenged, pregnant and postpartum women, and mature adults. Course content and information will help prepare students for national certification exams. Students must be accepted into the Exercise and Movement Science Program to be eligible to take this course

PE 194L Professional Activity: Fitness Assessment and
Exercise Prescription- Laboratory Techniques. $\qquad$ ..... 3 credits Prerequisite: PE 235. Advanced physical fitness testing procedures performed in a laboratory setting. Students will learn health screening and risk appraisal guidelines. Fitness tests performed will include bioelectrical, Omegawave, ECG, and anaerobic capacity, as well as submaximal testing protocols and maximal oxygen uptake testing using gas analysis. Students will assess test results and then prescribe appropriate exercise for a variety of populations. Students will further learn to identify the effects of common pharmacological agents on heart rate, blood pressure, and exercise capacity, and identify guidelines for termination of exercise testing. Course content and information will help prepare students for national certifications. Students must be accepted into the Exercise and Movement Science Program and be in good academic standing to be eligible to take this course.
PE 194S Professional Activity: Principles of Strength
Training and Conditioning Instruction.
$\qquad$ Prerequisite: Program Admission. Fundamental techniques o resistance training, and programs/systems of conditioning. Includes safety concerns, flexibility exercises, exercise modalities, aerobic conditioning, exercise prescription, exercise principles. Designed for those students who wish to be personal trainers, group exercise instructors, teachers/coaches or work in a private/corporate fitness setting. Course content and information will help prepare students for national certification exams. Students must be accepted into the Exercise and Movement Science Program to be eligible to take this course.
PE 194T Professional Activity: Techniques of Leadership Training. g........ 2 credits Prerequisite: PE 194F, PE 194S, PE 196 Introduction to and experience with a variety of fitness and coaching leadership methods and skills. Safety, motivation, communication, group and team organization, lesson and practice planning, and much more are covered in a lecture-lab setting. Students will experience leading/teaching in class assignments in their choice of fitness
activities. This comprehensive course in learning how to teach and lead is applicable to both personal trainers and group fitness leaders. Course content and information will help prepare students for national certifications. Students must be accepted into the Exercise and Movement Science Program and be in good academic standing to be eligible to take this course.

PE 196 Applied Anatomy and Kinesiology. 3 credits
Prerequisites: Program Admission. Basic kinesiological principles of movement and exercise. Includes major muscle groups, and joints, as well as the planes of movement, and basic biomechanical factors. Basic understanding of the major muscle groups including origins, insertions and actions. Basic kinesiological concepts will be taught. Course content and information will help prepare students for national certification exams. Students must be accepted into the Exercise and Movement Science Program to be eligible to take this course.
PE 199F Special Topics: Fitness. $\qquad$ 1 credit Prerequisite: PE 235 Current topics in health, fitness, and exercise science are addressed. See department for details. Course content and information will help prepare students for national certifications. Students must be accepted into the Exercise and Movement Science Program and be in good academic standing to be eligible to take this course.
PE 235 Applied Exercise Physiology 2 . 3 credits Prerequisite: PE135. A continuation of PE135 Applied Exercise Physiology I for students in the second year of the Fitness Specialist Program. Topics include exercise for unique populations (e.g., individuals with obesity, coronary disease, chronic obstructive pulmonary disease, diabetes, musculoskeletal disorders or other degenerative diseases, as well as children, adolescents, older adults, and male/female populations), environmental considerations during exercise, conditioning for optimal performance, and nutritional principles related to exercise. Course content and information will help prepare students for national certifications. Students must be accepted into the Exercise and Movement Science Program and be in good academic standing to be eligible to take this course.
PE 280 Co-op Ed: Physical Education. $\qquad$ .1-12 credits
Prerequisite: Instructor approval. This course provides the opportunity for supervised work experiences in a Physical Education program on campus or in a public or private school setting. Students may gain knowledge, develop skills, gain teaching experience, and explore career options while earning credit toward a degree or certificate. Work sites may be paid or non-paid. Note: For students who are not currently enrolled in the Professional Fitness Training Program, there is an enrollment minimum of 3 credits for this course.
PE 280A Co-op Ed: Athletics $\qquad$ 1-12 credits
Prerequisite: Instructor approval. This course provides an opportunity for supervised work experiences in the non-coaching aspects of an athletic program on campus or in a public or private work site in the community. Students may gain knowledge, develop skills, and explore career options while earning credit toward a degree or certificate. Work sites may be paid or non-paid. Note: For students who are not currently enrolled in the Professional FitnessTraining Program, there is an enrollment minimum of 3 credits for this course.
PE 280AR Co-op Ed: Aerobics $1-12$ credits
Prerequisite: Instructor approval. This course provides an opportunity for supervised work experiences in an aerobic fitness program on campus or in a public or private work site in the community. Students may gain knowledge, develop skills, gain teaching experience, and explore career options while earning credit toward a degree or certificate. Work sites may be paid or non-paid. Note: For students who are not currently enrolled in the Professional FitnessTraining Program, there is an enrollment minimum of 3 credits for this course.

## Course Fees

Many courses may have additional fees. Please refer to the web class schedule credit listings and registration information for updated fee information and fee amounts.

PE 280AT Co-op Ed: Athletic Training $1-12$ credits Prerequisite: Instructor approval. This course provides an opportunity for supervised work experiences in an athletic training environment that deals with injuries related to fitness and sports, including injury care, prevention, and rehabilitation methods and techniques. Students may gain knowledge, develop skills, and explore career options while earning credit toward a degree or certificate. Work sites may be on or off campus, paid or non-paid. Note: For students who are not currently enrolled in the Professional Fitness Training Program, there is an enrollment minimum of 3 credits for this course.
PE 280C Co-op Ed: Coaching .3-12 credits
Prerequisite: Instructor approval. This course provides an opportunity for supervised coaching experiences on campus or in a public or private program in the community. Students may gain knowledge, develop skills, get coaching experience, and explore career options while earning credit toward a degree or certificate. Work sites may be paid or non-paid.
PE 280F Co-op Ed: Fitness. $\qquad$ $1-12$ credits
Prerequisite: Instructor approval. This course provides an opportunity for supervised work experiences in a professional fitness program on campus or in a public or private work site in the community. Students will have the opportunity to integrate theory and practice gained in the classroom with practical experience in a professional work environment. Students may gain knowledge, develop skills, and explore career options while earning credit toward a degree or certificate. Work sites may be paid or non-paid. Note: For students who are not currently enrolled in the Professional FitnessTraining Program, there is an enrollment minimum of 3 credits for this course.
PE 280M Co-op Ed: Fitness Management $\qquad$ $1-12$ credits
Prerequisite: Instructor approval. This course provides an opportunity for supervised work experiences in the management aspects of a professional fitness program, on campus or in a public or private worksite in community. Students will have the opportunity to integrate theory and practice gained in the classroom with practical experience in a professional work environment. Students may gain knowledge, develop skills, and explore career options while earning credit toward a degree or certificate. Work sites may be paid or non-paid. Note: For students who are not currently enrolled in the Professional Fitness Training Program, there is an enrollment minimum of 3 credits for this course.

PE 280R Co-op Ed: Recreation $\qquad$ 1-12 credits
Prerequisite: Instructor approval. This course provides an opportunity for supervised work experiences in a recreational program on campus or in a public or private work site in the community. Students may gain knowledge, develop skills, and explore career options while earning credit toward a degree or certificate. Work sites may be paid or non-paid. Note: For students who are not currently enrolled in the Professional Fitness Training Program, there is an enrollment minimum of 3 credits for this course.
PE 280RT Co-op Ed: Rehabilitation Therapies. $\qquad$ 1-12 credits
This course provides students with an opportunity to work in an environment that deals with rehabilitation methods and techniques related to injury, illness and aging. Students may gain technical skills and knowledge under the guidance of a health care professional. Call for orientation times.
PE 280W Co-op Ed: Wellness $\qquad$ 1-12 credits
Prerequisite: Instructor approval. This course provides an opportunity for supervised work experiences in an employee wellness or similar program, on campus or in a public or private work site in the community. Students may gain knowledge, develop skills, and explore career options while earning credit toward a degree or certificate. Work sites may be paid or non-paid. Note: For students who are not currently enrolled in the Professional FitnessTraining Program, there is an enrollment minimum of 3 credits for this course.

PE 294 Foundations of Fitness Management $\qquad$ 3 credits Prerequisite: PE 194L. Introduction to management topics specific to the fitness industry, including fitness program administration, safety and legal liability, facility management, equipment acquisition and maintenance, corporate fitness practices, and employee wellness programs. Students will also be guided in job search practices and resume development. Learning experiences will include lectures, field trips, presentations by fitness professionals, individual projects, group projects, and computer assignments. Course content and information will help prepare students for national certifications. Students must be accepted into the Exercise and Movement Science Program and be in good academic standing to be eligible to take this course.
PE 295 Injury Prevention \& Management $\qquad$ 3 credits Prerequisite: PE196,PE 194F, PE 194S. Students will learn how to prevent, recognize and rehabilitate common injuries that may occur during activity. This course is designed to provide the conceptual framework for learning how to develop exercise prescription for individuals with physical limitations due to injury. It will include methods on how to select exercise progressions, how to teach exercises to clients, appropriate exercise guidelines for repetitions and sets, and an outline for the amount of time needed for the client to return to full activity. The use of ACSM guidelines for exercise prescription will be the foundation. Course content and information will help prepare students for national certifications. Students must be accepted into the Exercise and Movement Science Program and be in good academic standing to be eligible to take this course.

## Flight

Also see Aviation Maintenance
For information, contact Flight Technology, Airport Road, (541) 463-4195.
AS 111 The Air Force Today
1 credit
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 credit
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 credit
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 credit
Cadets learn officership, leadership, drill and ceremony, and customs and courtesies. Lec/lab. Graded P/N. OTHER PREREOS: 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

$\qquad$ .1 credit
Study of air power from balloons and dirigibles through the jet age; a historical review of air power employment in military and nonmilitary 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 credit
Study of air power from balloons and dirigibles through the jet age; a historical review of air power employment in military and nonmilitary 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. $\qquad$ 1 credit
Study of air power from balloons and dirigibles through the jet age; a historical review of air power employment in military and nonmilitary 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 credit 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 PREREOS: 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.. ... 1 credit 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 theTSA. Students will work on projects and schedule job shadows.
FT 102 General Aviation Careers. $\qquad$ 1 credit
A survey of general aviation career areas, both flying and nonflying, as presented by a variety of guest speakers from the aviation industry. Class attendance is mandatory for credit; this is not a graded course.
FT 103 Aircraft Development .4 credits
Prerequisite: Testing: minimum reading score of 68 . A survey course developing the evolution of the aviation industry. This course develops the interdependence of developing technology, materials sciences, political influences and economics. The student will exit this course understanding how these factors have driven the state of the industry today and projections for the future.
FT 113 Aviation Science 4 credits A foundational course developing applicable principles in the fields of physics, chemistry and mechanics. These principles are developed to an applications level to support an understanding of how major aircraft systems operate.
FT 115 Aircraft Structures and Systems. $\qquad$ .3 credits
Designed to give a pilot a thorough understanding of airplane systems and structural design.
FT 130 Primary Flight Briefing $\qquad$ . 3 credits
Prerequisite: Testing: minimum reading score of 68. This course will help students to master key areas of aeronautical knowledge necessary to progress efficiently toward the Private Pilot Certificate.
FT 228 Multiengine Ground School . . .2 credits
Recommend possession of FAA private pilot license. A two part multi-engine course: Part 1 develops the understanding of multiengine airplane systems and basics of multi-engine airplane flight operations including emergency procedures. Part 2 develops advanced multi-engine airplane systems and operation. Multiengine airplane operational procedures training including both normal and emergency procedures skills development.
FT 239 Professional Pilot Flight Lab. $\qquad$ 1-7 credits Prerequisites: Admission to the Flight Technology program. The Professional Pilot Course is designed to prepare applicants for their careers as professional pilots in the air transportation industry. The Professional Pilot Course includes certification training for Private Pilot, Commercial/Instrument Pilot in single-engine and multiengine airplanes. 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. Topics include FARs, airplane structures, aerodynamics, meteorology, navigation, accessing and using performance data and numerous other industry information resources.
FT 251 Commercial Pilot Ground School 5 credits
Recommend private pilot license or equivalent. This course develops the knowledge and skills required for a candidate to successfully complete and pass the FAA written test required to be certificated as a commercial pilot.
FT 252 Instrument Ground School. .5 credits Recommend completion of Commercial Pilot Ground School FT 251. This course prepares the student for successful completion of the FAA written examination required for an Instrument rating. The course develops an understanding of the IFR environment, systems and procedures.

FT 254 Aerodynamics .3 credits An analysis of the physics of flight; the characteristics of high-speed and low-speed flight and the effects of pressure, altitude, weight, center of gravity, and airfoil design on aircraft performance.
FT 255 Fundamentals and Flight InstructorInstrument Ground School. 3 credits
Recommend current passing score on FAA commercial pilot and instrument pilot knowledge exam or possession of valid commercial or ATP pilot certificate. A survey of psychological principles relating to the human learning process, plus a concise review of federal regulations, radio navigation, and principles of meteorology appropriate to IFR flight operations in the United States.
FT 256 Flight Instructor-Airplane Ground School. $\qquad$ 3 credits Recommend participants be the holder of a FAA Commercial Pilot certificate with an Instrument rating, or an ATP certificate. This course develops details of airplane flight operations and maneuvers analysis; FAA regulations and recommended procedures for flight instruction. Detailed analysis of reference documents and resources for flight instructors. Upon completion of this course, participants will be prepared for the FAA Flight Instructor written examination.

FT 280 Co-op Ed: Flight Tech 3-12 credits
This course provides the student with flight-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.
GS 109 Meteorology.. 5 credits
This course is a survey of the field of meteorology with detailed emphasis on the elements specific to the aviation industry. Students exit this course understanding how to access, analyze and use weather data to make decisions essential for safe flight.

## Foreign Languages - See Language Studies French - See Language Studies

## General Science

Also see Biology, Chemistry Earth and Environmental Science, Physics
For information, contact Science, Bldg. 16/Rm. 156, (541) 463-5446
GS 199B Special Studies: .1 credit
See department for topics.

## Course Fees

Many courses may have additional fees. Please refer to the web class schedule credit listings and registration information for updated fee information and fee amounts.

## Geography

For information, contact Social Science, Center Bldg./Rm. 403, (541) 463-5427.
GEOG 141 Natural Environment. $\qquad$ .. 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.
GEOG 142 Introduction to Human Geography $\qquad$ .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 inclass exercises. This course fulfills the race, gender, and ethnicity requirement. May be offered through Distance Learning.
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 206 Geography of Oregon $\qquad$ 3 credits This course emphasizes the physical and cultural geography of Oregon. Physical geography serves as a framework to support the understanding of cultural settlement patterns, resource bases, landuse, and urban patterns for the diverse cultures who have given identity and cultural meaning to the 'place' of Oregon.
Occasionally available as a field course summer term. GEOG 141 and/or GEOG 142 recommended prior to this class.
GEOG 216 Geography of Pacific Asia .3 credits
This regional course introduces the Pacific Rim with emphasis on East and Southeast Asia. A variety of cultures and natural environments are studied to understand development of modern Asia within a geographic and global context. Patterns of natural systems including landform regions, climate, and vegetation are explored. Traditional cultures and landscapes juxtaposed with modern patterns of economic growth show fast paced development shaping the new Asia. GEOG 141 or GEOG 142 is highly recommended prior to this class.

GEOG 280 Co-op Ed: Geography $\qquad$ 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.
GEOG 298 Independent Study: $\qquad$ 1-3 credits A variable credit course based on independent study contracted between an instructor and a student.

GIS 245 Maps and Spatial Information. $\qquad$ .4 credits Prerequisites: Math 60 or Consent of instructor. This course will provide an introduction to the cartographic principles needed to understand Geographic Information Science. The course will explore global reference and coordinate systems, maps and generalization, types of maps: refernece, thematic, topographic, aeiral photography, and GIS. During the course, students will be introduced to ArcMap. It is assumed that students have no prior knowledge about GIS. This course serves as a foundation course in the GIS sequence. The course assumes participants have taken CIS 101 Computer Fundamentals, or CS 120 Concepts of Computing, or have an equivalent understanding of basic computer literacy concepts, and have experience as a user of the Windows operating system and applications software.

GIS 246 Introduction to GIS .4 credits Prerequisites: Math 65 \& GIS 245, or Consent of instructor. CIS 247 Information Analysis and Visualization is highly recommended but not required. This course is the second in a series of Geographic Information Science courses and will focus on the development of skills and techniques used to create, analyze, and display spatial data in a geographic information system. The following skills and techniques will be emphasized: data management, map digitizing, and map editing. The course assumes participants have taken CIS 101 Computer Fundamentals, or CS 120 Concepts of Computing, or have an equivalent understanding of basic computer literacy concepts, and have experience as a user of the Windows operating system and applications software.
GIS 248 Applications in GIS $\qquad$ .4 credits Prerequisite: GIS 246 or consent of the instructor. This course will provide advanced experience in Geographic Information Science (GIS) concepts and applications. The course builds on the experience and knowledge gained in GIS 245 (Maps and Spatial Information), GIS 246 (Introduction to GIS) and CIS 247(Information Analysis and Visualization). Students will gain practical experience by performing a number of GIS tasks such as: database management, cartographic design, document conversion, analysis and workforce training. Experience will be gained via real-world, applied, capstone projects.

## Graphic Design

For information, contact Art and Applied Design, Bldg. 11/Rm. 101, (541) 463-5409.

## ART 115GD Basic Design: Fundamentals GD

$\qquad$ .4 credits Beginning course in two-dimensional design covering fundamental visual elements, concepts and principles. Emphasis will be placed on how those fundamentals apply to graphic design and will include career information. Course work includes necessary competencies for the Graphic Design program.

ART 119 Typography 1 3 credits
Prerequisite: ART 115 or ART 131. This course explores the use and design of letterforms and typographic design. Basic typographic history and classification of typefaces will be covered. Essential craftsmanship and technical skills will be stressed. Coursework includes necessary competencies for the Graphic Design program.
ART 199AB Special Studies: $\qquad$ 4 credits
ART 200 Graphic Design History $\qquad$ .3 credits A team-taught interdisciplinary approach to graphic design history and its relationship to traditional art. Students will 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, required for graphic design majors.
ART 216 Digital Design Tools. $\qquad$ 4 credits
An introduction to core layout, vector, bitmap, and documentsharing 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. This course 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. Exploration of advanced graphic design problems as well as portfolio preparation. Students are exposed to a number of professional and business issues in the field of graphic design. Coursework includes necessary competencies for the Graphic Design program.

ART 225 Digital Illustration 3 credits
Prerequisite: ART 216 or ART 260. This course is designed to give students 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(or ART 260) 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 $\qquad$ .4 credits
Prerequisites: Art 227,Art 218, MUL 212, ART 225 An intermediate course in digital prepress production. Coursework includes necessary competencies for the graphic design program.
ART 229 Graphic Design Production 3..................................... 4 credits Prerequisites: ART 228, Art 218, Mul 212, Art 225. An advanced course in digital production in which students produce projects in a studio setting under professional conditions and standards.
ART 237 Illustration 1. . 3 credits
Prerequisite: ART 131. This course provides an introduction to the field of illustration with emphasis on solving illustration problems and developing a personal style. Most of the assignments will concentrate on black and white illustration techniques.
ART 280GD Co-op Ed: Graphic Design $\qquad$ .3-12 credits
This course provides the student on-the-job experience in professional graphic design sites in the community. The student will have the opportunity to integrate theory and practice gleaned from the classroom with the practical experience of 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. The Graphic Design Program requires a minimum of six credits of cooperative education. Please contact graphic design cooperative education coordinator as soon as possible after registering.
ART 289 Web Production $\qquad$ .3 credits Prerequisite: CIS 125H and ART 216 or MUL 212. Intermediate web development course emphasizing production using web authoring software. Topics include site building and management, GUI customization, typography, CSS and integration of multimedia.

ART 290 Design Concepts for the Web . 3 credits Prerequisite: ART 216 (or ART 260) and ART 225, and MUL 212, and ART 289. An intermediate study of web site design and emphasis on informational architecture including strategy, planning, usability, and design of integrated web sites. This course covers business practices as they relate to graphic and web design.
GD 110 Introduction to Graphic Design. $\qquad$ . .1 credit This course presents information about the career of graphic design including 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 Health and PE, Bldg. 5/Rm. 205, (541) 463-5545.
HE 125 Workplace Health and Safety $\qquad$ .3 credits
This class is designed to increase awareness and 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. Topics will include but not be limited to: injury and illness prevention, teambuilding, behavior based psychology, emotional intelligence, workplace morale and wellness, hazard types and identification, consequences and prevention of environmental exposures, OSHA safety regulations and the principles of behavior change.

HE 152 Drugs, Society and Behavior. $\qquad$ 3 credits Overview of current information concerning the impact of drugs on both society and personal behavior. Students will learn how drugs affect the human body and will examine a variety of issues related to drug use and abuse. Topics include, but are not limited to: pharmacology, stimulants, depressants, opiates, inhalants, and psychedelics, as well as drug history and drug control issues.

HE 199 Special Studies: 3 credits
Wilderness First Aid will cover fundamental first aid care and emergency procedures in an outdoor environment. Techniques of handling the sick and injured in a more remote location will be included. Students will study and practice skills related care for airway obstruction, rescue breathing, child and adult CPR, shock, poisoning, temperature related conditions, altitude sickness, sudden illness, bites, stings, musculoskeletal injuries, including strains, sprains, dislocations and fractures, bleeding and wound management, internal injuries and patient transportation skills.
HE 209 Human Sexuality. $\qquad$ .. 3 credits
The course focuses on increasing one's knowledge and awareness of sexual health issues to make informed, responsible decisions. Students explore and discuss biological, psychological, and sociological forces that contribute to the development and expression of one's sexuality. Topics include, but are not limited to: female and male sexual anatomy and physiology; sexually transmitted infections; fertility management; conception, pregnancy, and childbirth; sexual coercion; sexual dysfunctions; gender identity; sexual arousal and behavior; communication and relationships; and sexual attitudes of the past and present. May be offered through Distance Learning.
HE 222 Consumer Health. 3 credits
This course is designed to provide students with the ability to obtain, understand and process basic health information and services needed to make informed decisions as a health consumer. Topics will include, but not be limited to: Health Conditions \& Diseases, Self-Care (i.e., dental care, skin care, womenís \& menís health issues, drugs, fitness, food choices, weight/fat control), Advertising \& Quackery, Alternative Health Methods, Health Care Facilities \& Health Insurance, Death \& Dying, Health Care Economics, and Consumer Laws and Agencies.
HE 250 Personal Health. 3 credits
Overview of current health information designed to expand the student's knowledge of the impact of personal responsibility, as well as the influences of family, community, and society on health behavior. The course focuses on education, behavior change strategies, self-assessments, and modification of risk factors. Topics will include, but are not limited to: communicable and chronic diseases; psychological and intellectual health; hereditary risks, addictive behaviors, alcohol and tobacco use, sexually transmitted infections, contraception, nutrition and consumer health and sustainability. This course may be offered through Distance Learning.
HE 252 First Aid. $\qquad$ .. 3 credits
This course focuses on fundamental emergency first aid assessment, care and prevention. Students will study and practice life-saving skills related to airway obstruction, rescue breathing, adult, child and infant CPR, shock, soft tissue and musculoskeletal injuries, sudden illnesses such as poisoning, bites/stings, seizures, heat and cold emergencies, diabetes and emergency childbirth. Other topics include but are not limited to; delayed help situations, moving and transport of victims, working with special needs populations, care and prevention of cardiovascular disease including stroke and other circulatory and respiratory conditions with an emphasis on creating healthy lifestyles. Meets American Red Cross, National Safety Council, and OSHA standards for responding to emergencies and CPR and First Aid certification. Students will also receive exposure to automated external defibrillators.
HE 255 Global Health. 4 credits
This course will increase student's knowledge and awareness of global sustainability and the health consequences related to; poverty, social status and global economic systems. Students will explore the interconnected global issues of: consumerism, industrial globalization, maternal and child health, violence, hunger, emerging infectious disease, environmental toxins and pollution, organic and conventional agricultural practices, alternative media resources, social marketing, fair trade, biodiversity and ecosystems services, population, environmental racism and the impacts of economic, political, and social constructs on the health of our communities and planet.

HE 261 Cardiopulmonary Resuscitation .1 credit 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 275 Lifetime Health and Fitness $\qquad$ .3 credits This course focuses on the relationship between fitness and achieving optimal lifelong health by introducing current health and fitness research. Topics include but are not limited to: emotional health, physical fitness, nutrition, weight management, cardiovascular health, stress management, cancer awareness and prevention, wellness promotion and environmental health. May be offered through Distance Learning.

HE 280 Co-op Ed: Health Occupations $\qquad$ 3-12 credits The purpose of this course is to provide students meaningful learning experiences related to the field of health occupations. This course allows the student the opportunity to earn college credit while working in the health care community under supervision. The field experience is planned to have a direct relationship to the student's classroom work so that each contributes to the student's education and future employability.
PE 280H Co-op Ed: Community Health. $\qquad$ $1-12$ credits Prerequisite: Instructor approval. This course provides an opportunity for supervised work experiences in a community health work site. Students may gain knowledge, develop skills, and explore career options while earning credit toward a degree or certificate. Work sites may be paid or non-paid. Note: For students who are not currently enrolled in the Professional Fitness Training program, there is an enrollment minimum of 3 credits for this course.

## Health Occupations

For information, contact Health Professions, Bldg. 4/Rm. 222, (541) 463-5317.
HO 101 Introduction to Health Occupations . $\qquad$ . 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 through Distance Learning.
HO 102 Diversity Issues in Healthcare
. 3 credits
This course explores the influence of membership in ethnic, religious, age, class and gender groupings on communication in health care settings on both the health care provider and the receiver of health care. Utilizing both theory and personal experience, students will identify personal attitudes and behaviors and gain experience in using effective methods of communicating with individuals from backgrounds represented in both patient and health care provider populations. May be offered through Distance Learning.

HO 103 Health Literacy and Communication $\qquad$ .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 through Distance Learning.

## Health Records

For information, contact Health Professions, 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 $\qquad$ 3 credits This course is designed for health occupation majors reading at a college level who wish to strengthen their study skills and strategies. Students will learn how to take notes from lectures and textbooks, study for tests, improve memory, read and study from textbooks, manage time effectively, and use the library.
HIT 104 Clinical Terminology. $\qquad$ . 3 credits An opportunity to learn terminology used in a medical setting such as names of clinical instruments, surgical procedures, laboratory tests and pharmacology. Particularly for those interested in health careers, but open to anyone.
HIT 120 Introduction to Health Records $\qquad$ 1 credit This course is designed to introduce the Health Records student to the career opportunities in health information management, work settings, basics of the patient record, and basics of the healthcare delivery system. Students will learn about the Health Insurance Portability and Accountability Act (HIPAA). Important guidelines for building a resume and portfolio.
HIT 154 Introduction to Medical Science. $\qquad$ 3 credits Prerequisites: Successful completion of Human Body Systems 1 (HO150) and Human Body Systems 2 (HO152); 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.
HIT 160 Medical Manager 3 credits
Prerequisites: Admission to the Medical Office Assistant or Health Records Technology Program. Introduces medical practice management software. Students learn to create/maintain patient files, make appointments, store treatment information, match CPT and diagnosis codes with treatment procedures and charges, create and follow insurance claims for collection of payments from Medicare, Medicaid, private insurance and other reimbursement organizations. Introduces medical practice management software.
HIT 196 Medical Transcription 2 .2 credits
Prerequisites: Medical Transcription 1 HO 195, consent of instructor. Come to the first class to be released to register. Continuation of Medical Transcription 1 HO 195 with higher standards for accuracy, neatness, terminology usage, spelling, etc.
HIT 197 Medical Transcription Laboratory 1-3 credits Prerequisites: Medical Transcription 2 HIT 196, consent of instructor. Come to the first class to be released to register. This course is designed to give the student actual medical transcription practice using authentic digital technology dictated by physicians in various specialties
HIT 222 Reimbursement Methodologies. 3 credits Prerequisites: Medical Insurance Procedures HO 112, Medical Coding Procedures HO 114, or instructor consent. The study of coded data and health information in reimbursement and payment systems appropriate to all health care settings. Emphasis on ability to identify correct codes and appropriate documentation in order to obtain maximum reimbursement. Technologic advances in claims submission and coding will be included.
HIT 280 Co-op Ed: Health Records $\qquad$ .3-12 credits Instructor consent required. 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. Students will set specific goals and evaluate their progress at the end of the term.

## Course Fees

Many courses may have additional fees. Please refer to the web class schedule credit listings and registration information for updated fee information and fee amounts.

HIT 298 Independent Study 1-3 credits
Requires Instructor Consent See the program coordinator for topics.
HO 100 Medical Terminology 1. 3 credits
Due to high demand, a student may register for this course only one time per academic year. A programmed course covering medical terminology, derivation, pronunciation and meaning. May be offered through Distance Learning.
HO 110 Administrative Medical Office Procedures $\qquad$ . 3 credits Principles of filing and records management specifically for the medical facility. Legal and ethical concerns of confidentiality \& privacy. Fundamentals of client reception, appointment scheduling, telephone techniques, and letter composition.
HO 112 Medical Insurance Procedures. $\qquad$ .. 3 credits Prerequisite: Medical Filing \& Records Management HO 110. Completion of Basic Math Applications (MTH 025) is strongly recommended but not required. Medical reimbursement management for private health and accident insurance, Medicare, Medicaid, Workers' Compensation. Abstracting information from health records for billing and transfer forms. Introduction to the use of CPT-4 and ICD-9-CM coding. This course includes computation component. Introduction to the CMS 1500 FORMS.
HO 114 Medical Coding Procedures. $\qquad$ .. 3 credits Prerequisites: HO 100, 2 HO 150; Corequisites: HO 112, HO 152; or instructor consent. A course for anyone involved in health care delivery, particularly dealing with insurance and/or Medicare and government regulations. Basics of ICD-9-CM and CPT-4 including abstracting health records and assigning code numbers to diagnoses and procedures for indexing health data and processing reimbursement claims.

## HO 150 Human Body Systems 1

Designed to help the student identify selected fundamental concepts of the anatomy and physiology of the cell and skin, musculoskeletal, nervous, sensory, endocrine, and circulatorylymphatic systems. Prior completion of Medical Terminology (strongly recommended but not required).
HO 152 Human Body Systems 2 .3 credits
Prerequisites: Human Body Systems 1 HO 150. Designed to help the student identify selected fundamental concepts of the anatomy and physiology of the respiratory, digestive, urinary, and reproductive systems. A basic introduction to microbiology is included.

## HO 190 Medical Formatting

3 credits
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. Prior completion of Medical Terminology (HO100) is strongly recommended but not required.
HO 195 Medical Transcription $\qquad$ .. 2 credits Prerequisite: Medical Terminology HO 100, keyboard 45 wpm, knowledge of MS Word, instructor consent. Come to the first class to be released to register. This course is designed to introduce the student to machine transcription of medical dictation with particular emphasis on accuracy and correct usage of medical terminology and English grammar. Correct spelling will also be emphasized.
HO 220 Legal and Ethical Aspects of Healthcare.................... 3 credits Prerequisite: Admission to the Medical Office Assistant program, Health Record Technology program, or instructor consent. An overview of the United States legal system. A study of the principles of law and ethics as applied to the healthcare field with particular reference to all phases of medical records management and medical assisting.
MA 110 Clinical Assistant 1. .. 3 credits Prerequisite: Admission to the Medical Office Assistant program, previous completion of or concurrent enrollment in all fall term Medical Office Assistant courses, or instructor consent. 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 130 Clinical Assistant 3 3 credits
(Spring Term) Prerequisites: Successful completion of Clinical Assistant 2 MA 120 and all fall and winter term Medical Office Assistant courses. 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 and completion of all fall term courses OR successful completion of Medical Terminology HO 100 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 298 Independent Study . $1-3$ credits
A variable credit course based on independent study contracted between an instructor and a student.

## History

For information, contact Social Science, Center Bldg./Rm. 403, (541) 463-5427.
HST 101 History of Western Civilization. $\qquad$ 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 and 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 $\qquad$ .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

$\qquad$ .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. May be offered through Distance Learning.

HST 105 World History 4 credits
A survey of the "global village" and the diverse peoples during the emergence of new world patterns beginning in approximately 1400 to 1815 including 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 through Distance Learning.
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 through Distance Learning.

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 through Distance Learning as an online class only.

HST 199 Special Studies: $\qquad$ .3 credits See department for topics.
HST 201 History of the United States. $\qquad$ .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 through Distance Learning.

HST 202 History of the United States. $\qquad$ .4 credits Survey of United States history focusing on the development of the country socially, economically, politically, and culturally. Jacksonian era, expansion, commercial and industrial revolution, slavery, Civil War, Reconstruction, Gilded Age, Populism. May be taken out of sequence. May be taken through Distance Learning
HST 203 History of the United States. $\qquad$ .4 credits Survey of United States history focusing on the creation and development of the country socially, economically, politically, and culturally. Imperialism, Progressivism, modernity, 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 through Distance Learning.
HST 207 History of the American West $\qquad$ .3 credits A survey course of the trans-Mississippian West covering social, political, intellectual, and environmental history. The course will include the study of this region of America and its peoples, from indigenous times into the 20th century. Some emphasis will be placed on contrasting the "mythical" West from historical facts, by involving the image of the West itself in movies, novels, music, and American floklore.
HST 208 US History Since 1945 $\qquad$ .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; AfricanAmericans' 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 257 American Indian History. $\qquad$ .4 credits
This course explores the history and historiography of North American Indians as communities and nations from pre-European contact to the present day. Various chronological, thematic, and regional histories include; Indian relations with other Indian and non-Indian groups and colonizers; Indians and the environment; gender; regional histories; and current issues.

HST 261 Latin American History $\qquad$ 4 credits
This is a survey course in Latin American History that begins with an investigation of the earliest inhabitants of the various countries and continues historically over time to the modern era. The course will focus on the themes and developments that the various countries had in common, such as conquest, colonization, independence, nationalism, revolutions, and reforms. As we study these common themes, we will concentrate on the peoples of specific countries and regions. Issues of gender, race, and class that affected the interactions of the various peoples with each other and with their environment as they formed and altered their societies will be examined.

## HST 266 US Women's History

$\qquad$ 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.

HST 298 Independent Study
1-4 credits
See department for topics.

## Hospitality - See Culinary Arts and Hospitality Management

## Human Relations

For information, contact the Counseling Department, Bldg. 1/103, (541) 463-5299.
CG 101 Native Circles: It's Your Life. 3 credits
This class introduces students to Lane resources and the Native community of Lane County. Students use traditional Native methods to set and achieve goals and assess skills. They explore how to keep their identities yet benefit from educational or other institutions. They examine the impact of class differences and race on personal success. They form networks of support and community.

CG 144 Introduction to Assertive Behavior $\qquad$ 1-3 credits Class is designed to assist students in developing self-management skills. Training will focus on areas of work and school settings, social and family situations, close interpersonal relationships, and consumer situations. Assertiveness skills are taught in a two-stage process, first defining assertive behavior, including pinpointing and describing assertive and non-assertive behaviors; and second, learning how to behave assertively. Includes deciding when to be assertive and practicing these new behaviors.

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, managing, and modifying causes of stress, altering individual perception of stressful events, and modifying the stress response. The symptoms, causes, and forms of depression will be described, including methods of treating depression. The topic of stress will be covered in more detail than depression. This course provides an educational approach to managing stress and depression. May be offered through Distance Learning.

CG 203 Human Relations at Work 1-3 credits
This course presents the interpersonal 'people skills' that are important in the modern workplace. Topics include communicating effectively, assertive behavior, teamwork, conflict resolution, and work ethics. Students will gain awareness of their individual work styles and how to work effectively with people with different styles in a diverse workplace. Specific techniques for coping with job stress, and managing anger in the workplace also will be emphasized. Class activities and assignments will stress practical application of skills. Course content is applicable in other settings such as family, social, and school.

CG 204 Eliminating Self-Defeating Behavior .1-3 credits
This class is intended for persons who have a recurring behavior, feeling, or thought which is negatively affecting their quality of life and which they wish to eliminate. For the purpose of this class, a self-defeating behavior can be an active behavior, such as smoking or negative self-talk, or a passive behavior like not making decisions or not doing other desired activities.
CG 211 Dreikursian Principles of Child Guidance 1 1-3 credits
Students examine the Adlerian/Dreikursian point of view for improving relationships with elementary-school-age and younger children who are experiencing social and emotional difficulties. Students view family counseling sessions in a counseling center setting, examine dynamics of relationships, and understand the application of principles and skills for improving relationships between parents and children. Students use ideas offered in the course in the context of their own life situations. May be offered through Distance Learning.

CG 212 Dreikursian Principles of Child Guidance 2 $\qquad$ 1-3 credits Students engage in specialized study from the Adlerian/Dreikursian point of view. Focus is on understanding in-depth ways of facilitating positive relationships of adults and children. Students view family counseling sessions in a counseling center setting and engage in weekly reading, discussions, and experiences.
CG 213 Improving Parent Child Relations $\qquad$ .3 credits Real life in-home interactions between parents and children and segments of interviews in which a counselor discusses with parents the application of principles and skills for improving relationships. Videotaped situations focus on establishing creditability as a parent, improving communication, setting reasonable and consistent limits, stimulating independence and responsibility, and improving order, structure, and routine. Approaches to typical problems are illustrated (e.g. fighting, crying, whining, conflict among siblings, bedtime). Reading and writing assignments supplement videotapes. May be available through Distance Learning.
CG 214 Understanding Anger $\qquad$ . 3 credits Title Changed approved, 11/07 A goal-directed (consistent with the theory of Alfred Adler) approach to understanding beliefs about anger, warning signs, styles of anger, and how anger is used. Examine how anger can be self-defeating, the ways it complicates personal life and interpersonal relationships, and options to feeling and acting in angry ways. Learn to define what is really important, alternatives to using anger as a method of reaching goals, and how to be more personally effective. In addition to self-management, learn how to respond to others who express anger, practicing skills in class.

CG 216 Understanding Eating Issues $\qquad$ .3 credits
This course is a general interest course for students who want to learn about the dynamics of eating issues. The course format includes large and small group activities, theoretical presentations, regularly assigned readings, written assignments and several quizzes. The course focus includes exploring the psychological, environmental, and personal dynamics that leads to eating for comfort, compulsive eating, anorexia and bulimia. There is an emphasis in using analytical tools to help explore such questions as, why have over half of all Americans developed eating issues that impinge on their health and limits their daily activities? And, what are the family dynamics, media ideal for thinness and commercial influences on obesity that affect how we think about food; and what we eat. In exploring the question, How do we heal? the course focuses on different methods both traditional and nontraditional that others have used in their healing process that improved their relationship with themselves and their eating.
CG 299 Conference On Families .1 credit See department for topics.

## Course Fees

Many courses may have additional fees. Please refer to the web class schedule credit listings and registration information for updated fee information and fee amounts.

## 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. Basic principles of self-care, when practiced, avoid most substance abuse problems. As self-care is culturally bound, providing a culturally competent and culturally proficient framework for what constitutes healthy behavior counters the generic mainstream approach, which actually promotes substance abuse by ignoring cultural protective factors. 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.
CPSY 200 Understanding Addictive Behavior. $\qquad$ .3 credits Broad overview of the field of addiction and the impact of addictions on individuals and society, introducing a variety of models and theories of addiction. The social and cultural environments within which substance abuse and addictions exist will be explored. Students will be introduced to scientifically supported models of prevention and treatment.

## Human Services

For information, contact Social Science, Center Bldg./Rm. 403, (541) 463-5427.
CG 280HS Co-op Ed: Human Services. 3-12 credits This course provides students with practical human service-related work experience in community organizations. The student will have the opportunity to integrate theory and practice skills learned in the classroom. Students can choose to work with a variety of client populations. In this course a student will 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 there professional lives, while simultaneously building a supportive learning environment for students in the Human Services Program. The course utilizes individual and small group exercises to improve skills in such areas as self-awareness, values clarification, communication skills, stress management, and burnout prevention as well as other field-oriented skills. Students will increase their abilities to work effectively with people from diverse individual, and cultural backgrounds. Students will develop skills to use on the job with clients in human service agencies.
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 199 Special Studies: $1-3$ credits See department for topics.

HS 201 Introduction to Human Services 3 credits Students will be introduced to a wide array of social and personal problems that are addressed by the field of human services. Students will explore the way economics and history shape current social welfare programs and policies. The philosophical foundation of the human service movement as well as career opportunities in the field will be examined. Trends and intervention strategies for a number of service systems will be introduced. The impact of culture and diversity on human services will be explored.
HS 205 Youth Addiction. .3 credits
Knowledge, concepts, and skills of substance abusing and addicted adolescents and their families will be acquired. The student will develop a working knowledge of adolescent development and behavior as related to chemical dependency. Students will learn about various juvenile justice and substance abuse treatment approaches. Cultural, ethnic, and racial issues will be discussed.
HS 206 Counseling the Criminal Addict. $\qquad$ .. 3 credits An overview of the complex relationship between drug abuse, dependency and criminality will be discussed. The criminal mind and how psychopharmacological, familial, socio-economic, gender, and cultural factors affect criminal development will be examined. The general functioning of the criminal justice and corrections systems will be studied.
HS 209 Crisis Intervention and Prevention. $\qquad$ 3 credits This course will introduce human service and correctional personnel to crisis intervention and prevention that emphasizes crisis counseling and non-physical methods for preventing or controlling disruptive behavior before it escalates. Students will be taught effective non-violent intervention for a wide range of crisis situations. Content of this course will provide students with hands-on practical approaches to crisis management.
HS 211 Family Interventions: Children. $\qquad$ .4 credits
This is the first class in a three-course sequence on treatment interventions. This class focuses on issues involving mental health, chemical dependency and a variety of other problem behaviors of infancy and childhood. Topics will be examined from a developmental and family focused perspective. Methods of engaging children, and their families in the best practices of treatment will be explored. This course is designed to provide students with "hands on" experience. Throughout the course, students will be analyzing actual and simulated cases. Course content will be presented through reading actual course studies, viewing simulations, producing student presentations and active role-playing.
HS 212 Family Interventions: Adolescents $\qquad$ .4 credits
This is the second class in a three-course sequence on treatment interventions. This class focuses on issues involving mental health, chemical dependency and a variety of other problem behaviors of adolescence. Topics will be examined from a developmental and family focused perspective. Methods of engaging adolescents, and their families in best practices of treatment will be explored. This course is designed to provide students with "hands on" experience. Throughout the course, students will be analyzing actual and simulated cases. Course content will be presented through reading actual case studies, viewing simulations, producing student presentations, and active role-playing.
HS 213 Family Intervention: Adults. $\qquad$ .4 credits This is the third course in a three-course sequence on treatment interventions. This class focuses on issues involving mental health, chemical dependency and a variety of other problem behaviors of adults. Topics will be examined from a developmental and family focused perspective. Methods of engaging adults, and their families in the best practices of treatment will be explored. This course is designed to provide students with "hands on " experience. Throughout the course, students will be analyzing actual and simulated cases. Course content will be presented through reading actual case studies, viewing simulations, producing student presentations and active role-playing.

HS 220 Prevention 1: Preventing Substance Abuse \&

## Other Social Problems

Prerequisite: College level reading and writing skills. Students will be introduced to prevention philosophy and program interventions aimed at addressing social problems and reinforcing healthy behavior and lifestyles. Risk factors, protective processes and resiliency factors will be explored. Students will have an opportunity to examine effective prevention programs that address the needs of different cultures and diverse populations.
HS 224 Group Counseling Skills. . 3 credits
Introduction to describing, selecting, and appropriately using strategies from accepted and culturally appropriate models for group counseling with clients with a variety of disorders including substance abuse. This class is accepted by ACCBO to meet certification requirements for alcohol and drug counselors.
HS 226 Ethics and Law . .. 3 credits
Introduction to the established professional codes of ethics that define the professional context within which the addiction counselor and human services provider works. Students will become knowledgeable about federal and state laws and regulations that apply in the field of substance abuse treatment and other human services. This class is accepted by ACCBO to meet certification requirements for alcohol and drug counselors.
HS 228 HIV/AIDS and other Infectious Diseases:
Risk Assessment and Intervention $\qquad$ .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 $\qquad$ .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. $\qquad$ 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
e ......

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. $\qquad$ 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 $\qquad$ .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 Social Science, 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. Both online and video mediums are used to enrich and enhance the topics covered. May be offered through Distance Learning.

## Internet - See Business and Computers: Introduction/Information Systems/Computer Science <br> Internships/Work Experiences - See Cooperative Education <br> Journalism

## Also see Photography

For information, contact Art and Applied Design, Bldg. 11/Rm. 101, (541) 463-5409.
ART 199AP Special Studies: . 4 credits
Prerequisite: J 134. This course is designed as a continuation of Photojournalism. We will be continuing the discussion of content and ethics that is addressed in Photojournalism. We will also learn how to create editorials, learn the differences between news and human interest, how to develop funding for stories that are not mainstream and how to promote yourself in the competitive field of photojournalism. Students will also learn how to ready their work through editorial processing and presentation.
J 134 Photojournalism .3 credits This course is designed to work within the field of content. Content within the work is not only the first step in good photojournalism, but also the first step in good art-making. Within this course, we will explore how you see an image, how you choose to share that image with those around you, and the message that your images carry. We will also be studying the history of photojournalism and the cross over from documentary photography to the world of art.

## J 216 Newswriting 1

$\qquad$ .. 3 credits
Study and practice of newsgathering and writing of 'straight' objective news stories. Discussions center on concept of news and news value, ethics, interviewing and traditional journalism methods and standards as practiced by established American newspapers.

J 234 Photojournalism 2 4 credits
Prerequisite: J 134. This course is designed as a continuation of Photojournalism. We will be continuing the discussion of content and ethics that is addressed in Photojournalism. Students will learn how to create editorials, identify the differences between news and human interest, develop funding for stories that are not mainstream, and to self-promote in the competitive field of photojournalism. Students will also learn how to prepare their work through editorial processing and presentation.
J 280 Co-op Ed: Journalism .3-12 credits
Prerequisite: Instructor approval. J216 for reporters, ART 221, 222, 223 for graphic artists, and ART261 and J216 for photographers is highly recommended. This course provides the student with journalism-related work experience in reporting, page design and photography on print publications. 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.

## Landscaping - See Construction

Language Studies
For information, contact Language, Literature and Communication, Center Bldg./Rm. 457, (541) 463-5419.
AIL 101 American Indian Languages .4 credits
Prerequisite: AIL 100 or consent of instructor. 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.
AIL 102 American Indian Languages . $\qquad$ 4 credits Prerequisite: AIL101 or consent of instructor. This course is the second course of a three-term sequence of study of the American Indian language, Chinuk Wawa, at the first-year college level. Students will achieve beginning listening, oral, cultural, and literacy competency. Determination of competency and instruction will conform to tribal, state, and college criteria. Language instruction will include activities, dialogue, and text analysis.
AIL 103 American Indian Languages .4 credits
Prerequisite: AIL 101 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.

AIL 201 Chinuk Wawa
4 credits
Prerequisite: AIL 103 or consent of the instructor. This course is the first course of a three-term sequence to ensure students achieve competency in Chinuk Wawa at the second year college level. Competency is defined by benchmarks set by the Tribes, by the state of Oregon and in accordance with Oregon's SB 690 of 2001, and by Lane's language standards. 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 vocabulary and structures presented in class. Emphasis is placed on daily speaking, writing, reading, text analysis, listening of Chinuk Wawa and learning about the cultures of the people who spoke and still speak the language.
AIL 202 Chinuk Wawa. $\qquad$ .4 credits
Prerequisite: AIL 201 or consent of the instructor. This course is the second course of a three-term sequence to ensure students achieve competency in Chinuk Wawa at the second year college level. Competency is defined by benchmarks set by the Tribes, by the state of Oregon and in accordance with Oregon's SB 690 of 2001, and by Lane's language standards. 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 vocabulary and structures presented in class. Emphasis is placed on daily speaking, writing, reading, text analysis, listening of Chinuk Wawa and learning about the cultures of the people who spoke and still speak the language.

AIL 203 Chinuk Wawa. 4 credits
Prerequisite: AIL 202 or consent of the instructor. This course is the third course of a three-term sequence to ensure students achieve competency in Chinuk Wawa at the second year college level. Competency is defined by benchmarks set by the Tribes, by the state of Oregon and in accordance with Oregon's SB 690 of 2001, and by Lane's language standards. 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 vocabulary and structures presented in class. Emphasis is placed on daily speaking, writing, reading, text analysis, listening of Chinuk Wawa and learning about the cultures of the people who spoke and still speak the language.
AIL 280 Co-op Ed: American Indian Language. $\qquad$ .3-12 credits Prerequisite: Instructor approval; AIL 100 or above preferred. The purpose of this class is to integrate classroom learning about American Indian languages with field experience, to gain exposure and understanding of issues related to culture and language, and to expand a student's understanding of the challenges and opportunities associated with learning American Indian languages. Students will work at an appropriate field site. Students will generate learning objectives for the experience, journal progress toward learning objectives and evaluate themselves at the end of the term. Site supervisor will orient, support, guide, provide instruction and evaluate the student's performance. Co-op coordinator will visit site to meet with supervisor, discuss student performance, and do a final evaluation at the end of the term.
FL 280IW Co-op Ed: International Work Experience $\qquad$ ..1-12 credits This college transfer credit course is a supervised internship program for international work experience through Lane Community College in partnership with IE3 Global Internships. Living and working in another country provides uniquely valuable experiences. Students gain career and intercultural skills essential in a global society. Internships are available in over 40 countries. Details are on the web at http://ie3global.ous.edu.

FR 099 French Conversation (Learning Laboratory: French) ... 1 credit Prerequisite: to be concurrently enrolled in an LCC French course either FR 102 or FR 202. This course offers conversational practice in French vocabulary and structure that the students have already acquired or are currently learning. Students will become more aware of cultural differences as well as of current events in the francophone world. It is divided into one section for second-year students and two sections for first-year students. The grade is based on an A, P or NP scale. No textbook is required.
FR 101 First-Year French. $\qquad$ . 5 credits The first term of a three-term sequence. Introduction to French, emphasizing oral communication (listening and speaking) in the context of French-speaking cultures, with some reading and writing practice. Students learn basic structures, vocabulary, and cultural information. Designed for students with no previous experience in French.
FR 102 First-Year French $\qquad$ .5 credits Prerequisite: FR 101 with a passing grade of C- or above, or equivalent. The second term of a three-term sequence. Continuation of the study of French, emphasizing oral communication (listening and speaking) in the context of Frenchspeaking cultures, with some reading and writing practice. Students continue to learn basic structures, vocabulary, and cultural information. Designed for students who have completed Fr 101 or equivalent.
FR 103 First-Year French. .5 credits
Prerequisite: FR 102 with a passing grade of C- or above, or equivalent. The third term of a three-term sequence. Continuation of the study of French, emphasizing oral communication (listening and speaking) in the context of French-speaking cultures, with more reading and writing practice. Students complete their exposure to basic structures and vocabulary and are introduced to additional cultural information. By the end of FR 103, the student should be able to communicate simply, understand basic conversations, and read and write in a basic manner. Designed for students who have completed FR 102 or equivalent.

FR 150 First-Year French
First term in a two-term accelerated sequence. Introduction to French emphasizing oral communication (listening and speaking) in the context of French-speaking cultures, with some reading and writing practice. Students learn basic structure and vocabulary, and cultural information. Designed for students with no previous experience in French.
FR 151 First-Year French. .7 credits Prerequisite: FR 101 or FR 150 with a passing grade of C- or above, or equivalent. The second term in a two-term accelerated sequence. Continuation of the study of French, emphasizing oral communication (listening and speaking) in the context of Frenchspeaking cultures, with additional reading and writing practice. Students complete their exposure to basic structures and vocabulary, and cultural information. By the end of FR 151, the student should be able to communicate simply, understand basic conversations, and read and write in a basic manner. Designed for students who have completed FR 150 or equivalent.
FR 199 Special Studies:.
s:.....
FR 201 Second-Year French
2 credits 5 credits Prerequisite: FR 103 or FR 151 with a passing grade of C- or above, or equivalent. First course of three-term sequence of Intermediate French. French 201, 202, 203 are intermediate five-skills courses with an emphasis on oral communication in French listening, comprehension, and speaking practice. These courses include periodic writing in journal form and in more structured compositions. Students will continue skill development in reading from both literary and nonliterary texts. French-speaking cultures serve as both an authentic context for the other four skills and a fifth skill in their own right. Students will review and add to their knowledge of grammatical structures, expressions, and vocabulary.
FR 202 Second-Year French . 5 credits
Prerequisite: FR 201 with a passing grade of C- or above, or equivalent. Second course of three-term sequence of Intermediate French. French 201, 202, 203 are intermediate five-skills courses with an emphasis on oral communication in French listening, comprehension, and speaking practice. These courses include periodic writing in journal form and in more structured compositions. Students will continue skill development in reading from both literary and nonliterary texts. French-speaking cultures serve as both an authentic context for the other four skills and a fifth skill in their own right. Students will review and add to their knowledge of grammatical structures, expressions, and vocabulary.
FR 203 Second-Year French 5 credits
Prerequisite: FR 202 with a passing grade of C- or above, or equivalent. Third course of three-term sequence of Intermediate French. French 201, 202, 203 are intermediate five-skills courses with an emphasis on oral communication in French listening, comprehension, and speaking practice. These courses include periodic writing in journal form and in more structured compositions. Students will continue skill development in reading from both literary and nonliterary texts. French-speaking cultures serve as both an authentic context for the other four skills and a fifth skill in their own right. Students will review and add to their knowledge of grammatical structures, expressions, and vocabulary.

FR 211 Conversational French 2 credits
Prerequisite: FR 103, FR 151, or equivalent. Conversational French classes are designed to allow students to improve their competence in oral communication skills. This is accomplished through introduction and expansion of vocabulary and expressions in a functional and cultural context. Students have the opportunity to share experiences and ideas and to learn communication skills useful in daily activities in French-speaking cultures. They also become aware of different levels of conversation, from informal to formal. This course is offered in the spring as an immersion weekend and may be offered in the summer under a different format.

FR 212 Conversational French 2 credits Prerequisite: FR 103, FR 151, or equivalent. Conversational French sequence is designed to allow students to improve their competence in oral communication skills. This is accomplished through introduction and expansion of vocabulary and expressions in a functional and cultural context. Students have the opportunity
to share experiences and ideas, and to learn communication skills useful in daily activities in French-speaking cultures. Students also become aware of different levels of conversation, from informal to formal.
FR 280 Co-op Ed: French. 3-12 credits
This course provides students who are fluent in French with opportunities to 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. Students will generate learning objectives for the experience, journal progress toward learning objectives and evaluate themselves at the end of the term. Site supervisor will orient, support, guide, provide instruction and evaluate the student's performance. Co-op coordinator will visit site to meet with supervisor, discuss student performance, and do a final evaluation at the end of the term. Meet with the French co-op coordinator the term before (if possible) to set up the internship.

SPAN 101 Spanish, First-Year .5 credits
Spanish 101 is the first course in a three course sequence designed to provide one full year of college level transfer courses at the beginning language level. Each course is conducted in Spanish and they must be taken in sequence. The sequence emphasizes the development of the skills of listening, speaking, reading, writing, and culture. In Spanish 101, students will learn to converse in a variety of common everyday settings using the vocabulary and structures presented in class. Emphasis is also placed on daily writing, reading, listening, and learning about Hispanic cultures. This course is conducted in Spanish.
SPAN 102 Spanish, First-Year. $\qquad$ .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 tranfer courses at the beginning language level. Each course is conducted in Spanish and they must be taken in sequence. This sequence emphasizes the development of the skills of listening, speaking, reading, writing, and culture. In Spanish 102, students will learn to converse in a variety of common everyday settings using the vocabulary and structures presented in class. Emphasis is also placed on daily writing, reading, listening, and learning about Hispanic cultures. This course is conducted in Spanish.
SPAN 103 Spanish, First-Year $\qquad$ .. 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. Emphasis is also placed on daily writing, reading, listening, and learning about Hispanic cultures. Tests are administered outside of class hours. This course is conducted in Spanish.
SPAN 201 Spanish, Second-Year. .5 credits
Prerequisite: SPAN 103 with passing grade of C- or above, or placement by instructor. SPAN 201 is the first course of a threeterm sequence (SPAN 201-202-203) designed to provide one full year of college transfer courses at the intermediate (second year) level. Each course is conducted in Spanish and they must be taken in sequence. SPAN 201-202-203 builds on Spanish language skills acquired through the beginning, first year sequence (SPAN 101-102103) and expands upon them to develop student skills at an intermediate language level. These courses are five skill courses with emphasis on daily reading, writing, listening and speaking of Spanish, and on learning about Spanish-speaking cultures.
SPAN 202 Spanish, Second-Year . 5 credits
Prerequisite: SPAN 201 with a passing grade of C- or above or placement by instructor. SPAN 202 is the second course of a threeterm sequence (SPAN 201-202-203) designed to provide one full year of college transfer courses at the intermediate (second year) level. Each course is conducted in Spanish and they must be taken in sequence. SPAN 202 continues the development of and expands upon the five language skills practiced in SPAN 201 (see course description) through emphasis on daily reading, writing, listening, and speaking of Spanish, and on learning about Spanish-speaking cultures.

SPAN 203 Spanish, Second-Year .5 credits Prerequisite: SPAN 202 with a passing grade of C- or above or placemnt by instructor. SPAN 203 is the third course of a threeterm sequence (SPAN 201-202-203) designed to provide one full year of college transfer courses at the intermediate (second year) level. Each course is conducted in Spanish and they must be taken in sequence. SPAN 203 continues the development of and expands upon the five language skills practiced through emphasis on daily reading, writing, listening, and speaking of Spanish, and on learning about Spanish-speaking cultures.
SPAN 211B Conversational Spanish Intermediate .3 credits Prerequisite: SPAN 103 or equivalent with min. grade of C- or first year language competence. Intermediate Spanish course in oral communication. The student has an opportunity for intensive practice in both speaking and listening skills to help improve oral/aural skills in spoken Spanish. Meaningful communication is accomplished through the expansion of vocabulary and expressions, and through interactive activities that permit the exchange of experiences and ideas in various areas of interest. The main themes developed in the course content are expanded through the incorporation of authentic readings and materials chosen from the internet and from literary and nonliterary texts.

SPAN 212B Conversational Spanish Intermediate $\qquad$ .3 credits Prerequisite: SPAN 103 with a passing grade of C- or above. See course description for SPAN 211B.

SPAN 280 Co-op Ed: Spanish. .3-12 credits
This course provides students who are fluent in Spanish with opportunities to 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. Students will generate learning objectives for the experience, journal progress toward learning objectives and evaluate themselves at the end of the term. Site supervisor will orient, support, guide, provide instruction and evaluate the student's performance. Co-op coordinator will visit site to meet with supervisor, discuss student performance, and do a final evaluation at the end of the term. Meet with the Spanish co-op coordinator the term before (if possible) to set up the internship.

## Legal Assistant

For information, contact the Business Department, Bldg. 2/Rm. 141, (541) 463-5221.
BA 280L Co-op Ed: Legal Assistant .3-12 credits This course provides the student an opportunity to apply theory learned in the classroom to practical work experience in the legal field. In this course a student will develop skills, explore career options and network with professionals and employers while earning credit toward a degree.
LGL 100 Introduction to the American Legal System .. $\qquad$
The focus of this course is on law office practice and its relationship to the individual. Exploration of law office work as related to the American legal system, including legislatures, courts, the executive branch, administrative agencies, the role of state and federal constitutions in resolving legal disputes, the dynamics of the attorney-client relationship, and the interrelationships of law, ethics, and social responsibility.
LGL 199 Special Studies: .
.1-4 credits
See department for topics.
LGL 201 Legal Procedures 1 4 credits
Prerequisite: BT 120 or instructor consent. Recommend BT 142 or BT 243 and LGL 100 (LGL 100 may be taken the same term) and accurate keyboarding speed of 45 wpm . Introductory preparation of legal pleadings, correspondence, and documents. Extensive coverage of written and oral communications needed for law practice, law office procedures, ethics, legal terminology, the court system, and the law library.
LGL 202 Legal Procedures 2. .3 credits
Prerequisite: LGL 201 and BT 220, or instructor consent. Intensive preparation of legal pleadings, correspondence, and documents related to contracts, torts, criminal law, family law, business organizations, real estate, trusts, estates, guardianships, probate, and bankruptcy. Further study of legal concepts and terminology.

LGL 203 Legal Procedures 3 .3 credits
Prerequisite: LGL 201 and LGL 202, or instructor consent. Advanced study of legal concepts, including legal research and analysis, writing a legal memorandum, reading and interpreting federal, state, and local court rules. Students will also learn to create a legal file.

LGL 298 Independent Study: Legal $\qquad$ .1-4 credits A variable credit course based on independent study contracted between an instructor and a student.

## Library/Information Research

For information, contact the Library, Center Bldg./2nd Floor, (541) 463-5770.
LIB 127 Library and Information Research $\qquad$ . 3 credits Students will develop critical thinking skills needed to locate, evaluate and cite information applicable to specific research needs. This is a non-lecture course ideally suited to self-motivated students. The course develops research skills and confidence that contribute to success in other college courses and life experiences. May be offered through Distance Learning.
LIB 127A Basic Research. $\qquad$
$\qquad$ Students will develop critical thinking skills needed to locate, evaluate and cite information applicable to specific research needs. The course develops research skills and confidence that contribute to success in other college courses and life experiences. May be offered through Distance Learning. LIB 127a is a condensed version of LIB 127. Students cannot get credit for both LIB 127 and LIB 127a.
LIB 199 Special Studies: $\qquad$
See department for description.

## Literature

For information, contact Language, Literature and Communication, Center Bldg./ Rm. 457, (541) 463-5419.

ENG 100 Children's Literature .. 4 credits
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 $\qquad$ .. 4 credits 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, the novel, and/or the novella. May be offered through Distance Learning.
ENG 105 Introduction to Literature: Drama $\qquad$ 4 credits 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 through Distance Learning.
ENG 106 Introduction to Literature: Poetry $\qquad$ .4 credits
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 through Distance Learning.

ENG 107 Survey of World Literature 4 credits
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 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 early modern era.

ENG 109 Survey of World Literature. $\qquad$ 4 credits
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 $\qquad$ 4 credits 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 hardboiled 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
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
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 $\qquad$ .4 credits
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-scene, 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. 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 scene, blocking, and movement.

## Course Fees

Many courses may have additional fees. Please refer to the web class schedule credit listings and registration information for updated fee information and fee amounts.

ENG 196 Introduction to Film Studies $\qquad$ 4 credits
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-scene, 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. 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.). The course also looks at the larger social and historical contexts in which films emerge, considering the ways that films both reflect and affect a culture. Along these lines, we focus particularly on issues and ideologies relating to race, class, gender, sexuality and nation.

ENG 197 Introduction to Film Studies $\qquad$ 4 credits
ENG 197 is the third course of a year-long sequence focusing on the history, art, and social contexts of film as an art form. A primary objective of the course is to enhance students' enjoyment and appreciation of film by developing their cinematic literacy. Students are introduced to the basic elements of film language, including cinematography, mise-en-scene, 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. A variety of assignments and activities develop and test students "ways of seeing." ENG 197 centers on films chosen around a theme, topic or director. Recent themes include "Film and the American Dream" or "American Independent Cinema." Providing an overview of film language, the course explores the style of the featured films and/or director and looks at their historical contexts and ideological effects relating to such contested areas of social experience as race, class, gender, sexuality, and nation.
ENG 199 Special Studies:
.6 credits See department for topic.

ENG 201 Shakespeare .4 credits
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 will include Romeo and Juliet.

ENG 203 Shakespeare. .4 credits
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 will include King Lear.
ENG 204 Survey of British Literature $\qquad$ 4 credits
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 $\qquad$ .4 credits 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
This course features a selection of classical 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 $\qquad$ .4 credits
This is an introductory course to Latino/a literature that will examine some of the major issues that have influenced its development beginning with the contact between European and pre-Columbian cultures. Students will also read some of the major voices in Latin American literature in order to examine how their work anticipates many of the issues facing contemporary Latino/a writers in the United States.
ENG 222 Literature and Gender. $\qquad$ .4 credits
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
This course provides an introduction to the oral traditional and formal written literature of Native American cultures through a wide variety of texts from different countries, tribes, regions, and individuals. Students will examine the worldview expressed in the literature, the major thematic currents of oral and written Native American literature, the characteristics of Native American forms and traditions, and the characteristics it shares.
ENG 240 Nature Literature
.4 credits
People often explain themselves and their world according to how they define and perceive their relationship with nature-and they have long done so. The Nature Literature course will examine how people's literature reflects their 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. $\qquad$ . .4 credits 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 . $\qquad$ . .4 credits 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
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

$\qquad$ .4 credits
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 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
Using the concept of the "American Dream" to examine work, class, and social mobility, the literature course is linked to WR 122 to create a learning community that helps students appreicate the power of class to shape our individual lives and our culture. A prevailing belief in American is that we are a "classless" society. However, the 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. The readings from the literature course will be the sources of the topics for the essays in the writing course. Althought the courses are linked and team taught, each will be graded separately.
ENG 259 African American Poetry, Plays and Film $\qquad$ .4 credits
This new 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 new 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.

## Course Fees

Many courses may have additional fees. Please refer to the quarterly class schedule credit listings and registration information for updated fee information and fee amounts.

## ENG 260 Introduction to Women Writers

$\qquad$ 4 credits
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 from the seventeenth century 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.
ENG 261 Science Fiction $\qquad$ 4 credits
Explores science fiction, fantasy and speculative futures through literary and popular fiction, film and guest authors. Discusses content, styles, techniques and conventions of the genre. Refined focus on research and the art of film adaptation.
ENG 270 Bob Dylan: American Poet. $\qquad$ 4 credits
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. $\qquad$ 4 credits
This course will examine the history of the horror film from the silent era to the present, focusing mainly on U.S. texts. The class will explore various theories of the horror genre, the history and social context of horror cycles, and the representation of class, gender, sexuality, nationality and ethnicity as they relate to horror.

ENG 272 Film Genre: Film Comedy
This course will focus on film comedy, a loosely defined genre that spans the silent era to the present. Starting with silent films, the course will focus on film comedy across the decades and may include the following sub genres: slapstick, screwball comedy, farce, romantic comedy, black comedy, parody/satire and/or grossout comedy. Students will be introduced to various theories of the genre as well as historical, political, and social issues related to representative texts.
ENG 273 Film Genre: Film Noir. 4 credits
This course will focus on film noir-a type of film featuring hardboiled detectives, dangerous urban landscapes and mysterious, perhaps treacherous, dames-that flourished in the U.S. between 1948-1958. The class will concentrate on the question of definition: is noir a genre, a style, a mood or a movement? Students will read various theories about noir and examine classical and contemporary films, measuring them against competing definitions of the genre. The course will also focus on the historical and social context of noir as well as issues of gender, race/ethnicity, class, sexuality and nationality as they relate to noir.
ENG 276 Film Genre: Western $\qquad$
$\square$
.3 credits
This course will focus on the history and conventions of the western, perhaps the most American of all film genres. Students will be introduced to a broad range of films, ranging from early examples from the silent era, to contemporary revisionist westerns. The class will examine the social and historical context of individual films, and address issues of gender, race/ethnicity, class, sexuality and nationality as they relate to the genre.
ENG 298 Independent Study: 1-4 credits
A variable credit course based on independent study contracted between an instructor and a student.
FA 263 Film in the Fifties .4 credits
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.
FA 264 Women Make Movies
.4 credits
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 womenauthored 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.
FA 265 African American Film Images. $\qquad$ .4 credits
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 moviemaking. 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 offsetting African Americans' full, rigorous admittance into the Hollywood system.

## Machine Shop, Machine Tools - See Manufacturing Management - See Business and Culinary Arts and Hospitality Management

## Manufacturing

For information, contact Advanced Technology, Bldg. 12/Rm. 201, (541) 463-5380.
ENGR 280M Co-op Ed: Manufacturing Technology ..........3-12 credits This course provides the student with manufacturing technologyrelated work experience in community businesses and industry. 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.
MFG 105 Fundamentals of Manufacturing $\qquad$ 2-12 credits This course integrates the fundamentals of trade skills (safety, tools, employability skills, rigging, blueprints, electricity, mathematics and communications) with basic manufacturing skills. Students will study industrial level manufacturing process including an introduction to machining (mills, lathes, CNC).
MFG 122 RV Manufacturing 1-6 credits
This course is offered to teach specific recreational vehicle manufacturing skills in the following areas: workplace safety; electrical systems; hydraulics; fuel systems; water systems; cable plant; HVAC; assembly; installation; interior and exterior coach fabrication and maintenance; and, powerplant, suspension, brakes troubleshooting. This course may be repeated up to 36 credits.
MFG 197 Manufacturing Technology .1-6 credits Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. MFG 197 covers theory, setup and operation of conventional (manual) machine tools and related tooling. Course includes materials, speeds and feeds, measuring tools, cutting tool geometry and selection. Develop competencies in troubleshooting setups, shop math and blue print reading. Completed machining projects become student tools. Manufacturing Technology MFG 197 is an open-entry/open-exit variable credit course. It is suggested that majors NOT schedule less than 6 credits of MFG 197 per term (instructor approval is required to schedule less than 6 credits). It is recommended that six terms be the target maximum for completion of MFG 197, 12 credits/ term 1-8 lecture, 3-12 lab hrs/wk. Upon satisfactory completion of 66 credits ( 528 lecture, 792 lab hrs) the student has completed MFG 197.
MFG 201 CNC Mill ..1-6 credits Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Development of the skills required to program, operate, and produce parts on the computer numerical control (CNC) 3 axis mill. Topics include: history of NC/CNC, computer to machine interface including feedback and adaptive control, understanding the G-code language required to efficiently program the machine tool from a part drawing, modern cutting tools and part fixtures for CNC operations, set-up and operation of CNC milling machines including machining centers with automatic tool changers. This course will be presented by lectures, demonstrations, and handson experience.

MFG 202 CNC Lathe 1-6 credits Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Development of the skills required to program, operate, and produce parts on the computer numerical control (CNC) lathe. Topics include: history of NC/CNC, computer to machine interface including feedback and adaptive control, understanding the G-code language required to efficiently program the machine tool from a part drawing, modern cutting tools and part fixtures for CNC operations, set-up and operation of CNC lathes including turning centers with automatic tool changers. This course will be presented by lectures, demonstrations, and hands-on experience.
MFG 208 CNC Special Projects. $\qquad$ . $1-9$ 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 handson experience.

MFG 210 CAM 1 1 ...... .3 credits
Prerequisite: MFG 201 and MFG 202, Or instructor consent. Introduction to Computer Aided Manufacturing CAM, and its application in modern industry. Development of the basic skills required to use Mastercam software for CNC Milling. Primary emphasis is on CAM for 3 axis CNC machining centers. Topics include: geometry creation, importing CAD drawings, assigning work planes, determining correct cutting tools and tool paths, solid model machining simulation, and creating CNC code. Introduction to multi-work plane 4 axis milling. Demonstration of the CAD/CAM/CNC process workflow using Mastercam software to create machine code for the LCC machining center. This course will be presented by means of lectures, demonstrations, and hands-on experience.
MFG 211 CAM 2 . 3 credits
Prerequisite: MFG 210 OR instructor consent. Utilization of the basic Mastercam software skills learned in MFG 210 applied to programming CNC lathes. Primary emphasis is on 2 axis turning centers. Introduction to CAM for multiple spindle, multiple axis turning centers. Orientation to CAM for milling complex 3D surfaces and mold cavities which will be further developed in MFG 212. Demonstration of the CAD/CAM/CNC process workflow using Mastercam software to create machine code for the LCC machining center. This course will be presented by means of lectures, demonstrations, and hands-on experience.
RTEC 100 Basic Career Technical Skills . $\qquad$ .2-6 credits
This course explores the basic skills for entering technical careers such as mechanics, manufacturing, aviation, electronics, etc. The course includes; safety, math, tools, basic electricity, basic hydraulics, employability skills, rigging, blue prints, and communication. Students may not receive credit for both RTECH 100 and APPR 101.

## Mathematics: Self-Paced Format

For information, visit the Math Resource Center in Building 16, Room 169, or call (541) 463-5399.

Most Lane Community College mathematics courses are presented in an instructor led lecture class format. However, to accommodate students that need a more flexible approach to instruction the department offers several courses in a variable credit, self-paced format. These courses are administered through the Mathematics Resource Center. Students enrolling in these courses must attend an Orientation Session where policies and procedures are outlined, study guides and schedules are distributed, and questions are answered. Group Orientation sessions occur during the first week of each term and begin on the hour in Building 16, Room 169.
The MRC also provides free tutoring support for all Lane math students in Building 16, Rooms 163 and 177.
The following courses require instructor permission to enroll. To obtain instructor permission, you must come to the Math Resource Center, Building 16, Room 169. Please call the Math Division Office at (541) 463-5392 for times.

Courses available for variable credit in a self-paced format offered through the Math Resource Center are:

MTH 20 Basic Math Review...................................................1-3 credits
MTH 60 Beginning Algebra .......................................................1-4 credits
MTH 65 Elementary Algebra ................................................1-4 credits
MTH 95 Intermediate Algebra.................................................1-5 credits
Additional self-paced courses offered in the Math Resource Center are:
MTH 022 Number Reasoning...................................................... 1 credit
MTH 053 Metric Measurement .................................................... 1 credit
MTH 058 Word Problems in Algebra........................................... 1 credit
MTH 071 Informal Geometry 1 ................................................. 2 credits
MTH 072 Informal Geometry 2 .................................................. 2 credits
MTH 020 Math Renewal $1-3$ credits
Prerequisite: MTH 010A or equivalent courses with a grade of "C-" or better, or pass a placement test through Testing Services.
Prerequisite grades or test scores must have been completed within the past four terms. If you have taken a higher level math course than this and passed the course with a "C-" or better, you may not use this course for your degree/certificate requirements. This course begins with a review of whole number, fraction, and decimal arithmetic that includes rounding, estimation, order of operations, averages, and the solving of one-step equations. This review is followed by an introduction to ratios, proportions, percent, measurement, and basic geometry in a problem-solving context, with the earlier review skills integrated throughout. Some applications for technical careers will be incorporated for students in professional technical programs. Required: Scientific Calculator with Advanced Direct Algebraic Logic (D.A.L.), which allows entry of an expression in the exact order it appears on paper. [Purchase after instructor recommendation]. Students wishing to take MTH 020 in a variable credit, self-paced format must obtain instructor permission prior to registering. This permission can be obtained in the Math Resource Center on the first day of classes or just prior to the beginning of the term.
MTH 022 Number Reasoning. $\qquad$ 1 credit
Prerequisite: Three credits of MTH 020 or equivalent courses with a grade of "C-" or better, or pass a placement test through the Testing Office. Prerequisite grades or test scores must have been completed within the past four terms. This is a self-paced course under the supervision of an instructor. This course will test students ability to perform basic math operations by hand and to evaluate whether an answer is of reasonable size. Upon entering this course, students are expected to be able to calculate by hand basic math problems involving decimals, fractions, percents, ratios and proportions. In addition to reviewing these basic math skills, this course will provide practice in comparing, estimating and reflecting on the reasonableness of answers.

MTH 053 Metric Measurement
Prerequisite: MTH 020 or equivalent courses with a grade of "C-" or better, or pass a placement test through the Testing Office. Prerequisite grades or test scores must have been completed within the past four terms. A self-paced course under the supervision of an instructor. The course provides hands-on experience in metric measurement and encourages metric common sense: the ability to estimate and think in metric units, metric prefixes, metric symbols, conversion of units, temperature, length, mass, and volume.

MTH 058 Word Problems in Algebra $\qquad$ 1 credit Prerequisite: MTH 060 and above or equivalent courses with a grade of "C-" or better or pass a placement test through the Testing Office. Prerequisite grades or test scores must have been completed within the past four terms. A self-paced course under the supervision of an instructor. This course requires some beginning algebra skills. It covers methods for solving standard word problems using basic algebra skills.

MTH 060 Beginning Algebra $\qquad$ 1-4 credits Prerequisite: MTH 020 or equivalent courses with a grade of "C-" or better, or pass a placement test through the Testing Office. Prerequisite grades or test scores must have been completed within the past four terms. If you have taken a higher level math course than this and passed the course with a "C-" or better, you may not use this course for your degree/certificate requirements. This course is for the student who has not taken algebra recently, or who desires a slow-paced introduction to the subject. This is the first term of a two-term sequence in introductory algebra. Topics include a selective review of arithmetic, tables and graphs, signed numbers, problem solving, linear equations, ratio and proportion, and unit analysis. MTH 060 prepares students for Elementary Algebra, MTH 065. MTH 060 and MTH 065 provide a two-term sequence preparatory to Intermediate Algebra, MTH 095. A scientific calculator is required. Students wishing to take Mth 060 in a variable credit, self-paced format must obtain instructor permission prior to registering. This permission can be obtained in the Math Resource Center on the first day of classes or just prior to the beginning of the term.

MTH 065 Elementary Algebra $\qquad$ 1-4 credits Prerequisite: MTH 060 or equivalent courses with a grade of "C-" or better. Prerequisite grades must have been completed within the past four terms. If you have taken a higher level math course than this and passed the course with a "C-" or better, you may not use this course for your degree/certificate requirements. This is the second term of a two-term sequence in introductory algebra. Students having successfully completed MTH 060 should continue with this course in preparation for taking Intermediate Algebra (MTH 095). Topics include systems of linear equations, polynomials, factoring, quadratic equations, rational expressions, exponents, and radicals. A scientific calculator is required. Students wishing to take MTH 065 in a variable credit, self-paced format must obtain instructor permission prior to registering. This permission can be obtained in the Math Resource Center on the first day of classes or just prior to the beginning of the term.
MTH 071 Informal Geometry 1 .2 credits
Prerequisite: Four credits of MTH 060 or five credits of MTH 070 or equivalent courses with a grade of " C -" or better or pass a placement test through theTesting Office. Prerequisite grades or test scores must have been completed within the past four terms. Instructor permission required. A self-paced course under the supervision of an instructor. This informal course in geometry requires elementary algebra skills. Topics include angles, parallel and perpendicular lines, polygons, polyhedra, transformations, triangles, congruence, quadrilaterals, and the coordinate plane. Basic vocabulary and elementary relationships are stressed. Suitable for students with little background in geometry and who want new concepts introduced one at a time. MTH 071 and MTH 072 do not satisfy the geometry prerequisites for Trigonometry MTH 112 or Calculus 1 MTH 251.

MTH 072 Informal Geometry 2 2 credits Prerequisite: MTH 071 with a grade of "C-" or better. Prerequisite grade must have been completed within the past four terms. Instructor permission required. A self-paced course under the supervision of an instructor. This course includes concepts and computation of perimeter, area, surface area, and volume; applications of similar figures; the Pythagorean Theorem, and elementary trigonometric ratios; attributes and measurement of circles, prisms, pyramids, cones, and cylinders; and transformations related to coordinate geometry. MTH 071 and MTH 072 do not satisfy the geometry prerequisites for Trigonometry MTH 112 or Calculus 1 MTH 251.

MTH 095 Intermediate Algebra $\qquad$ 1-5 credits Prerequisite: MTH 065 or MTH 070 or equivalent courses with a grade of "C-" or better, or pass a placement test through the Testing Office. Prerequisite grades or test scores must have been completed within the past four terms. 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 required. A graphing calculator (TI-83) is suggested for students taking math courses above MTH 095. This course provides a foundation for MTH 097, MTH 105, MTH 111, or MTH 211 or MTH 213. Students wishing to take Mth 095 in a variable credit, self-paced format must obtain instructor permission prior to registering. This permission can be obtained in the Math Resource Center on the first day of classes or just prior to the beginning of the term.

## Mathematics:Traditional Instructor-Led Format

For information, contact Mathematics, Bldg. 16/Rm. 166, (541) 463-5392.
Most Lane Community College mathematics courses are presented in an instructor-led lecture class format. However, to accommodate students that need a more flexible approach to instruction, the department offers several courses in a variable credit, self-paced format. These courses are administered through the Mathematics Resource Center.

MTH 010A Whole Numbers, Fractions, and Decimals............ 3 credits Prerequisite: Placement by the LCC math test or consent of the instructor. Students will review whole number skills and learn to compute with fractions and decimals. Universal math concepts will be integrated with the curriculum to increase students' abilities and to extend their understanding of basic math principles in preparation for higher level math courses. Effective math study strategies and math anxiety issues will be discussed to increase students' confidence in their abilities to succeed in math classes and to use math in daily life. MTH 010A is intended for students who need to strengthen their basic math skills before moving on to MTH 020.
MTH 010T Whole Numbers, Fractions, and Decimals: WIT... 3 credits Prerequisite: Placement by the LCC math test or consent of the instructor. Students will review whole number skills and learn to compute with fractions and decimals. Universal math concepts will be integrated with the curriculum to increase students' abilities and to extend their understanding of basic math principles in preparation for higher level math courses. Effective math study strategies and math anxiety issues will be discussed to increase students' confidence in their abilities to succeed in math classes and to use math in daily life. MTH 010T is intended for students who need to strengthen their basic math skills before moving on to MTH 020.
MTH 020 Math Renewal $\qquad$ 1-3 credits
Prerequisite: MTH 010A or equivalent courses with a grade of "C-" or better, or pass a placement test through Testing Services. Prerequisite grades or test scores must have been completed within the past four terms. If you have taken a higher level math course than this and passed the course with a "C-" or better, you may not use this course for your degree/certificate requirements. This course begins with a review of whole number, fraction, and decimal arithmetic that includes rounding, estimation, order of operations, averages, and the solving of one-step equations. This review is followed by an introduction to ratios, proportions, percent, measurement, and basic geometry in a problem-solving context, with the earlier review skills integrated throughout. Some applications for technical careers will be incorporated for students in professional technical programs. Required: Scientific Calculator with Advanced Direct Algebraic Logic (D.A.L.), which allows entry of an expression in the exact order it appears on paper. [Purchase after instructor recommendation]. Students wishing to take MTH 020 in a variable credit, self-paced format must obtain instructor permission prior to registering. This permission can be obtained in the Math Resource Center on the first day of classes or just prior to the beginning of the term.

MTH 025 Basic Mathematics Applications $\qquad$ .3 credits Prerequisite: Three credits of MTH 020 or equivalent courses with a grade of "C-" or better, or pass a placement test through the Testing Office. Prerequisite grades or test scores must have been completed within the past four terms. If you have taken a higher level math course than this and passed the course with a "C-" or higher, you may not use this course for your degree/certificate requirements. Basic skills in fractions, decimals, percents and ratios will be assumed. MTH 025 is a course in the application of basic mathematics to everyday situations. Topics include applications involving budget and retirement, simple and compound interest, mortgage and charge options, household and garden, health formulas, food preparation, measurement systems, markup and discounts. The course will focus on group work and investigations, with assessment to include projects and portfolios. Scientific calculator required

MTH 052 Math for Introductory Physical Science .4 credits Prerequisite: MTH 020 or equivalent content with a grade of "C-"or better or pass a placement test through the Testing Office. Prerequisite grades or test scores must have been completed within the past four terms. If you have taken a higher level math course than this and passed the course with a "C-" or better, you may not use this course for your degree/certificate requirements. This is 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.

## MTH 060 Beginning Algebra

$\qquad$ 1-4 credits
Prerequisite: MTH 020 or equivalent courses with a grade of "C-" or better or pass a placement test through the Testing Office.
Prerequisite grades or test scores must have been completed within the past four terms. If you have taken a higher level math course than this and passed the course with a "C-" or better, you may not use this course for your degree/certificate requirements. This course is for the student who has not taken algebra recently, or who desires a slow-paced introduction to the subject. This is the first term of a two-term sequence in introductory algebra. Topics include a selective review of arithmetic, tables and graphs, signed numbers, problem solving, linear equations, ratio and proportion, and unit analysis. MTH 060 prepares students for Elementary Algebra, MTH 065. MTH 060 and MTH 065 provide a two-term sequence preparatory to Intermediate Algebra, MTH 095. A scientific calculator is required. Students wishing to take Mth 060 in a variable credit, self-paced format must obtain instructor permission prior to registering. This permission can be obtained in the Math Resource Center on the first day of classes or just prior to the beginning of the term.
MTH 065 Elementary Algebra $\qquad$ 1-4 credits Prerequisite: MTH 060 or equivalent courses with a grade of "C-" or better. Prerequisite grades must have been completed within the past four terms. If you have taken a higher level math course than this and passed the course with a "C-" or better, you may not use this course for your degree/certificate requirements. This is the second term of a two-term sequence in introductory algebra. Students having successfully completed MTH 060 should continue with this course in preparation for taking Intermediate Algebra (MTH 095). Topics include systems of linear equations, polynomials, factoring, quadratic equations, rational expressions, exponents, and radicals. A scientific calculator is required. Students wishing to take MTH 065 in a variable credit, self-paced format must obtain instructor permission prior to registering. This permission can be obtained in the Math Resource Center on the first day of classes or just prior to the beginning of the term.

MTH 070 Introductory Algebra 5 credits
Prerequisite: 1) Recent experience in algebra, such as an eleventh grade high school algebra course completed within the last three years; and 2) MTH 020 or equivalent course with a grade of " C -" or better or pass a placement test through the Testing Office.
Prerequisite grades or test scores must have been completed within the past four terms. If you have taken a higher level math course than this and passed the course with a "C-" or better, you may not use this course for your degree/certificate requirements. MTH 070 is a fast paced review of algebra for students with recent algebra experience. For students without recent algebra experience, MTH 060 and MTH 065 provide a more relaxed and thorough introduction to the subject. (Students who are unsure whether to
take MTH 070 or MTH 060 should seek the advice of a Counselor or Advisor.) MTH 070 prepares students for Intermediate Algebra, MTH 095. Topics include a selective review of arithmetic, tables and graphs, signed numbers, problem solving, linear equations, ratio and proportion, unit analysis, systems of linear equations, polynomials, factoring, quadratic equations, rational expressions, exponents, and radicals. A scientific calculator is required.

MTH 076 Applied Geometry for Technicians .4 credits
Prerequisite: MTH 020 with a grade of "C-" or better or pass a placement test through the Testing Office. Prerequisite grades or test scores must have been completed within the past four terms. MTH 076 Applied Geometry includes the following: angle measure, properties of systems with parallel, perpendicular and oblique lines; perimeter and area of polygons and circles; surface area and volume of solid figures such as prisms and pyramids; similarity, ratio, and proportion; right triangle trigonometry; linear, square, and cubic units; and dimensional analysis in metric and US customary measures. Algebra will be introduced as needed to work with proportions and formulas. The course will emphasize applications encountered in technical-professional programs and clear communication of mathematical results.

MTH 086 Applied Algebra for Technicians .4 credits
Prerequisite: MTH 076 with a grade of "C-" or better, or instructor permission. Prerequisite grades or test scores must have been completed within the past four terms. MTH 086 Applied Algebra is a first course in algebraic skills needed for technical mathematics, including the following: signed numbers, positive and negative exponents, scientific notation, the Cartesian coordinate system, linear equations and their graphs, linear systems and their graphs, quadratic equations and their graphs, forming expressions and equations from real situations. Oblique triangle trigonometry is an optional topic. Fraction skills will be reviewed as needed. Geometric topics from MTH 076 will be integrated throughout. The course will emphasize clear communication of mathematical results.

MTH 095 Intermediate Algebra 1-5 credits Prerequisite: MTH 065 or MTH 070 or equivalent courses with a grade of "C-" or better, or pass a placement test through the Testing Office. Prerequisite grades or test scores must have been completed within the past four terms. 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 required. A graphing calculator (TI-83) is suggested for students taking math courses above MTH 095. This course provides a foundation for MTH 097, MTH 105, MTH 111, or MTH 211 or MTH 213. Students wishing to take Mth 095 in a variable credit, self-paced format must obtain instructor permission prior to registering. This permission can be obtained in the Math Resource Center on the first day of classes or just prior to the beginning of the term.
MTH 096 Using the Scientific Graphing Calculator $\qquad$ 1 credit Prerequisite: Co-requisite of MTH 095 or higher. Introduction to the graphing calculator. Topics include evaluating expressions, graphing functions, solving equations using multiple formats, programming, and effective use of tools offered by the graphing calculator to solve mathematical problems.
MTH 097 Geometry . $\qquad$ Prerequisite: MTH 095 or 4 credits of MTH 090 or equivalen courses with a grade of "C-" or better or pass a placement test through the Testing Office or one-and-one-half years of high school algebra. Prerequisite grades or test scores must have been completed within the past four terms. A course in informal geometry covering the study of lines, planes, polygons, circles, solids, area, perimeter, volume, surface area, Pythagorean Theorem, congruence, and similar figures. Applications and exploration of geometry topics rather than proofs will be stressed. This course is the geometry prerequisite for MTH 112, and 251. MTH 097 is strongly recommended for MTH 111 and MTH 211. Scientific calculator required.

MTH 105 Introduction to Contemporary Mathematics ......... 4 credits Prerequisite: MTH 095 or equivalent courses with a grade of "C-" or better or pass a placement test through the Testing Office. Prerequisite grades or test scores must have been completed within the past four terms. Survey of Applications of Mathematics for non-science majors including probability, statistics, finance and exponential modeling. (Also available through Distance Learning). Note: MTH 105 will not meet any Science/Math/Computer Science degree requirements if taken after MTH 243; however, MTH 105 can be used as an elective if taken after MTH 243.

MTH 106 Introduction to Contemporary Math 2 $\qquad$ 4 credits Prerequisite: MTH 105 with a grade of " C -" or better completed within the past four terms. College Now offering only. The second of a two term sequence involving problem solving with a variety of applications of mathematics. These applications include elementary probability and at least two of the following topics: history and uses of geometry, matrices and linear systems, Markov chains, game theory, graph theory involving routing and networks, mathematics of voting and apportionment, or other topics approved by the Mathematics Division
MTH 111 College Algebra. 5 credits
Prerequisite: MTH 095 or equivalent courses with a grade of "C-" or better, or pass a placement test through the Testing Office. Prerequisite grades or test scores must have been completed within the past four terms. MTH 097 is strongly recommended. College Algebra is the study of basic functions and their applications. This includes polynomial, rational, exponential, and logarithmic functions and their inverses. Other topics include an introduction to sequences and non-linear systems of equations. In accordance with national recommendations, this course emphasizes skill building, problem solving, modeling, reasoning, communication, connections with other disciplines, and the appropriate use of technology. A graphing calculator is required. However, students will be held accountable for many skills without a calculator. See current calculator recommendation chart.

## MTH 112 Trigonometry

 . 4 credits Prerequisite: MTH 097 and MTH 111 or equivalent courses with a grade of "C-" or better or pass placement tests through the Testing Office. Prerequisite grades or test scores must have been completed within the past four terms. Trigonometry has wide applications in the world around us. It is a vital tool in construction, physics, and engineering. Trigonometry is preparatory for Calculus 1 (Differential Calculus, MTH 251). The major topics covered include radian measure, circular functions and their graphs, right triangle ratios and related trigonometric functions, identities, solving trigonometric equations, law of sines, law of cosines, and applications. Other topics include polar coordinates, parametric equations, vectors, and conic sections. A graphing calculator is required. See current calculator recommendation chart.MTH 199 Special Studies:
1 credit
See department for topics.
MTH 211 Fundamentals of Elementary Mathematics 1 ........ 4 credits Prerequisite: MTH 095 or equivalent courses completed with a grade of "C-" or better, or pass a placement test through the Testing Office. Prerequisite grades or test scores must have been completed within the past four terms. MTH 097 is strongly recommended before MTH 211. Surveys mathematical topics for those interested in the presentation of mathematics at the K-9 levels. Various manipulative and heuristic problem solving strategies are used to emphasize problem solving, patterns, sequences, set theory, logic, numerations systems, number bases, arithmetic operations, and number theory.

MTH 212 Fundamentals of Elementary Mathematics 2........ 4 credits Prerequisite: Completion of MTH 211 with a grade of "C-" or better. Prerequisite grades must have been completed within the past four terms. Surveys mathematical topics for those interested in the presentation of mathematics at the K-9 levels. Various manipulative and heuristic problem solving approaches are used to explore rational numbers (fractions, decimals, and percents), integers, the set of irrational numbers, the set of real numbers, and simple probability and statistics.

MTH 213 Fundamentals of Elementary Mathematics $3 . . . . . . .4$ credits Prerequisite: Completion of MTH 211 or MTH 212 with a grade of "C-" or better. Prerequisite grades must have been completed within the past four terms. MTH 097 is strongly recommended before MTH 213. Surveys mathematical topics for those interested in the presentation of mathematics at the K-9 levels. Various manipulative and heuristic problem solving approaches are used to explore algebra and functions, informal geometry, transformational geometry, and measurement systems.
MTH 231 Discrete Mathematics 1 4 credits
Prerequisite: MTH 111 or equivalent courses with a grade of "C-" or better or pass a placement test through the Testing Office.
Prerequisite grades or test scores must have been completed within the past four terms. First course in three-term sequence fulfilling the Discrete Mathematics requirement for enrolling in upper division Computer Science courses at the University of Oregon and Oregon State University. Topics include formal logic, methods of proof, sequences and mathematical induction. The order of the topics may vary with instructor and text.
MTH 232 Discrete Mathematics 2 $\qquad$ 4 credits
Prerequisite: MTH 231 with a grade of "C-" or better. Prerequisite grade must have been completed within the past four terms. Second course in three-term sequence fulfilling the Discrete Mathematics requirement for enrolling in upper division Computer Science courses at the University of Oregon and Oregon State University. Topics include set theory, combinatorics, elementary counting techniques, functions, Boolean algebra and probability. The order of the topics may vary with instructor and text.
MTH 233 Discrete Mathematics 3 .4 credits
Prerequisite: MTH 232 with a grade of "C-" or better. Prerequisite grade must have been completed within the past four terms. Third course in three-term sequence fulfilling the Discrete Mathematics requirement for enrolling in upper division Computer Science courses at the University of Oregon and Oregon State University. Topics include recursion, relations, modular arithmetic, group theory, graphs and trees. The order of the topics may vary with instructor and text.
MTH 241 Elementary Calculus 1. . 4 credits Prerequisite: MTH 111 or equivalent courses with a grade of "C-" or better or pass a placement test through the Testing Office. Prerequisite grades or test scores must have been completed within the past four terms. Differential calculus (without Trigonometry) for business and social sciences. Some review of algebraic techniques. Major emphasis is on limits; continuity; derivatives with applications; exponential and logarithmic functions, their derivatives and applications; and introductory mathematics of finance.
MTH 242 Elementary Calculus 2 $\qquad$ .4 credits
Prerequisite: MTH 241 with a grade of "C-" or better. Prerequisite grade must have been completed within the past four terms. Integral calculus (without Trigonometry) for business and social sciences. Integration and applications for single variable functions, techniques of integration, partial differentiation methods for multivariate functions and their relative extrema, and matrix algebra.

MTH 243 Introduction to Probability and Statistics $\qquad$ 4 credits Prerequisite: MTH 111 or equivalent courses with a grade of "C-" or better or pass a placement test through the Testing Office. Prerequisite grades or test scores must have been completed within the past four terms. Discrete and continuous probability, data description and analysis, measures of central tendency and variability, binomial and other distributions, sampling distributions; basic concepts of statistical inference, including confidence intervals, hypothesis testing, correlation, and regression. Note: Students planning to take MTH 105 and MTH 243 must takeMTH 105 first in order to apply the Mth 105 credits towards any Science/Math/Computer Science degree requirements. Students who complete MTH 105 after MTH 243 will have theMTH 105 credits counted as elective credits.

(COURSES BELOW THIS LINE SATISFY THE A.A. OREGON TRANSFER DEGREE REQUIREMENT)


NOTE: Y ou must obtain departmental permission to enroll in an M RC course. Visit the M RC or call the M athematics Division: 463-5392.


MTH 251 Calculus 1 (Differential Calculus)

## )...

$\qquad$ .5 credits Prerequisite: MTH 112 (Trigonometry) or equivalent courses with a grade of "C-" or better, or pass a placement test through the Testing Office. Prerequisite classes or test scores must have been completed within the past four terms. MTH 251 is a first-term calculus course including a review of algebra and trigonometry followed by development of the derivative from the perspective of rate of change, slope of the tangent line, and numerical and graphical limits of the difference quotient. 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. The use of a programmable graphing calculator is required.
MTH 252 Calculus 2 (Integral Calculus) . $\qquad$ 5 credits Prerequisite: MTH 251 (Calculus 1) or equivalent courses with a grade of "C-" or better. Prerequisite class must have been completed within the past four terms. MTH 252 is a second-term calculus course covering definite and indefinite integrals. Specific topics covered include conceptual development of the definite integral, properties of the definite integral, the first and second Fundamental Theorem 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. The use of a programmable graphing calculator is required.
MTH 253 Calculus 3 (Infinite Series and Sequences). $\qquad$ .4 credits Prerequisite: MTH 252 with a grade of "C-" or better. Prerequisite grade must have been completed within the past four terms. This is the third term of a six-term sequence. Indeterminate forms and improper integrals. Sequences and series. Investigation of the convergence of series. Taylor series and power series.
Miscellaneous topics include parametric and polar equations and conics. The use of programmable graphic calculator is required.

MTH 254 Vector Calculus 1 (Introduction to Vectors and Multidimensions). $\qquad$ .4 credits Prerequisite: MTH 253 with a grade of "C-" or better. Prerequisite grade must have been completed within the past four terms. This is the fourth term of a six-term sequence. Major emphasis is on three-dimensional vectors and differential calculus of several variables. The use of a programmable graphing calculator is required.
MTH 255 Vector Calculus 2 (Introduction to Vector Analysis)4 credits Prerequisite: MTH 254 with a grade of "C-" or better. Prerequisite grade must have been completed within the past four terms. This is the fifth term of a six-term sequence. Major emphasis is on multiple integration, vector fields, and applications. The use of a programmable graphing calculator is required.
MTH 256 Applied Differential Equations $\qquad$ 4 credits
Prerequisite: MTH 254 with a grade of "C-" or better. Prerequisite grade must have been 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. The use of programmable graphing calculator required.

MTH 261 Introduction to Linear Algebra 2 credits
Corequisite: MTH 252. If the co-requisite has already been completed, then one of the following must have been completed with a "C-" or better within the past four terms: MTH 252, MTH 253, MTH 254, MTH 255 or MTH 256. Introduction to Linear Algebra, MTH 261 may be taken concurrently with any math course after Calculus 1, MTH 251. The course covers systems of linear equations, vectors in a geometric setting, real vector spaces, matrices, operations on matrices, inversion of matrices, determinants, linear transformations, dot product and cross product, and eigenvalues and eigenvectors.

MTH 265 Statistics for Scientists and Engineers $\qquad$ .4 credits Prerequisite: MTH252 with a grade of "C" or better. A calculusbased 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. Prerequisite: MTH 252
MTH 280 Co-op Ed: Mathematics. $\qquad$ .1-12 credits
The LCC mathematics student tutor will devote a prearranged number of hours each week to classroom observation and possible assistance to the instructor, as well as direct student contact outside the classroom in a one-to-one or group situation. The student tutor will write learning goals at the beginning of the term, keep a daily log of progress on goals, etc., and write a summary paper. The tutor will meet periodically with the mathematics supervisor to discuss any problems, to get feedback, and for evaluation of the student tutor's progress. The mathematics supervisor will train, direct, supervise, and evaluate the student tutor's performance.

## Mechanics - See Automotive, Aviation, Diesel

Media Studies

## Also see Video Production

For information about classes with course numbers that begin with: ENG- Contact Language, Literature and Communication, Center Bldg./Rm. 457, 463-5419.
FA- Contact Art and Applied Design, Building 11/Rm. 101, 463-5409.
ENG 195 Introduction to Film Studies .4 credits
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-scene, 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. 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 scene, blocking, and movement.
ENG 196 Introduction to Film Studies . .4 credits
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-scene, 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. 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.). The course also looks at the larger social and historical contexts in which films emerge, considering the ways that films both reflect and affect a culture. Along these lines, we focus particularly on issues and ideologies relating to race, class, gender, sexuality and nation.

## Course Fees

Many courses may have additional fees. Please refer to the quarterly class schedule credit listings and registration information for updated fee information and fee amounts.

ENG 197 Introduction to Film Studies 4 credits ENG 197 is the third course of a year-long sequence focusing on the history, art, and social contexts of film as an art form. A primary objective of the course is to enhance students' enjoyment and appreciation of film by developing their cinematic literacy. Students are introduced to the basic elements of film language, including cinematography, mise-en-scene, 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. A variety of assignments and activities develop and test students "ways of seeing." ENG 197 centers on films chosen around a theme, topic or director. Recent themes include "Film and the American Dream" or "American Independent Cinema." Providing an overview of film language, the course explores the style of the featured films and/or director and looks at their historical contexts and ideological effects relating to such contested areas of social experience as race, class, gender, sexuality, and nation.
FA 250 Concepts of Visual Literacy.......................................... 3 credits Introduces students 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 will learn to incorporate these design elements into visual projects and learn how to critically evaluate visually mediated messages.
FA 255 Understanding Movies: American Cinema $\qquad$ 3 credits An introductory film studies course designed to bring Hollywood film making into clear focus as an art form, as an economic force, and as a system of representation and communication. The course explores how Hollywood films work technically, artistically and culturally. Students will probe the deeper meaning of American movies - the hidden messages of genres, the social and psychological effects of Hollywood film style, and the mutual influence of society and popular culture-through encounters with the work of such directors as John Ford, Howard Hawks, and Martin Scorsese. May be offered through Distance Learning.
FA 263 Film in the Fifties $\qquad$ .4 credits
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.

FA 264 Women Make Movies .4 credits
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 womenauthored 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.
FA 265 African American Film Images. .4 credits
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 moviemaking. 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 offsetting African Americans' full, rigorous admittance into the Hollywood system.

## Medical Office Assisting

## Also see Health Records

For information, contact Health Professions, Bldg.4/Rm 222, (541) 463-5617. You must be accepted into the program to take most of these classes.

MA 120 Clinical Assistant 2 .3 credits Prerequisites: Successful completion of Clinical Assistant 1 MA 110 and all fall term Medical Office Assistant courses. 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 280 Co-op Ed: Medical Office Assistant. $\qquad$ 3-12 credits Prerequisite: MA120 with grade of C or better, or consent of instructor. The purpose of this course is to provide internships in local medical offices and hospitals in both clinical and administrative office settings. During the required unpaid field placement spring or summer term students earn college credit and gain actual work experience. Further instruction in the identification and proper use of other medical equipment and valuable on-thejob training are additional benefits gained in this course. Students attend a weekly seminar that includes instruction for writing effective resumes, interviewing techniques and other job-search skills.

## Microbiology - See Anatomy/Physiology/Microbiology

## Multimedfa Design

Also see Video Production
For information, contact Art and Applied Design, Bldg. 11/Rm. 101, (541) 463-5409.
ART 151A Media Graphics. .3 credits
Prerequisite: CIS 140B. This course will give students a solid foundation in the essential skills needed to use Flash software. 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. Flash is used to create all kinds of content such as website front-ends, interactive games, animated cartoons, movie trailers, and PDA interfaces.
ART 288 Introduction to Web Design. $\qquad$ .2 credits Prerequisite or Co-requisite: CIS 125H. An introduction to design and communication principles as they apply to web design. Students will also investigate the unique challenges involved in web site design. This course may be offered through Distance Learning or as a hybrid course.

ART 298 Independent Study .1-3 credits
An independent study experience designed to allow the student with prior qualifying college course experience in his/her field of interest to initiate individual projects, with instructor approval. Enables the student to explore further some specific interest, method, project, or technique. Upon completion of the course, the student should demonstrate an increased capability in the chosen field, method or technique. May be available in the following areas: Art History, Design, Drawing, Ceramics, Graphic Design, Painting, Fibers, Printmaking, and Sculpture. Repeatable.

FA 221 Computer Animation. ... 3 credits Historical beginnings of animation from flipbooks to film. Students will explore the uses of animation from business presentations to entertainment. This project-oriented, hands-on course will give students the opportunity to script, design, and produce animation projects on the computer. The course will emphasize 2-D animation techniques and tools and introduce 3-D modeling and animation techniques and tools.
FA 222 Computer Animation 2. .3 credits Prerequisite: FA 221. This course is a comprehensive exploration of three-dimensional computer animation arts: 3-D 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 will have the opportunity to develop authoring skills using Macromedia Director and the Lingo authoring language. This course is not about programming; it is about applying multimedia design to an authoring language framework to solve implementation problems, and to enhance nonlinear content presentation. Activities will focus primarily on completed multimedia projects and their effectiveness. Students are encouraged to develop tools and programs that serve real needs or fit well into a portfolio.
FA 254 Fundamentals of Lighting. $\qquad$ .3 credits
This course will give the student a comprehensive mix of lighting techniques, tools and theory that can be applied to media production including video, photography, and production design. Students will 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 will gain an understanding of image manipulation and demonstrations, practical hands-on exercises and assignments.
FA 261 Writing and Interactive Design. $\qquad$ 3 credits
Prerequisite: WR 121. An introduction to basic principles involved in scripting for interactive media. Focusing on writing techniques which foster interactivity, the course will explore the role of authoring tools in the design of multimedia projects, define the stages involved in the development of multimedia projects, and address 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 through Distance Learning.
MDP 246 Multimedia Production 1 $\qquad$ 4 credits Prerequisite: FA 250, FA 231, VP 151, AUD 120, ART 151A, MUL 210, and CIS 140B. A practicum course that gives students the opportunity to apply technical knowledge and skills learned in the first year to actual basic 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.

MDP 247 Multimedia Production 2 4 credits Prerequisite: MDP 246, FA 261, VP 152, MUL 212, and CG 203. 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 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 $\qquad$ .3-12 credits
Prerequisite: Instructor approval. This course provides the student with multimedia-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.

MUL 210 Multimedia Design. 3 credits
Prerequisite: ART 261, CIS 140B, and AUD 120. Students learn to design and produce computer multimedia programs by utilizing digital production techniques in imaging, sound, and animation. Emphasis is given to design implementation and human factors, user analysis, interface and interaction considerations, project management, and meeting client needs.

MUL 212 Digital Imaging .3 credits
Prerequisite or Co-requisite: ART 261. Basic computer literacy required. Introduction to the use of Adobe Photoshop for digital compositing, typography, image repair, and construction of photographic images and digital artworks. This course covers basic concepts, processes, and aesthetic interpretation of making digital imagery.

MUL 298 Independent Study: Multimedia 1-3 credits
A variable credit course based on independent study contracted between an instructor and a student.

## Music

For information, contact Music, Dance and Theatre Arts, Bldg. 6/Rm. 205, (541) 463-5209.
MUS 101 Music Fundamentals $\qquad$ 3 credits
This course provides the student an opportunity to develop a working knowledge of the elements of music. Students learn the basic skills needed to read, write, analyze, and compose simple music. Students may find it helpful to take Group Piano MUS 131 at the same time. This course prepares one for Music Theory MUS 111.
MUS 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. Successful completion of this class leads to opportunities to work with a faculty producer on future defined projects in the recording studio.

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 Matering.

MUS 111 Music Theory 1 (First Term) . 4 credits 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. Students are encouraged to take MUS114 and MUS127 concurrently.
MUS 112 Music Theory 1 (Second Term). $\qquad$ . 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. Students are encouraged to take MUS115 and MUS128 concurrently.
MUS 113 Music Theory 1 (Third Term) $\qquad$ .4 credits Prerequisite: MUS 112. Must be taken in sequence. Emphasis of MUS113 is in concepts of prolongation and contextual analysis. Includes all diatonic chords, cadences, embellishing chords, melodic analysis, sequences, and secondary dominants. Students are encouraged to take MUS116 and MUS129 concurrently.
MUS 114 Sight-reading and Ear Training (First Term)............. 2 credits Prerequisite: Placement test. 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. Students are encouraged to take MUS111 and MUS127 concurrently.
MUS 115 Sight-reading and Ear Training (Second Term) ....... 2 credits Prerequisite: MUS 114. Second in three term sequence of courses developing the skills necessary to read melodies at sight and to notate melodies one hears. It includes study of rhythm and meter, tonality and modality (solfeggio) scales, triads and seventh chords, cadences, and conducting patterns. Students are encouraged to take MUS112 and MUS128 concurrently. Students are encouraged to take MUS112 and MUS128 concurrently.
MUS 116 Sight-reading and Ear Training (Third Term) ........... 2 credits Prerequisite: MUS 115. Third in three-term sequence of courses developing the skills necessary to read melodies at sight and to notate melodies one hears. It includes study of rhythm and meter, tonality and modality (solfeggio) scales, triads and seventh chords, cadences, and conducting patterns. Students are encouraged to take 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 outside of class.
MUS 119 Music Technology MIDI/Audio 2. $\qquad$ .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 movies. Students will also have the opportunity to work with many audio formats such as AIFF, SDII, WAV, MP3, and surround sound as they work on their sound event projects. Students will work in the studio a minimum of 3 hours outside of class.

MUS 127 Keyboard Skills 1 (First Term). .2 credits Prerequisites: Proficiency placement Test. This course is part of a 6term 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. Students are encouraged to take MUS111 and MUS114 concurrently.
MUS 128 Keyboard Skills 1 (Second Term) $\qquad$ .2 credits Prerequisites: MUS127 or proficiency placement test. 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, sightreading of 2-part piano texture. Students are encouraged to take MUS112 and MUS115 concurrently.

MUS 129 Keyboard Skills 1 (Third Term) $\qquad$ .2 credits Prerequisites: MUS128 or proficiency placement test Co-requisites: MUS113 \& MUS116 This course is part of a 6-term sequence. It is designed to develop piano skills essential for all music majors: performance of rhythmic patterns, scales \& arpeggios, intervals, chord progressions (including cadences) with correct voice leading and resolution, harmonization, transposition, improvisation, realization of figured bass, sight-reading of 2-part piano texture. Students are encouraged to take MUS113 and MUS116 concurrently.
MUS 131 Group Piano $\qquad$ 2 credits
This course is for students who are not music majors who are interested in learning to play piano or continuing their keyboard studies. The course provides group instruction covering principles of piano playing. May be repeated up to 6 credits. May be applied to transfer associate's degrees. See advisor for details.
MUS 134 Group Voice .. 2 credits
This class is designed to help students develop their voices for singing. They will be instructed individually and as a group in vocal techniques that will improve the quality of their voices. They will learn about diction, phrasing, dynamics, expression, posture, breath-control, and vocal resonance as well as well as the basic anatomy of singing. They will also learn how to cope with the fear of singing in front of others. No musical background is needed to take this class. May be repeated up to 6 credits. May be applied to transfer associate's degrees.
MUS 137 Group Guitar .2 credits
The student must have access to an acoustical guitar. Group Guitar provides a basic orientation to guitar techniques that encompass accompaniment and solo skills. Students will learn to read standard musical notation. A variety of strumming and finger-picking are taught to accompany singing.
MUS 161 Jazz Improvisation: Instrumental. $\qquad$ .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 $\qquad$ 1 credit Instrumental performance is designed for instrumental students at MUP 100 or above who are taking individual lessons and are declared pre-music or music majors. This class focuses on the art of performance and how to deal with performance anxiety. May be repeated up to 6 credits. May be applied to transfer associate's degrees.
MUS 186 Vocal Performance 1 credit
Vocal Performance is designed for vocal students at MUP100 or above who are taking individual lessons and are declared premusic or music majors. This class focuses on performance of classical literature and how to deal with performance anxiety. May be repeated up to 6 credits. May be applied to transfer associate's degrees.
MUS 201 Introduction to Music and Its Literature. $\qquad$ .3 credits This course meets three hours per week for three terms to survey, listen to, and study classical music from antiquity to the present. Music of representative composers from each of the musical periods will be studied to follow the effect of musical experimentation and outside influences on the growth of musical style. MUS 201, 202, 203 do not need to be taken in sequence.

MUS 202 Introduction to Music and Its Literature $\qquad$ 3 credits Second course in sequence. See sequence information under course description for MUS 201.

MUS 203 Introduction to Music and Its Literature. .3 credits Third course in sequence. See sequence information under course description for MUS 201.

MUS 205 Introduction to Jazz History
3 credits
This course provides the student with listening skills and a historical overview of jazz from its origins to the present. Emphasis is on in-class listening and discussion of the music. No musical background is needed to take this class. Satisfies arts and letters and ethnic/gender/cultural diversity requirements.
MUS 211 Music Theory 2: (First Term). $\qquad$ 3 credits
Prerequisite: MUS 113 . This 3-term sequence is a continuation of Music Theory I (MUS111, 112, 113) with further studies of compositional techniques in tonal harmony. Emphasis of MUS 211 is on chromaticism and analysis. Includes altered chords (N6 and augmented sixths chords), modal mixtures and diatonic modulation. Students are encouraged to take MUS224 and MUS214 concurrently.
MUS 212 Music Theory 2 (Second Term). $\qquad$ 3 credits
Prerequisite MUS 211. Continuation of MUS 211, with chromatic elaboration and enharmonic modulation using fully diminished seventh chords, augmented 6ths and Mm 7ths. Emphasis of MUS 212 is on form and analysis including binary, ternary, rondo, variations, art song, and sonata form. Students are encouraged to take MUS225 and MUS215 concurrently.
MUS 213 Music Theory 2 (Third Term) $\qquad$ 3 credits
Prerequisite: MUS 212 Emphasis for MUS 213 is on musical language of the 20th century, including modes, atonality, serialism, set theory, new forms and new organizations of rhythm and meter. Students are encouraged to take MUS226 and MUS216 concurrently.
MUS 214 Keyboard Skills 2 (First Term). 1 credit Prerequisites: MUS129 or proficiency test. This course is part of a 6term sequence. It is designed to develop piano skills essential for all music majors. Keyboard skills II focuses on chromatic harmony. Skills include the performance of scales \& arpeggios, chord progressions with modulations (including altered chords) with correct voice leading and resolution, harmonization, transposition, improvisation, realization of figured bass, sight-reading of 2-part piano texture. Students are encouraged to take MUS211 and MUS 224 concurrently.
MUS 215 Keyboard Skills 2(Second Term) 1 credit Prerequisites: MUS214 or proficiency test. This course is part of a 6term sequence. It is designed to develop piano skills essential for all music majors. Keyboard skills II focuses on chromatic harmony. Skills include the performance of scales \& arpeggios, chord progressions with modulations (including altered chords) with correct voice leading and resolution, harmonization, transposition, improvisation, realization of figured bass, sight-reading of 2-part piano texture. Students are encouraged to take MUS212 and MUS225 concurrently.
MUS 216 Keyboard Skills 2(Third Term) 1 credit
Prerequisites: MUS215 or proficiency test. This course is part of a 6term sequence. It is designed to develop piano skills essential for all music majors. Keyboard skills II focuses on chromatic harmony. Skills include the performance of scales \& arpeggios, chord progressions with modulations (including altered chords) with correct voice leading and resolution, harmonization, transposition, improvisation, realization of figured bass, sight-reading of 2-part piano texture. Students are encouraged to take MUS213 and MUS226 concurrently.
MUS 224 Sight-reading and Ear Training (First Term) $\qquad$ 2 credits
Prerequisite: MUS 116. Continues development of student's perception, knowledge, and skills needed to notate melodies, 2 and 4 part harmonies. Students are encouraged to take MUS211 and MUS214 concurrently.
MUS 225 Sight-reading and Ear Training (Second Term) ....... 2 credits Prerequisite: MUS 224. Continues development of student's perception, knowledge, and skills needed to read and write music. Students are encouraged to take MUS212 and MUS215 concurrently.

MUS 226 Sight-reading and Ear Training (Third Term)........... 2 credits
Prerequisite: MUS 225. Continues development of student's perception, knowledge, and skills needed to read and write music. Students are encouraged to take MUS213 and MUS216 concurrently.
MUS 261 Music History .4 credits Prerequisite: MUS 111, MUS112. History is a survey of the music, lives, and times of composers and other musicians that influenced the course of Western Music. Fall term covers basic stylistic concepts, Greek and Roman legacies, Medieval and Renaissance time periods ( 900 AD-1600AD).
MUS 262 Music History .4 credits
Prerequisite: MUS 111, MUS 112. Music History is a survey of the music, lives, and times of composers and other musicians that influenced the course of Western music. Winter term covers the Baroque, Pre-Classic and Classic eras, including early Beethoven. (c.1600-1825)

## MUS 263 Music History

$\qquad$ .. 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 ear (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 $\mathbf{2 6 5}$ 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 c.1963, while learning about important artists in this style.
MUS $\mathbf{2 6 6}$ History of Rock Music 3. .4 credits
This course is designed to provide an opportunity to explore the musical, social and cultural aspects of rock music from c. 1975 through 1995, while learning about important artists in this style.
MUS 270 Jazz Theory ... 3 credits
This one-term course in jazz theory will introduce the student to concepts of jazz harmony, melody, rhythm, form, timbre and instrumental performance practice. The focus will be on analyses of jazz compositions and improvisation techniques, as well as traditional concepts of music theory. Students must be able to read music.

MUS 280 Co-op Ed: Music $\qquad$ 3-12 credits This course provides the student with music-related work experience in community businesses and industry. 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 college credit.
MUS 291 Chamber Choir. $\qquad$ . .2 credits This is a select vocal ensemble that rehearses and performs choral chamber music from the medieval period to the present. Audition during first week of class. Students need to be able to read music. May be repeated up to 12 credits. May be transferred.
MUS 292 Vocal Jazz Ensemble.
$\qquad$ .. 2 credits
Audition required during first week of class, fall term and as needed thereafter. Read, rehearse, and perform music of the vocal jazz idiom including swing, blues, Latin, and ballad styles. Student must have the ability to learn music on his/her own, be at rehearsal prepared and on time, and have an enthusiasm for the music. Vocal jazz also requires a full-year commitment. May be repeated up to 12 credits. May be transferred.

## Course Fees

Many courses may have additional fees. Please refer to the web class schedule credit listings and registration information for updated fee information and fee amounts.

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. Heavy emphasis on rhythm section playing. No audition required. May be repeated up to 12 credits. May be transferred.
MUS 294 Jazz Ensemble $\qquad$ .2 credits Jazz Ensemble is a class for students who wish to study jazz music in a performance environment. The class is limited to six saxophones, five trumpets, five trombones, piano, bass, guitar, and trap set. Audition required. The Lane Jazz Ensemble performs formal concerts on and off campus throughout the year (Fall, Winter, Spring). May be repeated up to 12 credits. May be transferred.

## MUS 295 Symphonic Band

 2 credits Symphonic Band provides an opportunity for woodwind, brass, and percussion students to study, rehearse, and perform all types of concert band literature. An audition is recommended for new members (though not required. Returning members do not need to audition. High school or college ensemble experience is recommended. The Lane Symphonic band performs at least one formal concert at the end of fall, winter and spring term. May be repeated up to 12 credits. May be transferred.MUS 296 Chamber Orchestra $\qquad$ .2 credits
This course blends the talents of experienced community instrumentalists with student musicians creating an excellent orchestra experience for all. Chamber orchestra plays three programs each year. Audition only. Rehearsals are Wednesday evenings, 7-9:50 p.m. May be repeated up to 12 credits. May be transferred.
MUS 297 Concert Choir $\qquad$ .2 credits
This class is open to anyone interested in singing in a large ensemble. No prior experience is required. Students develop their vocal skills and learn music of various periods and styles in preparation for at least one public performance each term. May be repeated up to 12 credits. May be transferred.
MUS 298 Independent Study. 1-6 credits
A variable credit course based on independent study contracted between an instructor and a student. Repeatable.

## Music Lessons

For information, contact Music, Dance and Theatre Arts, Bldg. 6/Rm. 205, (541) 463-5209.

## MUP 100 Individual Lessons

 1-2 credits Individual instruction in technical and stylistic aspects of solo performance for pre- and non-majors. Students receive 10 45-min lessons each term in their major instrument. Instruction is offered in the following: voice, piano, flute, oboe, clarinet, saxophone, bassoon, violin, trumpet, French horn, trombone, baritone horn, tuba, string bass, cello, viola, electric bass guitar, jazz guitar, classical guitar, harp, and percussion. No more than six hours credit may be earned in MUP 100 singularly or combined.MUP 171 Individual Lessons: Piano (First-year level) ............ 2 credits Prerequisite: Jury required to enter this level. Individual instruction in technical and stylistic aspects of solo performance. Each term students enroll for one 45-minute lesson each week. Regular practice outside of lessons is expected. Consult with instructor regarding expectations. A term jury is required.
MUP 174 Individual Lessons: Voice (First-year level) ............. 2 credits Prerequisite: Jury required to enter this level. See course description for MUP 171.
MUP 175 Individual Lessons: Violin (First-year level)............. 2 credits Prerequisite: Jury required to enter this level. See course description for MUP 171.
MUP 178 Individual Lessons: Bass (First-year level).............. 2 credits Prerequisite: Jury required to enter this level. See course description for MUP 171.

MUP 181 Individual Lessons: Flute (First-year level) .2 credits Prerequisite: Jury required to enter this level. See course description for MUP 171.
MUP 183 Individual Lessons: Clarinet (First-year level)......... 2 credits Prerequisite: Jury required to enter this level. See course description for MUP 171.
MUP 184 Individual Lessons: Saxophone (First-year level) .. 2 credits Prerequisite: Jury required to enter this level. See course description for MUP 171.
MUP 186 Individual Lessons: Trumpet (First-year level) ........ 2 credits Prerequisite: Jury required to enter this level. See course description for MUP 171.
MUP 187 Individual Lessons: French Horn (First-year level). 2 credits Prerequisite: Jury required to enter this level. See course description for MUP 171.
MUP 188 Individual Lessons: Trombone (First-year level) ..... 2 credits Prerequisite: Jury required to enter this level. See course description for MUP 171.

## MUP 189 Individual Lessons:

Baritone Horn (First-year level) .................................................. 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 171.
MUP 190 Individual Lessons: Tuba (First-year level) .............. 2 credits Prerequisite: Jury required to enter this level. See course description for MUP 171.
MUP 191 Individual Lessons: Percussion (First-year level) ... 2 credits Prerequisite: Jury required to enter this level. See course description for MUP 171.
MUP 192 Individual Lessons: Electric Bass (First-year level) 2 credits Prerequisite: Jury required to enter this level. See course description for MUP 171.
MUP 194 Individual Lessons: Guitar (First-year level)........... 2 credits Prerequisite: Jury required to enter this level. See course desctiption for MUP 171.
MUP 271 Individual Lessons: Piano (Second-year level)....... 2 credits Prerequisite: Jury required to enter this level. Individual instruction in technical and stylistic aspects of solo performance. Each term students enroll for one 45-minute lesson each week. Regular practice outside of lessons is expected consult with instructor regarding expectations.
MUP 274 Individual Lessons: Voice (Second-year level)........ 2 credits Prerequisite: Jury required to enter this level. See course description for MUP 271.
MUP 275 Individual Lessons: Violin (Second-year level)....... 2 credits Prerequisite: Jury required to enter this level. See course description for MUP 271.
MUP 281 Individual Lessons: Flute (Second-year level) ........ 2 credits Prerequisite: Jury required to enter this level. See course description for MUP 271.
MUP 283 Individual Lessons: Clarinet (Second-year level) ... 2 credits Prerequisite: Jury required to enter this level. See course description for MUP 271.

## MUP 284 Individual Lessons:

Saxophone (Second-year level)
$\qquad$
$\qquad$ .2 credits Prerequisite: Jury required to enter this level. See course description for MUP 271.
MUP 286 Individual Lessons: Trumpet (Second-year level)... 2 credits Prerequisite: Jury required to enter this level. See course description for MUP 271.
MUP 287 Individual Lessons:
French Horn (Second-year level) 2 credits Prerequisite: Jury required to enter this level. See course description for MUP 271.
MUP 288 Individual Lessons:
Trombone (Second-year level) $\qquad$ .2 credits Prerequisite: Jury required to enter this level. See course description for MUP 271.
MUP 289 Individual Lessons:
Baritone Horn (Second-year level) .2 credits Prerequisite: Jury required to enter this level. See course description for MUP 271.

MUP 291 Individual Lessons:
Percussion (Second-year level) .............................................. 2 credits
Prerequisite: Jury required to enter this level. See course
description for MUP 271.
MUP 292 Individual Lessons:
Electric Bass (Second-year level)
2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 271.
MUP 294 Individual Lessons: Guitar (Second-year level)...... 2 credits Prerequisite: Jury required to enter this level. See course description for MUP 271.

## Nursing

For information, contact Health Professions, 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 $\qquad$ .3 credits
This course is designed for health occupation majors reading at a college level who wish to strengthen their study skills and strategies. Students will learn how to take notes from lectures and textbooks, study for tests, improve memory, read and study from textbooks, manage time effectively, and use the library.

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 This course introduces the learner to framework of the OCNE curriculum. The emphasis 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. Includes classroom and clinical learning experiences

## NRS 110B Foundations of Nursing-Health

Promotion Clinical Lab
5 credits
Clinical Lab required for NRS110A.
NRS 111A Foundations of Nursing in Chronic IIIness 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
Clinical Lab required for NRS111A.
NRS 112A Foundations of Nursing in Acute Care 1 .2 credits This course introduces the learner to assessment and common interventions (including relevant technical procedures) for care of patients during an acute episode of disease/illness. 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. (Concurrent with Pathophysiology I/II and Pharmacology I/II) (Can follow Foundations of Nursing in Chronic IIIness I).

## NRS 112B Foundations of Nursing in

Acute Care 1 Clinical Lab .4 credits
Clinical Lab required for NUR112A.
NRS 199 Special Studies:
.1-3 credits
See department for topic.
NRS 221A Foundations of Nursing in
Chronic Illness 2 and End of Life $\qquad$ .4 credits
This course builds on Foundations of Nursing in Chronic Illness 1. 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, selfdetermination, and autonomy are explored. Complex skills associated with symptom management, negotiating in interdisciplinary teams, and the impact of 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. Prerequisites: WR 123 Composition: Research or WR 227 Technical Writing. (Can follow Nursing in Acute Care 2 and End-of-Life).

## NRS 221B Foundations of Nursing in

Chronic Illness 2 and End-of-Life Clinical Lab
.5 credits Clinical Lab required for NRS221A.

NRS 222A Foundations of Nursing in
Acute Care 2 \& End-of-Life $\qquad$
This course builds on Nursing in Acute Care I focusing on more complex and/or unstable patient care situations some of which require astute assessment 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 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 \& patient teaching for discharge planning. Exemplars include acute psychiatric disorders as well as acute conditions affecting multile body systems. Prerequisites: WR 123 Composition: Research or WR 227 Technical Writing.

## NRS 222B Foundations of Nursing in

Acute Care 2 \& End-of-Life Clinical Lab
.5 credits
Clinical Lab required for NRS222A.
NRS 224A Integrative Practicum 1 $\qquad$ .2 credits
This course is designed to formalize the clinical judgments, knowledge and skills necessary in safe, registered nurse practice. The preceptorship 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. Includes seminar, self-directed study and clinical experience. Required for AAS and eligibility for RN Licensure

NRS 224B Integrative Practicum 1 Lab 7 credits Clinical Lab required for NRS224A.
NRS $\mathbf{2 3 0}$ Clinical Pharmacology 1 3 credits
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

## Course Fees

Many courses may have additional fees. Please refer to the web class schedule credit listings and registration information for updated fee information and fee amounts.

NRS 231 Clinical Pharmacology 2 3 credits 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

NRS 232 Pathophysiological Processes 1 . 3 credits This course introduces pathophysiological processes that contribute to many different disease states across the lifespan and human responses to those processes. Students will learn to make selective clinical decisions regarding using current, reliable sources of pathophysiology information, selecting and interpreting focused assessments based on knowledge of pathophysiological processes, teaching persons from diverse populations regarding pathophysiological processes, and communicating with other health professionals regarding pathophysiological processes. Prerequisites: Anatomy and Physiology sequence; Microbiology
NRS 233 Pathophysiological Process 2. $\qquad$ 3 credits
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 selected 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 1.

NRS 280 Co-op Ed: Nursing .2-12 credits Cooperative education is a voluntary experience beyond the formal requirements of the Associate Degree Nursing Program. Nursing students in Cooperative Education are eligible to earn college credit for job related activities in professional medical settings.
Cooperative Education sites may be in specialty areas that are not part of the normal nursing curriculum or in an area where a student wants to gain hands-on experience. While at Cooperative Education sites, students develop skills, integrate theory and practice, expand career knowledge, and make contacts for potential future employment in nursing. First-year nursing students are eligible for Cooperative Education during winter term and are assigned to work with ancillary staff. In spring term of first year and each following term, students with a minimum GPA of 2.8 in nursing courses are eligible for Cooperative Education and work under the direct supervision of a Registered Nurse.

NRS 298 Independent Study: Nursing.................................1-3 credits A variable credit course based on independent study contracted between an instructor and a student.

PTA 280A Co-op Ed: First Clinical Affiliation $\qquad$ 6 credits Prerequisite: PTA 100, PTA 104, PTA 104L. This course provides the fourth quarter Physical Therapist Assistant Student (SPTA) a supervised application of previously learned techniques and skills in the rehabilitation of patients in a college-selected clinical facility. The focus is on safe, legal, ethical and effective use of physical therapy interventions. This course also fosters the development of communication skills, interpersonal relationships and professionalism for the health care field. It requires a high level of critical thinking related to implementing, modifying and progressing physical therapy rehabilitation programs. Supervision of the student at the beginning to intermediate level is provided by the PT/PTA staff of the affiliating co-operative institution and is coordinated by the college faculty. This course is the first of three clinical/co-operative educational experiences in the PTA program.
PTA 280B Co-op Ed: Second Clinical Affiliation ..................... 6 credits Prerequisite: PTA 280A, PTA 204, PTA 204L. This course provides the second year student Physical Therapist Assistant (SPTA) a second, supervised application of previously learned techniques and skills in the rehabilitation of patients in a college-selected
clinical facility. The focus is on progressing from an intermediate to advanced student level of competency in the application in the safe, legal, ethical and effective use of physical therapy interventions. This course requires a professional level of communication and interpersonal relationship skills necessary for the healthcare field. It requires an intermediate to advanced level of critical thinking related to implementing, modifying and progressing physical therapy rehabilitation programs. Supervision of the student at intermediate to advanced level is provided by the staff of the affiliating institution and is coordinated by the college faculty. This course is the second of three cooperative education courses in the PTA program.

PTA 280C Co-op Ed: Third Clinical Affiliation $\qquad$ 6 credits
Prerequisite: PTA 280B, PTA 205/205L. This course provides the second year student Physical Therapist Assistant (SPTA) a third and final, supervised application of previously learned techniques and skills in the rehabilitation of patients in a college-selected clinical facility. The focus is on safe, legal, ethical and effective application of physical therapy interventions as an entry-level PTA. This course requires a professional level of communication and interpersonal relationship skills necessary for the healthcare field. It requires an advanced level of critical thinking related to implementing, modifying and progressing physical therapy rehabilitation programs. Students are placed in an inpatient, sub-acute/SNF, or outpatient/ambulatory setting. Supervision of the student at advanced student to entry level PTA is provided by the staff of the affiliating institution and is coordinated by the college faculty. This course is the third of three cooperative education courses in the PTA program.

## Nutrition

For information, contact Health Professions, Bldg. 4/Rm. 222, (541) 463-5617.
FN 105 Nutrition for Foodservice Professionals. 3 credits
As nutrient functions, food sources and guidelines are discussed throughout the term, 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. This may be offered through Distance Learning and during Winter term, it is offered for culinary majors only.
FN 190 Sports Nutrition............................................................ 2 credits This course focuses on how active individuals can develop an eating and hydration plan to support athletic performance and to stay well-nourished. 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 for improving personal eating habits and for evaluating nutrition information in the mass media. May be offered through Distance Learning.
FN 199 Special Studies: .
.2 credits
See department for topic.
FN 225 Nutrition .4 credits A study of how the body takes in and uses the nutrients from food. Food sources, functions, and requirements of the following are discussed: carbohydrates, proteins, fats, vitamins, minerals and water. In addition, digestion, absorption and metabolism of all nutrients are covered. Skills are developed for improving personal eating habits and for evaluating nutrition information in the mass media. In addition to sections offered on the 30th Ave. LCC campus, it may also be offered through Distance Learning and it may be offered in Florence.
FN 230 Family Food and Nutrition $\qquad$ 3 credits
This course's focus is how to prepare and offer to families a variety of nutrient dense foods in an environment that helps family members develop a positive approach to eating. Each food group's role in a nutritionally adequate diet is discussed. Presented are ideas for menu planning and food selection as well as a variety of quick, nutritious and tasty recipes. May be offered through Distance Learning.
FN 298 Independent Study $\qquad$ .1-3 credits A variable credit course based on independent study contracted between an instructor and a student.

## Occupational Skills

For information, contact Cooperative Education, Bldg. 19/Rm. 231, (541) 463-5203.
GWE 280 Co-op Ed: General Work Experience $\qquad$ 3-12 credits Prerequisite: Instructor approval. This course provides the student on-the-job learning experiences in community businesses and organizations. The student will have the opportunity to integrate theory and practice gained in the classroom with the 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.

OST 280 Co-op Ed: Occupational Skills $\qquad$ 1-12 credits
Prerequisite: Instructor approval required. This course offers a student college credit for on-the-job work experience related to his or her educational and career goals. Through Cooperative Education a student can 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 $\qquad$ .3-12 credits 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.
PST 101 Professional Skills Training .....................................1-6 credits
Prerequisite: Instructor approval required. Co-requisite: Only available to students who have sustained an injury, or other circumstances, and 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. Related classroom instruction is also offered in support of the lab experience. Students will acquire the skills needed to be employable. Can be taken more than one term.

## Office Assistant - See Administrative Support <br> Paramedic - See Emergency Medical/Paramedic Parent Education - See Early Childhood Education

## Philosophy and Religion

For information, contact Social Science, Center Bldg./Rm. 403, (541) 463-5427.
PHL 199 Special Studies: $\qquad$ 4 credits See department for topics.
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 through Distance Learning.
PHL 202 Theories of Knowledge $\qquad$ 4 credits
Theories of knowledge, or 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 through Distance Learning.
PHL 203 Theories of Reality. $\qquad$ .. 4 credits
Theories of reality, or metaphysics, are the study of what is ultimately real. 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 through Distance Learning.

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; '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 through Distance Learning.
PHL 221 Critical Thinking .4 credits
This course is aimed at developing practical reasoning skills.
Students will learn to analyze and evaluate arguments, detect fallacies, distinguish science from pseudo-science, recognize media bias, and better understand methods of deception employed by advertisers, political organizations and others. A central goal of this course is to develop an attitude of fair-mindedness and intellectual honesty while learning to avoid the pitfalls of defensiveness and rationalization.

REL 201 Religions of India (Hinduism, Buddhism) $\qquad$ .. 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) $\qquad$ .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 through Distance Learning.
REL 211 Introduction to the Bible $\qquad$ .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 NewTestament 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 match up with later institutional and modern expressions of Christian faith.
REL 243 Nature,Religion and Ecology. $\qquad$ .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.
REL 298 Independent Study: .1-4 credits
See department for topics.

Photography
For information, contact Art and Applied Design, Bldg. 11/Rm. 101, (541) 463-5409.
ART 199 Special Studies:
.3-4 credits
See department for topics
ART 210 The Photographic Vision. $\qquad$ .3 credits
Introductory course in photography that approaches the medium as an art form and unique means of human communication, as well as technical skill. Student is introduced to basic mechanical principles of the camera, shown how photography has influenced human perception and communication throughout history, and provided with techniques for responding to the content and structure of photographs. Does not fulfill Photography 1 requirement, prerequisite or elective credit for the Multimedia Design and Production program. May be offered through Distance Learning.

## ART 261 Photography 1

3 credits
Introduction to history and fundamentals of photography. Emphasis on camera handling, manual exposure control, composition, and basic color theory. Demonstration given 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.

## FA 256 Lighting for Photography

$\qquad$ .3 credits
The course objective is to provide students with an introduction to the basics in lighting for photography. Students will learn how to work within a studio environment as well as on location. All students will work with professional lighting equipment and learn the basics in setting up, metering and shooting both portraits and basic commercial products. During this course, students will also learn the basics in camera and lens variations, film stock, digital output and editing.
J 134 Photojournalism $\qquad$ 3 credits This course is designed to work within the field of content. Content within the work is not only the first step in good photojournalism, but also the first step in good art-making. Within this course, we will explore how you see an image, how you choose to share that image with those around you, and the message that your images carry. We will also be studying the history of photojournalism and the cross over from documentary photography to the world of art.
J 234 Photojournalism 2 .4 credits
Prerequisite: J 134. This course is designed as a continuation of Photojournalism. We will be continuing the discussion of content and ethics that is addressed in Photojournalism. Students will learn how to create editorials, identify the differences between news and human interest, develop funding for stories that are not mainstream, and to self-promote in the competitive field of photojournalism. Students will also learn how to prepare their work through editorial processing and presentation.
MUL 214 Digital Photography.................................................... 3 credits Prerequisite: ART 261 Introduction to Digital Photography, overview of digital camera types and technologies, camera controls, managing file resolution, formats, and back-up strategies. Migration of traditional photographic skills to a digital workflow, using a survey of photo editing software, practical sharing technologies (email, web and print), and anticipated trends in the industry. Software emphasis will introduce iPhoto, Photoshop and Aperture.

## Physical Education

Also see Dance and Fitness Training
For information, contact Health and PE, Bldg. 5/Rm. 205, (541) 463-5545.
PE 181C Combination Aerobics $\qquad$ 1 credit Combination Aerobics is a rhythmic aerobics class designed to increase cardiovascular fitness and muscular endurance through a variety of exercise formats. Following the principles of progression and overload, this course will allow students an opportunity to
sample formats such as step aerobics, dance aerobics, circuit training, interval training and kickboxing aerobics. Light resistance exercises with the use of hand weights and elastic bands are incorporated to maximize cross training benefits.
PE 181D Dance Aerobics $\qquad$ 1 credit
Simple choreographed dance patterns are incorporated into this rhythmic aerobics class to improve cardiovascular fitness. Movements presented in this course should safely accommodate the needs of the beginning exerciser as well as the conditioned athlete by allowing optional intensity levels to be employed.
PE 181K Kickboxing Aerobics 1 credit Martial arts-inspired movements are combined with classic sports drills to create a challenging and fun rhythmic workout. This course will allow students the opportunity to progressively enhance their fitness levels by offering various impact and intensity options.
PE 181S Step Aerobics 1 credit This class enables students to enhance their cardio-respiratory and muscular endurance through the execution of choreographed step patterns. Options for intensity are provided to meet the needs of students of various fitness levels.

## PE 181SB Body Sculpt

$\qquad$ 1 credit Body Sculpt is a group fitness class designed to increase muscular endurance by incorporating resistance exercises for all the major muscle groups. Participants utilize hand weights and resistance bands as well as their own body weight to develop muscle firmness and definition. Fitness gains may include improved muscular endurance, increased muscular strength and altered body composition. Individuals of all fitness levels can experience the benefits of this class by employing suitable resistance and intensity options.

PE 181SS Step and Sculpt
1 credit
Step \& Sculpt is a group fitness class designed to increase cardiorespiratory and muscular endurance. Participants alternate between step aerobics combinations and resistance exercises to experience the benefits of both approaches. Hand weights and resistance bands will be utilized to develop muscle firmness and definition. Simple step routines and aerobics drills will allow participants the opportunity to maintain their target heart rates in order to achieve overall fitness gains.
PE 181Y Yogilates. 1 credit
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. Improvements in agility, coordination, confidence, body awareness and body appreciation help enhance overall health.
PE 182A Scuba Diving 1 credit
Covers necessary skills, physical conditioning and knowledge for the exciting sport of scuba diving. Diving skills such as hand signals, buoyancy control, equipment usage and diver safety will also be stressed.
PE 182B Scuba Diving Advanced 1 credit
Further develops scuba diving skills and introduces new material to the certified diver. Develops night diving, navigation, deep diving, search and recovery and underwater environments.

PE 182C Rescue Diver $\qquad$
$\qquad$ . 1 credit A course designed to improve diver understanding of emergency situations in diving. The course covers self-rescue, diver stress, first aid equipment, diver tows, dealing with both a panicked and a passive victim, in-water artificial respiration, equipment removal, and non-swimming assists, among other subjects. The course includes classroom as well as pool exercises and open water evaluations. Students must have beginning and advanced scuba or equivalent, and be CPR certified.

PE 182D Divemaster 1 .. 1 credit
The Divemaster 1 course prepares the divemaster candidate with advanced diving knowledge in management and control, supervising students, physics, physiology, and equipment. Beginning internship experience is also stressed. The successful candidate will demonstrate advanced watermanship and stamina. Upon completion of the Divemaster 1 curriculum, the candidate is eligible to participate in the Divemaster 2 program.

PE 182E Divemaster 2. 1 credit The Divemaster 2 course implements knowledge and skills in a scuba practicum. The divemaster candidate will provide assistance to new students enrolled in lower level scuba classes at Lane. Divemaster 2 candidates will also learn underwater map making and surveying skills, first aid, the role of the divemaster in nontraining capacities such as conducting orientation dives. Upon completion the candidate will have attained a PADI Divemaster rating and be eligible for instructor level training.

## PE 183A Conditioning

 1 creditThis exercise class is designed for students of all fitness levels. Instructor-led activities utilize state-of-the-art equipment in the LCC Fitness Education Center, such as Free Motion, Cybex and Paramount weight machines. Many types of cardio machines and functional training equipment are also used in a variety of class formats. Addressing basic fitness principles, this progressive, cross-training approach will improve participants' fitness levels by increasing muscular strength and endurance, enhancing cardiovascular endurance, improving flexibility, and increasing core strength.

PE 183B Exercise and Weight Control.

## ol...

$\qquad$ .1 credit
This activity class is designed for individuals who would like to alter their body composition and control their weight. A variety of class formats are incorporated as a cross-training approach to address basic fitness principles and exercise recommendations. Utilizing state-of-the-art exercise equipment in the LCC Fitness Education Center, students participate in instructor-led activities to gain benefits related to regular exercise. These include increased muscular strength and endurance, enhanced cardiovascular endurance, improved flexibility, increased core strength, and altered body composition. Fitness assessments are offered and current nutritional information is presented as elements of this class.

PE 183C Exercise Walking. 1 credit Exercise walking develops and maintains cardiovascular fitness, muscular endurance and joint flexibility. The emphasis will be on developing a progressive walking program starting with a basic understanding of one's current fitness level. A variety of topics will be discussed including: proper technique, pace, training methods, injury prevention, nutrition and hydration. Trails, track, roads, hills and off campus areas will be used.

PE 183CG Group Cycling 1 credit
This course is designed to improve cardiorespiratory fitness and muscular endurance, while enhancing cycling skills and mechanics. Workout sessions are performed on specialized stationary cycles and are led by an instructor. Students cycle to music using a variety of body positions and drills. Options for intensity are provided to meet the needs of students of various fitness levels.

PE 183E Fitness Circuits 1 credit
An instructor lead circuit training class for all ages and fitness levels. Students participate in exercise circuits to improve cardiovascular fitness, muscular endurance and flexibility. Body weight resistance exercises, weight machines, cardiovascular machines and other modalities will all be used. Nutrition and weight control ideas and concepts will be addressed.

PE 183F Fitness Education: Introduction. .1 credit Students are guided in creating a well-rounded, self-paced fitness program. All student complete a mandatory orientation including health screening, exercise program information and equipment instruction. Following orientation, students attend exercise sessions during FEC usage hours to fulfill course requirements and meet personal fitness goals. The FEC offers instructional assistance in personalized exercise programming, wellness seminars, an incentive program, and opportunities for fitness development and stress management. Students can choose to take part in an optional fitness assessment to determine individual strengths and areas for improvement in cardiovascular fitness, overall body strength, muscular endurance, flexibility and body composition. Students can receive a printout of fitness assessment results and recommendations. All students are encouraged in a supportive and noncompetitive environment. For Fitness Education Center usage hours or additional information, contact the FEC at 463-3987.

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, general fitness information and an orientation to all of the equipment in the Fitness Education Center.

PE 183G Fitness Education: Returning .1 credit
For students who have successfully completed PE 183F Fitness Education: Introduction. Students continue their well-rounded, selfpaced fitness program. The FEC offers continued instructional assistance in personalized exercise programming, wellness seminars, an incentive program, fitness assessments and opportunities for fitness development and stress management. Students attend exercise sessions during FEC usage hours to fulfill course requirements and meet personal fitness goals. For Fitness Education Center usage hours or additional information, contact the FEC at 463-3987.

PE 183J Jogging .... 1 credit
Emphasis on a progressive jogging program starting with a basic understanding of one's current fitness level. Individualized programs will be developed accordingly. A variety of topics will be discussed including: work-out ideas, nutrition and weight control will be addressed.

PE 183R Stability Ball Fitness. 1 credit Students will perform conditioning exercises with a focus on core stability and improvement of muscular strength, endurance, flexibility, balance, and coordination. Light weights, resistance bands and weighted balls will be used to compliment the fitness workout.
PE 183 S Strength Training 1 credit
Emphasis on progressive resistance training using a variety of exercise modalities including barbells, dumbbells, resistance bands, body weight, and weight machines. Students can develop strength, muscular size, toning, and improve general physical condition. Basic training programs and routines for all levels will be discussed. Special and individualized programs available.

PE 183U Strength Training for Women. 1 credit A fun and active class designed for women of all ages, experience and conditioning levels. Use of barbells, dumbbells, weight machines, stability balls, bands, medicine balls, body weight resistance exercises and more, to tone and strengthen all major muscle groups and improve your general physical condition. Emphasis is on safe and correct techniques, while learning terminology and basic anatomy. Basic and specialized individual programs for beginners through advanced levels, tailored to your goals and experience.
PE 183W Therapeutic Exercise and Rehabilitation. $\qquad$ .1 credit
This course will use cardiovascular, strength, endurance, and flexibility programing with the awareness of orthopedic injuries, chronic pain, cardiovascular and pulmonary diseases, and metabolic disorders. This course does not address neuromuscular, cognitive, or emotional disorders. The purpose of this course is focused on designing exercise programs meeting the needs of the injured individual. This course is structured to help you improve overall health and wellness so you can progress into other fitness courses.
PE 184A Archery Beginning. $\qquad$ .1 credit Fundamentals including safety, care and use of equipment, basic rules, etiquette, terminology and skill techniques. Learn to successfully shoot at different size targets at various distances. Individual competition in regulation and novelty shoots. All equipment provided, however with permission of instructor you may be able to use your own equipment if it is suitable for our range. Class is designed for beginners, but experienced students welcome.

## Course Fees

Many courses may have additional fees. Please refer to the quarterly class schedule credit listings and registration information for updated fee information and fee amounts.

PE 184AI Archery Intermediate $\qquad$ 1 credit Designed for experienced archers to improve and refine basic skills and develop more consistency in form, aiming, techniques and scoring at a variety of distances and targets. Individual competition in regulation and novelty shoots. All equipment provided, however with permission of instructor you may be able to use your own equipment if it is suitable for our range.
PE 184B Badminton Beginning. 1 credit
Learn and develop badminton skills through daily play and skill work on basic fundamentals. Footwork, grip, forehand and backhand shot execution, shot selection, scoring, terminology, etiquette and rules will be covered. Skills and basic strategy will be applied in both singles and doubles play. Equipment provided, but may bring own racquet.
PE 184C Badminton Intermediate $\qquad$ .1 credit Designed for experienced players to refine basic skills and develop advanced shots and strategy in singles and doubles play.
Equipment provided, but may bring own racquet.
PE 184D Bowling .1 credit Development and improvement of skills for a social and popular recreational activity. Fundamentals of spot bowling techniques used for both straight and hook deliveries. Rules, scoring and etiquette will be covered. Designed for beginning bowlers.

PE 184F Fencing .1 credit Instruction in skills basic to foil fencing, including offensive and defensive skills, rules, etiquette, judging, and bout experience.
PE 184G Golf Beginning .1 credit Beginning golf is an introduction to golf including short game, full swing and routines on the course. Rules and etiquette will also be introduced. Upon completion, the student will have enough working knowledge to start playing the game. Some rounds of golf are provided.
PE 184H Golf Intermediate $\qquad$ 1 credit Intermediate golf is a continuation of beginning golf with an emphasis on swing mechanics, trouble shots, strategy and more extensive application of rules.
PE 184I Ice Skating Beginning
.1 credit
Introduction to ice skating. Safety, equipment, forward and backward swizzles, one and two foot glides, stroking, forward and backward crossovers, stops and beginning turns. Written and skill testing required.
PE 184J Ice Skating Intermediate. 1 credit
An intermediate level ice skating class that builds on the beginning skills of forward and backward stroking and crossovers and provides instruction in forward and backward turns, edges, beginning jumps and spins. A hockey track is available for skaters interested in learning basic hockey skills and game rules. Written and skill testing required.
PE 184K Karate Beginning 1 credit
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 in Oregon for selfdefense. The beginning class includes sparring strategies.
PE 184P Personal Defense $\qquad$ 1 credit
Fundamental personal defense skills, precautionary measures to improve one's safety, countering attacks whereby various weapons are employed, developing a skill level that promotes self-assurance to reduce panic. The students' legal rights and responsibilities in Oregon for self-defense will be presented.
PE 184T Tennis Beginning
.1 credit
Learn and develop basic tennis skills including forehand, backhand, serve, return of serve and volley through drills, ball machine practice and game play. Learn and apply basic doubles strategy, rules, etiquette and terminology. Designed for the new or novice player.
PE 184 U Tennis Intermediate. 1 credit
Tennis Intermediate is a continuation of Beg. Tennis designed to refine basic skills and develop advanced strokes and strategy in singles and doubles play. Designed for experience players.
PE 185M Meditation 1 credit A survey of diverse meditation techniques to enable students to find the appropriate methods for them. Includes discussion and practice of breath awareness, sensory meditation, instant calming technique, affirmation/mantra, walking and other movement
awareness and guided imagery. Practice of correct sitting postures, gentle stretching, and breathing techniques which aid in meditation will be included.

PE 185T Tai Chi Chuan 1 credit
Chinese meditative exercise. Thousands of years old, Tai Chi is the best way to promote health and develop an effective martial art. This class teaches Yang-style and Chen style Tai Chi.
PE 185Y Yoga Beginning .
$\qquad$
Basic knowledge of asanas (stretching postures), Pranayama (breathing techniques), relaxation and yogic philosophy to enhance flexibility, strength, respiratory function, postural alignment, and stress reduction. Sitting, lying, inverted, and standing postures will be included.
PE 185YG Gentle Yoga. 1 credit
Practice of gentle yoga postures, stretches, breathing and relaxation techniques. Designed for students who need modification of traditional yoga practice due to limited mobility; less flexibility or strength; or other special needs. Course will enhance flexibility, respiratory function, postural alignment, strength and stress management.

## PE 185Z Yoga Intermediate

$\qquad$ 1 credit More difficult variations of beginning postures and more advanced postures and breathing techniques will be added to improve flexibility, endurance, correct postural alignment, and stress management. Designed for students who have a basic knowledge of asanas (stretching postures), Pranayaama (breathing techniques), and relaxation.
PE 186D Downhill Skiing and Snowboarding $\qquad$ 1 credit Instruction and practice in fundamental skills of downhill skiing and snowboarding. Instruction provided for beginner through advanced skill level. Classes held at an Oregon ski area. Transportation is provided, rentals not included.
PE 186H Handguns and Personal Safety $\qquad$ 1 credit A fast-moving course with a fundamental training approach to the physical skills necessary to become a safe and accurate handgun user. Legal and ethical issues pertaining to handgun use and ownership are included.
PE 186W Whitewater River Rafting $\qquad$ 1-2 credits This is an entry-level course for the beginner or novice rafter. The course is designed to provide a foundation of basic river skills, with a focus on safety awareness and preparedness. Through a series of lectures, and two (2) weekend field outings on local rivers, students will learn about topics including rafting equipment use. reading rapids, padde, captaining skills, boat maneuvering, river safety and rescue, low impact river use and a variety of other topics. With the aid of an instructor, students will guide paddle-rafts on appropriate river sections during the outings. Safety awareness and preparedness is the foundation for this course.
PE 188B Basketball Beginning 1 credit 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 $\qquad$ 1 credit 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 credit 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 credit
Instruction and practice in the fundamental soccer techniques, position play, offensive and defensive tactics, team formation and rules of the game. Team play may include 11 on 11 or mini-game play.

## PE 1880 Soccer-Indoor <br> or ...

 1 creditInstruction and practice in the fundamental indoor soccer techniques including position play, offensive and defensive tactics, team formation and rules of the game.

PE 188S Softball 1 credit
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 practices. Outfield play, unfield play and game strategy will be covered. Skill development and game play will be a part of every lesson. this course incorporates slow pitch rules and procedures.
PE 188U Ultimate Frisbee. $\qquad$ 1 credit
Basic skills of Ultimate Frisbee. This game combines the passing and scoring of football, the cutting and guarding of basketball, and the non-stop movement of soccer. Through organized play, all students will be actively involved in the game. Discussion of rules, strategy, and terminology will be included as well. This is a fun course designed to enhance cardiovascular capacity.

PE 188V Volleyball Beginning $\qquad$ 1 credit
This class emphasizes fundamental development in basic skills, rules, terminology and team play.

PE 188W Volleyball Intermediate. 1 credit
This class will include a review of skills and techniques fundamental to the game. Additional strategies and techniques will be discussed.

## PE 191A Cross Country Conditioning 1

$\qquad$ 1 credit
A conditioning class designed for students interested in participating in competitive cross-country running. Emphasis on conditioning and endurance. Recent Cross Country experience highly recommended.
PE 191B Cross Country Skills 1 $\qquad$ 1 credit
Theory, analysis, advanced skills and techniques for skilled performers and individuals who are preparing for a competitive cross country experience. Course covers terminology, regulations, strategy, conduct, sportsmanship and healthy lifestyle choices. Recent Cross Country experience highly recommended.
PE 191C Cross Country Conditioning 2 .1 credit
A highly advanced conditioning class that is designed for students interested in competitive cross-country running at the elite level. Strong emphasis on conditioning and endurance. This class is more advanced than PE191A.
PE 191D Cross Country Skills 2 .1 credit
Theory, analysis, advanced skills and techniques for skilled performers and individuals who are preparing for a competitive cross country experience. Course covers terminology, regulations, strategy, conduct, sportsmanship and healthy lifestyle choices.
PE 192l Soccer Conditioning 1. .1 credit
A conditioning class designed for students with an interest in participating in competitive soccer. Emphasis on conditioning, exercise principles and the development of fundamentals.

PE 192J Soccer Conditioning 2. .. 1 credit
A highly advanced conditioning class that is designed for students interested in competitive soccer at the elite level. Strong emphasis on conditioning and endurance. This class is more advanced than PE192l.

PE 192K Soccer Skills 1
1 credit
This course will provide intermediate instruction and practice in the fundamentals of soccer. Individual skill technique in kicking, passing, trapping, ball control, heading and tackling will be stressed. Team concepts of position play, offensive and defensive tactics, game strategy, formation and rules of the game will emphasized.
PE 192M Soccer Skills 2 1 credit
This course will provide advanced instruction and practice in the fundamentals of soccer. Expand on individual skill techniques learned in Skills 1. Expand and incorporate new team concepts of position play, offensive and defensive tactics, game strategy, formations and rules of the game.
PE 193A Basketball Conditioning 1........................................... 1 credit
A conditioning class designed for students interested in participating in competitive basketball. Emphasis on conditioning and development of fundamentals.
PE 193B Basketball Skills-Mens Rules 1 1 credit
Theory, analysis, advanced skills and techniques for skilled performers and individuals who are preparing for a competitive basketball experience. Course covers terminology, regulations, strategy, conduct, sportsmanship and healthy lifestyle choices.

PE 193C Basketball Conditioning 2 1 credit
A conditioning class designed for students interested in participating in competitive basketball. Emphasis on conditioning and development of fundamentals.
PE 193D Basketball Skills-Mens Rules 2. $\qquad$ .1 credit Theory, analysis, advanced skills and techniques for skilled performers and individuals who are preparing for a competitive basketball experience. Course covers terminology, regulations, strategy, conduct, sportsmanship and healthy lifestyle choices.
PE 195A Basketball Women's Conditioning 1. $\qquad$ 1 credit A conditioning class designed for students interested in participating in competitive basketball. Emphasis on conditioning and development of fundamentals.

PE 195B Basketball Skills-Women's Rules 1 $\qquad$ 1 credit Theory, analysis, skills and techniques for skilled performers and individuals who are preparing for a competitive basketball experience. Course covers terminology, rules, strategy, conduct, sportsmanship and healthy lifestyle choices. Women's ball and Women's NCAA rules will be used.

PE 195C Basketball-Women's Conditioning 2. $\qquad$ 1 credit
A conditioning class designed for students interested in participating in competitive basketball at an elite level. Strong emphasis on conditioning, endurance and fundamentals.
PE 195D Basketball Skills-Womens Rules 2. .. 1 credit
Theory, analysis, advanced skills and techniques for skilled performers and individuals who are preparing for a competitive basketball experience. Course covers terminology, rules, advanced strategies, conduct, sportsmanship and healthy lifestyle choices. Women's ball and Women's NCAA rules will be used.

PE 196A Track \& Field Conditioning 1. ... 1 credit
A conditioning class designed for students interested in participating in competitive track and field. Emphasis on conditioning, development of fundamentals and skills. Current track and field experience highly recommended.
PE 196B Track \& Field Skills-Women's Rules 1 $\qquad$ .1 credit 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, strategy, conduct, sportsmanship and healthy lifestyle choices. Current track and field experience highly recommended.
PE 196C Track \& Field Skills-Men's Rules 1 ............................... 1 credit 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, strategy, conduct, sportsmanship and healthy lifestyle choices. Current track and field experience highly recommended.
PE 196D Track \& Field Conditioning 2. . 1 credit
A conditioning class designed for students interested in participating in competitive track and field. Emphasis on conditioning, development of fundamentals and skills.
PE 196E Track \& Field Skills-Women's Rules 2 $\qquad$ .1 credit An advanced course that covers theory, analysis, skills and techniques for individuals who are preparing for a competitive track and field experience. Course covers terminology, regulations, strategy, conduct, sportsmanship and healthy lifestyle choices. Course is more technical and advanced than PE196B.
PE 196F Track \& Field Skills-Mens Rules 2. $\qquad$ .. 1 credit
An advanced course that covers theory, analysis, skills and techniques for individuals who are preparing for a competitive track and field experience. Course covers terminology, regulations, strategy, conduct, sportsmanship and healthy lifestyle choices. Course is more technical and advanced than PE196C.

PE 197A Baseball Conditioning 1. . 1 credit A conditioning class designed for students interested in participating in competitive baseball. Emphasis on conditioning and development of fundamentals.
PE 197B Baseball Skills 1. $\qquad$ 1 credit
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.

PE 197C Baseball Conditioning 2 1 credit An advanced conditioning class designed for students interested in participating in competitive baseball at an elite level. Emphasis on conditioning and development of fundamentals. Course is more advanced than PE197A.

PE 197D Baseball Skills 2 $\qquad$ .1 credit
An advanced course that covers theory, analysis, skills and techniques for individuals who are preparing for a competitive baseball experience at an elite level. There is a strong emphasis on skill development. Course is more advanced than PE197B.

PE 298 Independent Study. 1 credit A variable credit course based on independent study contracted between the instructor, student and Division Dean.

## Physical Science - See Chemistry, Earth and Environmental Science, Physics

## Physical Therapist

For information, contact Health Professions, Bldg.4/Rm. 222, (541)463-5617. You must be accepted into the program to take most of these classes.
PTA 100 Introduction to Physical Therapy $\qquad$
Prerequisite: Admission into the PTA program. This course provides a study of the history and practice of physical therapy, roles of personnel who provide physical therapy, communication, professionalism, and reimbursement issues. Information and technology integration into academic and clinical practice are also introduced.

PTA 101 Introduction to Clinical Practice 1 .5 credits

## Prerequisite: Admission into the PTA program. This course

 introduces physical therapy practice patterns for soft tissue injuries, soft tissue pathology, and physical therapy interventions for acute and chronic pain. Included are theoretical principles, documentation, safety, and communication considerations for practical applications of the following physical therapy interventions: superficial and deep heat, cold, aquatics and hydrotherapy, electrical modalities, compression/taping, TENS and therapeutic massage. Safety, documentation/billing, data collection and patient communication are integrated into lecture. Principles of positioning, transfer training, gait training and wheelchair management are also introduced. May be offered through Distance Learning.PTA 101L Introduction to Clincal Practice 1 Lab $\qquad$ 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 localized acute and chronic pain and soft tissue injuries. Topics and skills include application of superficial and deep heating agents, electrical modalities, compression/taping, bracing, exercise, and assisted mobility training. Principles of safe and effective communication, data collection, protection of patient privacy and body mechanics are integrated into laboratory practice. May be offered through distance learning or in a format including some online instruction.

PTA 103 Introduction to Clinical Practice 2 .5 credits
Prerequisites: PTA 101, PTA 101L, HO 152. This course covers the application of physical therapy interventions for medical conditions contained localized body systems, such as single organ dysfunction (cardiac, lung, muscles of respiration, liver, kidney, gastrointestinal, genitourinary, reproductive, skin). Anatomy, physiology, etiology, and theory are integrated with considerations for patient communication, PT/PTA communication and the health care team. May be offered through Distance Learning.
PTA 103L Introduction to Cliinical Practice 2 Lab $\qquad$ .2 credits Prerequisite: HO 152, PTA 101 and PTA 101L. Corequisite: PTA 103 This co-requisite lab to PTA 103 allows for practice of physical therapy interventions for medical conditions contained localized body systems. Topics and skills include exercise and conditioning/reconditioning, energy conservation, breathing exercises, and gross mobility activity progression. Principles of safe and effective communication, body mechanics, tests and measures, data collection, abuse and neglect reporting are integrated into laboratory practice. May be offered through distance learning or in a format including some online instruction.

PTA 104 PT Interventions-Orthopedic Dysfunctions $\qquad$ 5 credits Prerequisite: PTA 103 and PTA 103L. Corequisite: PTA 104L This course covers the principles for physical therapy intervention and treatment progression affecting the skeletal system: fracture (adult and pediatric), pre- and post-surgical conditions for the spine and extremities, joint replacement, arthritis, osteoporosis, and other conditions involving bone tissue. Mechanisms of injury, treatment interventions, data collection, documentation, communication, and treatment progressions are discussed. May be offered through Distance Learning.

PTA 104L PT Interventions-Orthopedic Dysfunctions Lab..... 2 credits Prerequisite: PTA 103 and PTA 103L Corequisite: PTA 104 This corequisite lab for PTA 104 allows for practical application of physical therapy interventions related to orthopedic conditions.
Orthotics/prosthetics, traction, balance, therapeutic exercise, body mechanics, patient safety education/home management, and gait training are also covered. May be offered through distance learning or in a format including some online instruction.
PTA 132 Applied Kinesiology 1 $\qquad$ .2 credits Prerequisites: PTA 101, HO 152. This course addresses kinesiology and therapeutic exercises for injury prevention and management for the pelvis, lower extremity and gait. Terminology, biomechanical principles of movement, joint structure and function, muscle anatomy, action, and innervations will be integrated into physical therapy interventions and therapeutic exercise for the lower quarter. Documentation, safety, and billing considerations are also discussed. May be offered through Distance Learning.

PTA 132L Applied Kinesiology 1 Lab. $\qquad$ .2 credits Prerequisite: HO 150, HO 152 and 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 application and documentation of palpation, goniometry, therapeutic exercise, manual muscle testing, gait deviations, and stretching. May be offered through distance learning or in a format including some online instruction.
PTA 133 Applied Kinesiology 2 ... 2 credits
Prerequisite: PTA 132, PTA 132L. This course addresses kinesiology principles for the upper extremity, neck, trunk, and muscles of respiration. Terminology, biomechanical principles of movement, joint structure and function, muscle anatomy, action, and innervations will be integrated into physical therapy interventions and data collection for therapeutic exercises and posture. May be offered through Distance Learning.
PTA 133L Applied Kinesiology 2 Lab. $\qquad$ .. 2 credits Prerequisite: PTA 132 and PTA 132L Corequisite: PTA 133This corequisite lab to PTA 133 allows for practice of physical therapy interventions and data collection based on principles of kinesiology for the upper quarter. Skills include application and documentation of palpation, goniometry, therapeutic exercise, manual muscle testing, and posture analysis and posture education. May be offered through distance learning or in a format including some online instruction.
PTA 200 Professionalism, Ethics, and Exam Preparation ...... 4 credits Prerequisite: PTA 100, PTA 205, PTA 205L, and PTA 280B Corequisite: PTA 203This course continues instruction in ethics and applied ethics for the physical therapist assistant using case studies. Students will apply knowledge from previous course work and cooperative education into ethical practice issues that may be encountered in physical therapy settings. Skills for transition into the physical therapy workforce are applied to developing a professional resume. Students are introduced the format of the licensure exam and engage in preparatory exercises for the exam. May be offered through Distance Learning.
PTA 203 Contemporary Topics in Physical Therapy $\qquad$ .2 credits Prerequisite: PTA 205, PTA 205L and PTA 280B. Corequisite: PTA 200This course explores contemporary issues affecting clinical and professional physical therapy practice and impacts on the PTA culminating in class presentation of service learning projects to the PTA Advisory Committee. May be offered through Distance Learning.

PTA 204 PT Interventions - Neurological Dysfunctions ......... 5 credits Prerequisite: PTA 133, PTA 133L, PTA 104, PTA104L. Corequisite: PTA 204L. This course covers the principles for physical therapy interventions and treatment progression in conditions affecting the neurological and neuromuscular systems: spinal cord injury, stroke, brain injury and hemorrhage, central and peripheral nerve disorders, vestibular and developmental disorders. Treatment considerations for special populations (pediatric, psychiatric) are also introduced. May be offered through Distance Learning.

## PTA 204L PT Interventions -

Neurological Dysfunctions Lab $\qquad$ 2 credits Prerequisite: PTA 104, PTa 104L, PTA 133 and PTA 133L Corequisite: PTA 204 This co-requisite lab for PTA 204 allows for practical application of physical therapy interventions related to neurological conditions, including bed mobility, gait and locomotion training, balance training, adaptive equipment, and activity modification. Issues regarding patient communication, safety, integration of the health care team, and tests and measures for this patient population are covered. May be offered through distance learning or in a format including some online instruction.
PTA 205 PT Interventions - Complex Medical Dysfunction... 4 credits Prerequisite: PTA 204, PTA 204L, PTA 280A. Corequisite: PTA 205L. This course covers the etiology, theory and application of physical therapy interventions for complex medical conditions involving multiple body systems such as CAD, COPD, diabetes, lymphedema, AIDS, infections, metabolic disorders, genetic disorders, wounds and burns. Patient communication, documentation, OSHA and infection control for this population is included. Topics include biofeedback, breathing strategies, postural pulmonary drainage, manual chest percussion techniques and energy conservation. Also covered are compression garments, debridement and dressings for burn and wound management. May be offered through Distance Learning.

PTA 205L PT Interventions - Complex Medical. $\qquad$ 2 credits Prerequisite: PTA 204, PTA 204L, PTA 280A Corequisite: PTA 205 This co-requisite lab for PTA 205 allows for practical application of physical therapy interventions related to complex medical conditions, including biofeedback, external compression, chest percussion, pulmonary drainage, positioning for pressure relief, advanced infection control, prosthetic training and wound care. Issues regarding patient communication,safety, integration of the health care team, and tests and measures for this patient population are covered. May be offered through distance learning or in a format including some online instruction.
PTA 280A Co-op Ed: First Clinical Affiliation $\qquad$ .6 credits Prerequisite: PTA 100, PTA 104, PTA 104L. This course provides the fourth quarter Physical Therapist Assistant Student (SPTA) a supervised application of previously learned techniques and skills in the rehabilitation of patients in a college-selected clinical facility. The focus is on safe, legal, ethical and effective use of physical therapy interventions. This course also fosters the development of communication skills, interpersonal relationships and professionalism for the health care field. It requires a high level of critical thinking related to implementing, modifying and progressing physical therapy rehabilitation programs. Supervision of the student at the beginning to intermediate level is provided by the PT/PTA staff of the affiliating co-operative institution and is coordinated by the college faculty. This course is the first of three clinical/co-operative educational experiences in the PTA program.
PTA 280B Co-op Ed: Second Clinical Affiliation. $\qquad$ 6 credits Prerequisite: PTA 280A, PTA 204, PTA 204L. This course provides the second year student Physical Therapist Assistant (SPTA) a second, supervised application of previously learned techniques and skills in the rehabilitation of patients in a college-selected clinical facility. The focus is on progressing from an intermediate to advanced student level of competency in the application in the safe, legal, ethical and effective use of physical therapy interventions. This course requires a professional level of communication and interpersonal relationship skills necessary for the healthcare field. It requires an intermediate to advanced level of critical thinking related to implementing, modifying and progressing physical therapy rehabilitation programs. Supervision of the student at intermediate to advanced level is provided by the staff of the affiliating institution and is coordinated by the college faculty. This course is the second of three cooperative education courses in the PTA program.

PTA 280C Co-op Ed: Third Clinical Affiliation. 6 credits Prerequisite: PTA 280B, PTA 205/205L. This course provides the second year student Physical Therapist Assistant (SPTA) a third and final, supervised application of previously learned techniques and skills in the rehabilitation of patients in a college-selected clinical facility. The focus is on safe, legal, ethical and effective application of physical therapy interventions as an entry-level PTA. This course requires a professional level of communication and interpersonal relationship skills necessary for the healthcare field. It requires an advanced level of critical thinking related to implementing, modifying and progressing physical therapy rehabilitation programs. Students are placed in an inpatient, sub-acute/SNF, or outpatient/ambulatory setting. Supervision of the student at advanced student to entry level PTA is provided by the staff of the affiliating institution and is coordinated by the college faculty. This course is the third of three cooperative education courses in the PTA program.

## Physics <br> For information, contact Science, Bldg. 16/Rm. 156, (541) 463-5446.

ASTR 107 Survey of Astronomy
Prerequisite: MTH 052 or above with grade of ' $C^{\prime}$ ' or better or pass placement test. This course provides a one-term, comprehensive introduction to the science of astronomy. The course introduces the science of the origin, characteristics and evolution of solar systems, stars, galaxies and the universe. Both classroom and telecourse formats for this class are regularly available. Lab credit is a fixed part of the 4-credit classroom format, and optional in the 3-4 credit telecourse.
ASTR 121 Astronomy of the Solar System $\qquad$ .4 credits Prerequisite: MTH 052 or higher. Primary subject matter for this course is an in-depth understanding of the following: Naked-eye Astronomy (the Earth?s motion and seasons, celestial coordinates, the Moon?s motion and phases);The Solar System (an introduction to comparative planetology); Earth and its Moon (our home planet and moon which provides data and points of reference); Mercury (the inner-most planet, and the inner-most terrestrial planet, physical characteristics, comparisons to our Moon); Venus (physical characteristics, comparisons to Earth); Mars (physical characteristics, also the question of life on Mars); Jupiter (the innermost gas planet, characteristics, the giant planet, its moons); Saturn (the next gas planet, characteristics, its rings, comparisons to Jupiter and its moons); Uranus, Neptune, Pluto, and Beyond (characteristics of planets beyond Saturn in a framework set by the discussion of the other planets nearer the Sun) Solar System Debris (comets and asteroids); and Formation of Planetary Systems (modeling the origin of our solar system).
ASTR 122 Stellar Astronomy $\qquad$ .. 4 credits Prerequisite: MTH 052 or above with grade of 'C-' or better or pass placement test. This course provides an introduction to astronomy as science and to fundamental physics concepts underlying our current understanding of stars. Focus on our sun and its place in our 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. Primary subject matter for this course is an in-depth understanding of the following:The Milky Way Galaxy (our home galaxy which provides data and points of reference); Normal Galaxies (the usual entities making up the largescale structure of the universe); Active Galaxies and Quasars (unusual dynamic entities and observations at the edge of the observable universe); Cosmology (questions, theories and models of the past and future of the universe, the Big Bang, the geometry of space-time, the cosmic background radiation, dark matter, dark energy); The Early Universe (origins of atoms, nuclei, and formation of structure); and Life in the Universe (frameworks, questions, searches)
GS 104 Physical Science $\qquad$ .4 credits Prerequisite: MTH 052 or above with grade of 'C-' or better or pass placement test. In the GS 104, GS 105, GS 106 course sequence for non-science majors, emphasis is placed on basic principles that tie the physical sciences together. GS104 topics are selected from the standard first year of physics, such as mechanics, heat, temperature and entropy, electricity and magnetism, waves, and some
introduction to modern physics. This science class includes lab experiences in a variety of settings, with an emphasis on directly observable connection to specific phenomena, as well as classroom demonstrations. Any of the GS 104, 105,106 courses can be taken independently of the others.
PH 101 Fundamentals of Physics 4 credits Prerequisite: MTH 052 or above with grade of ' C -' or better or pass placement test. The 'Fundamentals of Physics' courses provide an introduction to a broad range of fundamental physics concepts and is 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 professional-technical students, as well as providing physics transfer credit for professional-technical students who may transfer to a university; for example, drafting students who may go on to study architecture. Emphasis is on everyday phenomena and conceptual understanding more than calculations. Each course can be taken independently, though the sequential order is recommended when possible. PH 101 is not a prerequisite for PH 102 or PH 103. The classes are readily accepted for transfer credit. The class environment includes labs, demonstrations, discussion and handson activities. PH 101 focuses on the nature of science, data analysis, motion, momentum, energy, gravity, the atomic nature of matter, and the properties of solids, liquids, gases, and plasmas.

PH 102 Fundamentals of Physics .4 credits Prerequisite: MTH 052 or above with grade of 'C-' or better or pass placement test. PH 102 provides an introduction to heat and thermodynamics, waves and sound, and electricity and magnetism. It can be taken independently of PH 101 and PH 103. See information about the Fundamentals of Physics sequence in the PH 101 course description.

PH 103 Fundamentals of Physics. .4 credits
Prerequisite: MTH 052 or above with grade of 'C-' or better or pass placement test. PH 103 is concerned with light and color and many aspects of modern physics, including atomic physics, quantum mechanics, nuclear physics, special and general relativity, and astrophysics. It can be taken independently of PH 101 and PH 102. See information about the Fundamentals of Physics sequence in the PH 101 course description.

PH 201 General Physics .5 credits
Prerequisite: MTH 112 with grade of 'C-' or better or pass placement test. This three-term sequence introduces a wide range of fundamental physics concepts and analysis that is required for most health, mathematics and all science majors. PH 201, 2, 3, provides an algebra-based introduction, which is sufficient for majors not requiring calculus. These three courses all focus on conceptual understanding, graphical representation, and problem solving. The mathematical background in college-level algebra and trigonometry is needed and used throughout the sequence. The courses are designed to be taken in sequence. PH 201 provides an introduction to the concepts of force, acceleration, work, energy and momentum of objects with mass in various kinds of motion.

## PH 202 General Physics

 .5 credits Prerequisite: PH 201 with grade of 'C-' or better. The second term of this algebra-based General Physics sequence, PH 202, provides an introduction to rotational motion, sound, wave phenomena and optics. See information about this General Physics sequence in the PH 201 course description.PH 203 General Physics 5 credits Prerequisite: PH 202 with grade of ‘C-' or better. In the third term of this algebra-based General Physics sequence, PH 203 provides an introduction to the topics of electricity, magnetism, and selected topics from modern physics. See information about this General Physics sequence under the PH 201 course

## Course Fees

Many courses may have additional fees. Please refer to the web class schedule credit listings and registration information for updated fee information and fee amounts.

PH 211 General Physics with Calculus 5 credits Corequisite: MTH 251. This calculus-based, three-term sequence provides an introduction to fundamental physics concepts and analysis that are required for engineering and physics majors, and also readily meets any General Physics requirements for other health, mathematics and science majors. These physics courses require a concurrent study of calculus, if calculus hasn't been studied previously. In particular, PH 211 requires MTH 251 concurrently, PH 212 requires MTH 252 concurrently, and PH 213 requires MTH 253 concurrently, if this mathematics was not studies 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, graphical representation, and problem solving. In addition, there is an emphasis on generating and evaluating mathematical models of physical systems. These courses are designed to be taken in sequential order. This first course of the sequence, PH 211, introduces mechanics, including accelerated motion, forces, energy, and momentum of objects with mass in motion.

PH 212 General Physics with Calculus. $\qquad$ 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 this three term sequence in the PH 211 course description.
PH 213 General Physics with Calculus.. $\qquad$ .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 this three term sequence under PH 211.
PH 298 Independent Study 1-3 credits A variable credit course based on independent study contracted between an instructor and a student.

## Political Science

For information, contact Social Science, Center Bldg./Rm. 403, (541) 463-5427.
PS 104 Problems in US Politics /Film 1 $\qquad$ .4 credits
This course is designed to incorporate commercial and documentary films and videos, speaker panels, a packet of readings and class discussion of political/public policy issues. Students will be expected to develop and apply critical analytical skills in addressing a wide range of political topics.

PS 105 Problems in US Politics/ Film 2 $\qquad$ .3 credits While technically a continuation of PS 104, this is offered as a stand alone course which does not require taking PS 104 previously. Films, videos, readings, discussion, and speaker panels will be utilized to develop and apply critical analytical skills to address a variety of political and public policy issues.
PS 199 Special Studies in Political Science . 3 credits See department for topics.
PS 201 U.S. Government and Politics $\qquad$ .3 credits An introduction to American Government and politics that includes consideration of the debates surrounding the formation of the Constitution, the theory and practice of American Federalism, American political economy, media and politics, the formation and impact of public opinion, and various forms of political participation including voting, political parties, campaigns, interest groups, and social movements

PS 202 U.S. Government and Politics $\qquad$ .3 credits A continuation of American 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.
PS 203 State and Local Government and Politics $\qquad$ . 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 $\qquad$ 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 nongovernmental 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.

I... 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. $\qquad$ .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.. $\qquad$ 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.

## Course Fees

Many courses may have additional fees. Please refer to the online class schedule credit listings and registration information for updated fee information and fee amounts.

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 $\qquad$ 2-12 credits Internships in this discipline allow students to learn about and work on political campaigns, assist federal/state/local legislators and work with grass roots organizations. Working with governmental and political professionals gives students the opportunity to explore potential career options, enhance academic and career resumes, develop workplace skills and earn academic credit. No political or governmental experience is required but a commitment to the placement for at least the term is expected.
PS 280LW Co-op Ed: Pre Law. 2-12 credits
This course is designed for students who anticipate pursuing a legal career, particularly those seeking to become an attorney. While internships vary from term to term, depending upon availability of offices, students have an opportunity to learn and work with lawyers, legal assistants and other legal professionals in areas of legal administration, research, working with clients and working with the courts. Students will be able to develop workplace skills, explore career options, enhance resumes and earn academic credit. Previous legal experience or coursework is not required, but once placed, students are expected to fulfill their commitment to the end of the term.
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.

## Psychology

For information, contact Social Science, 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. Also available through Distance Learning Fall, Winter, Spring terms.
PSY 201 General Psychology. 3 credits
Scientific principles related to psychology and psychological research including an introduction to statistical methodology, the human organism considering both developmental and structural aspects, neurobiology and neurochemistry, and anatomy of the brain, the senses and perceptual processes and how they are influenced by the internal and external environment, and states of consciousness. Basic principles and theories of behavior.
Sophomore standing recommended. Also recommend that the PSY 201-202-203 courses be taken in sequence. May be offered through Distance Learning.
PSY 202 General Psychology. . 3 credits
The study of behavior as it is influenced by learning, remembering, forgetting, higher brain functions, motivation and emotions. Previous PSY 201 recommended. May be offered through Distance Learning.

PSY 203 General Psychology 3 credits Individual differences and methods of measurement, personality dynamics, stress, abnormal, social, and applied psychology. Previous PSY 201 \& PSY 202 recommended. May be offered through Distance Learning.
PSY 212 Theoretical Principles of Learning 3 credits Recommend at least one introductory psychology course before taking this course. Lectures, demonstrations, and review of experimental research in the areas of animal and human learning Variables that influence learning will also be considered including stimulus-response connections, discrimination, chaining, verbal association, concept formation, and problem solving. Memory, transfer of learning, forgetting, insight and observational learning will also be covered.

## PSY 214 Introduction to Personality

$\qquad$ .3 credits Recommend at least one introductory psychology course before taking this course. This course aims to familiarize students with the major theoretical viewpoints about personality within mainstream psychology. Methods of researching issues in personality, theories about how personality develops in individuals and how it is organized, procedures for personality assessment, and processes by which personality may be changed are discussed. Students relate theoretical concepts to personal awareness exercises.
PSY 215 Lifespan Developmental Psychology........................ 3 credits Prerequisite: PSY 201. An introduction to psychological aspects of human development from conception through old age. Topics covered include brain, perceptual, cognitive, memory, socioemotional, and personality development. Theoretical and methodological issues pertaining to the study of development will also be covered.

PSY 216 Social Psychology .3 credits
Prerequisite: PSY 201 or PSY 203. The boundary field where sociology and psychology overlap. The influence of psychological process on groups, and the influence of culture, society, and groups on individuals. Topics: group dynamics, leadership, socialization, attitude change, and others. Emphasis is put on learning to use social psychological findings to explain real-life events.
PSY 217 Introduction to Experimental Psychology. $\qquad$ .3 credits Prerequisite: PSY 201. This course presents the basic principles of the modern scientific approach to the study of human behavior. It includes the study of the terminology, methods and values that support psychological research. The primary focus is on the understanding of common research designs and what conclusions can reasonably be drawn from the results of experiments using those designs. Students will have an opportunity to conduct experiments of their own design.
PSY 218 Multicultural Psychology $\qquad$ 4 credits
Prequisite: PSY 202 and PSY 203. This course is designed to assist students in understanding the diversity of individual experiences. It is based on developing awareness, knowledge, and skills as they relate to the areas of worldview, identity, and acculturation with regard to the exploration of psychological issues. These topics will include cognition, sensation, perception, intelligence, emotion, motivation, development, disorders, and social psychology. In addition, we will explore the methodologies of cross-cultural research in psychology. We will explore and identify cultural assumptions about people different from ourselves via modeling, observations, readings, and experiential exercises.
PSY 231 Human Sexual Behavior. $\qquad$ .3 credits Prerequisite: PSY 201. Explores human sexuality by examining the behavioral, psychological, and biological components that compose our sexuality. Topics include cross-cultural comparisons, learned and developmental origins, biological systems, variations in sexual behavior, and sexual difficulties. This course emphasizes the behavioral rather than the health issues in human sexuality.

PSY 235 Human Development 1 $\qquad$ 3 credits Prerequisite: PSY 201. An introduction to human development from conception through adolescence. Areas covered include physical (especially brain), cognitive, social-emotional and personality development as well as theoretical and methodological issues. May be offered through Distance Learning.

PSY 236 Human Development 2. 3 credits Prerequisite: PSY 201 or PSY 235. Examines human development from early adulthood through old age and death. Areas covered include physical (especially brain), cognitive, social, and personality development as well as theoretical and methodological issues. May be offered through Distance Learning.
PSY 239 Introduction to Abnormal Psychology. $\qquad$ .3 credits Recommend at least one introductory psychology course before taking this course. Introduction to Abnormal Psychology bridges the gap between mental health-related concepts touched upon in the General Psychology course and the more in-depth analysis of issues relating to emotional disturbance covered in the typical upper division class in Abnormal Psychology. Major topics to be covered will include the historical and current status of behavior disorders, introductory statistics regarding the incidence and classification of persons who are emotionally disturbed and a framework for understanding such phenomena. May be offered through Distance Learning.
PSY 280 Co-op Ed: Psychology $\qquad$ 3-12 credits This course provides the student with psychology-related work experience in community 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 professional while earning college credit.
PSY 298 Independent Study $\qquad$ 1-3 credits
A variable credit course based on independent study contracted between an instructor and a student.

## Radio - See Audio <br> Reading - See Study Skills and College Prep

## Real Estate

For information about noncredit, state approved Real Estate classes, call (541) 463-5252.

RE 280 Co-op Ed: Real Estate .............................................3-12 credits Prerequisite: Instructor approval required. This course offers students relevant work experience related to the real estate industry. Students will have the opportunity to integrate theory and practice, develop skills and expand career knowledge.

## Religion - See Philosophy and Religion

## Respiratory Care

For information, contact Health Professions, 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 $\qquad$ .3 credits
This course is designed for health occupation majors reading at a college level who wish to strengthen their study skills and strategies. Students will learn how to take notes from lectures and textbooks, study for tests, improve memory, read and study from textbooks, manage time effectively, and use the library.
RT 110 Introduction to Mechanical Ventilation $\qquad$ ...... 3 credits Prerequisite: RT 254, RT 251 and acceptance into Respiratory Care Program or consent of instructor. This course introduces concepts of artificial ventilatory support of the critically ill or ventilator dependent patient. This course develops awareness and understanding of ventilator settings and monitoring parameters. Discussion includes long-term mechanical ventilatory support and medical devices used.
RT 112 Respiratory Care Science .2 credits Prerequisite: Acceptance into Respiratory Care Program or consent of instructor. Co-requisite: RT 114 and RT 146. This course provides the student with instruction in specific applications of pertinent principles of mathematics, physics and chemistry relating to the practice of respiratory care. This course assumes that the student has previous educational experience in mathematics and chemistry as required by admission to the respiratory care program.

RT 114 Fundamentals of Respiratory Care $\qquad$ 2 credits Prerequisite: Acceptance into the Respiratory Care Program. Corequisite: RT 112, RT 146. This course provides instruction in basic patient care skills with a focus on safety and legal/ethical issues relevant to the respiratory care practitioner. Topics include legal and ethical issues facing respiratory care practitioners, patient positioning and safety, proper body mechanics, infection control, medical documentation and communication, and medication administration. Student will demonstrate skills in laboratory setting.
RT 116 Basic Respiratory Assessment $\qquad$ 2 credits Prerequisites: RT 112. RT 114, RT 146 Co-requisites: RT 127, RT 144, RT 141. 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

$\qquad$ 2 credits
Prerequisite: RT 127, RT 144, RT 141 Co-requisites: RT 254, RT 251 This course provides instruction in the etiology, pathogenesis, and pathophysiology of common respiratory diseases and their clinical, laboratory, radiological and physical manifestations. Simulated or real patient cases are utilized for practice in assessment of data and the application of principles and procedures in management of these diseases. This course is the first of a four-part sequence addressing disease states that require progressively more advanced scenarios. Topics include scenarios that reflect concepts presented in the co-requisite respiratory care courses.
RT 127 Respiratory Care Diseases and Medications. $\qquad$ 4 credits Prerequisite: RT 112, RT 114 Co-requisite: RT 116, RT 144, RT 141 This course studies the normal anatomic and physiologic components of respiration, including the nature and causes of cardiopulmonary disorders. Physiologic functions presented include mechanics of ventilation, oxygen and carbon dioxide transport, neuro-regulation of respiration, acid-base balance, and defense mechanisms of the lung. Topics include discussion of common cardiopulmonary disorders requiring medication administration by respiratory therapists, and the indications, contraindications, mechanisms of action and standard dosages of those medications
RT 136 Respiratory Care Case Review Part 2 4 credits
Prerequisite: RT 126 Co-requisites: RT 110 This course provides instruction in the etiology, pathogenesis, and pathophysiology of common respiratory diseases and their clinical, laboratory, radiological and physical manifestations. Simulated or real patient cases are utilized for practice in assessment of data and the application of principles and procedures in management of these diseases. This course is the second of a four-part sequence addressing disease states that require progressively more advanced scenarios. Topics include scenarios that reflect concepts presented in the co-requisite or prerequisite respiratory care courses.

RT 141 Principles of Respiratory Care Lab .1 credit Prerequisite: RT 112, RT 114 Co-Requisite: RT 144 Practice time is provided for pulmonary assessment techniques, 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. $\qquad$ 3 credits Prerequisite: RT 112, RT 114 Co-Requisite: RT 141 Patient assessment and therapeutic modalities encountered in the clinical setting is emphasized. Indications, contraindications, and hazards of gas therapy, humidity therapy, aerosol therapy, chest physiotherapy and basic medications delivery are presented. Significance is given to positive pressure breathing, hyperinflation therapy, and emergency resuscitation techniques. Presentations include physical principles related to the behavior of gases and various gas laws pertinent to respiratory care practice.
RT 146 Introduction to Clinical Respiratory Care $\qquad$ .3 credits Prerequisite: Acceptance into Respiratory Care Program or consent of instructor. Co-requisite: RT 112, RT 114 An introductory course designed to orient the student to the respiratory care profession and associated clinical practice facilities. Topics include job requirements, professional credentials and legal/ethical guidelines for the practice of respiratory care. Provides time for hospitalspecific training for HIPAA, infection control, blood-borne pathogen, harassment, and general hospital policy and procedure orientation. Assignments include job-shadow rotations through affiliate respiratory care departments.

RT 148 Advanced Placement Clinical Practice $\qquad$ . $1-8$ credits Prerequisite: Acceptance into Respiratory Care Program and consent of instructor. This course is designed to assess the clinical skills of candidates for advanced placement in the Respiratory Care program. Students will be observed performing all aspects of clinical respiratory care to determine appropriate placement in the clinical practice courses of the program.
RT 216 Respiratory Care Case Review - Part 3 $\qquad$ .2 credits
Prerequisite: RT 136 This course provides instruction in the etiology, pathogenesis, and pathophysiology of common respiratory diseases and their clinical, laboratory, radiological and physical manifestations. Simulated or real patient cases are utilized for practice in assessment of data and the application of principles and procedures in management of these diseases. This course is the third of a four-part sequence addressing disease states that require progressively more advanced scenarios. Topics include scenarios that reflect concepts presented in the co-requisite respiratory care courses.
RT 236 Clinical Practice 1. $\qquad$ .8 credits Prerequisite: : RT 116, RT 141, RT 144, RT 127 Co-requisites: RT 126, RT 251, RT 254 This course is the first in a sequence of four courses addressing the development of skills in respiratory care patient assessment and application of therapeutic modalities in the treatment of respiratory disorders. Emphasis is on clinical performance of basic therapy, infection control techniques, and development of professional attitudes and behaviors in the clinical setting.
RT 241 Principles of Mechanical Ventilation Lab. $\qquad$ .1 credit
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 $\qquad$ .3 credits
Prerequisite: RT 110 (minimum passing grade C). Acceptance into Respiratory Care Program or consent of instructor. Emphasis of this course is on the function of mechanical ventilation equipment. Students are provided information regarding current indications, contraindications and hazards of continuous mechanical ventilation. Advanced ventilator monitoring techniques and analysis of ventilator waveforms as well as problem-solving algorithms are presented
RT 248 Clinical Practice 2. .. 6 credits
Prerequisite: RT 236 Co-Requisites: RT 136, RT 110 This course is a continuation of Clinical Practice 1, RT 236 with special emphasis on development of skills used in determining efficacy of therapeutic modalities in patient care situations. Familiarization with diagnostics and monitoring techniques and skills used in management of critical care patients will be included. Continued emphasis is placed on development of professional attitudes and behaviors in clinical settings.
RT 251 Pulmonary Diagnostics and Monitoring Lab $\qquad$ .1 credit 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 116, RT 127, RT 144, RT 141 (minimum passing grade of C) Co-Requisite: RT 251 Emphasis is placed on diagnostics 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.

RT 256 Respiratory Care Case Review - Part 4 .2 credits Prerequisite: RT 216 minimum passing grade of "C" Corequisites: RT 262, RT 266, RT 268 This course provides instruction in the etiology, pathogenesis, and pathophysiology of common respiratory diseases and their clinical, laboratory, radiological and physical manifestations. Simulated or real patient cases are utilized for practice in assessment of data and the application of principles and procedures in management of these diseases. This course is the last of a four-part sequence addressing disease states that require progressively more advanced scenarios. Topics include scenarios that reflect concepts presented in the co-requisite respiratory care courses.

RT 258 Clinical Practice 3. 8 credits Prerequisite: RT 248 Co-Requisite: RT 244, RT 241, RT 216 This course is a continuation of Clinical Practice 2, RT 248 with special emphasis on an introduction and development of skills used in performance of therapeutic modalities employed in intensive care situations. Familiarization with therapeutic and monitoring techniques and skills used in management of critical care patients is provided. Special areas of emphasis will include exposure to adult intensive care and the initiation and maintenance of mechanical ventilators. Continued emphasis is placed on development of professional attitudes and behaviors in clinical settings.
RT 262 Neonatal/Pediatric Respiratory Care. $\qquad$ 3 credits Prerequisite: RT 244, RT 241 (minimum grade of C) Respiratory care of the neonate and pediatric patient is presented with special emphasis on physiology, pulmonary complications, and related intensive care procedures. Transportation and assessment of the sick newborn and child is emphasized. Topics prepare the student for more advanced training in Neonatal Resuscitation Protocol.

RT 266 Emergency and Critical Care - Part 1. $\qquad$ .3 credits Prerequisite: RT 244, RT 241 (minimum grade of C) This course presents information on monitoring techniques used in the management of intensive care unit patients. The course includes in depth discussion of electrocardiography, emergency airway management, and medications used in the management of critical care patients
RT 268 Clinical Practice 4. .8 credits Prerequisites: RT 216, RT 241, RT 244, RT 258 Corequisites: RT 256, RT 262, RT 266 This course is the last in a sequence of four courses addressing the development of skills in respiratory care patient assessment, application of therapeutic modalities in the treatment of respiratory disorders and development of professional attitudes and behaviors in the clinical setting. Emphasis is on respiratory care in the critical care setting, polysomnography, and other diagnostic studies. Assignments include neonatal and pediatric respiratory care, sleep study, and pulmonary function study.

RT 270 Clinical Competency Assessment $\qquad$ .1 credit
Prerequisite: RT 146, RT 236, RT 258, RT 268 This course is designed to provide a 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 or consent of instructor. This course provides students the opportunity to demonstrate their ability to integrate recall, application and analysis levels of knowledge related to the performance of respiratory care procedures through completion of National Board for Respiratory Care style Self Assessment Examinations. Both Entry Level and Advanced Practitioner Level Examinations are used to prepare the student for credentialing examinations that are required after completion of the program. Faculty provides instruction in using examination matrices in preparation for the examinations and in understanding the grading systems used in scoring the examinations.

RT 276 Emergency and Critical Care - Part 2 .2 credits Prerequisite: RT 266 This course builds on content presented in the prerequisite Emergency and Critical Care Part 1. Topics prepare the student for more advanced training in Advanced Cardiac Life Support and Pediatric Advanced Life Support.
RT 280 Co-op Ed: Respiratory Therapy.
1-12 credits
Prerequisite: Acceptance into the Respiratory Care Program and consent of instructor. The purpose of this course is to provide students meaningful learning experiences related to the Respiratory

Therapy profession. This course provides students an opportunity to earn college credit while working in the health care community under supervision. The field experience is planned to have a direct relationship to students' classroom work so that each contributes to the students' education and future employment in respiratory care. Co-op may be taken as an optional elective, and is a required course in the final term of the program as a critical care focused practicum clinical capstone course
RT 298 Independent Study. .1-3 credits
Prerequisite: Admission into the Respiratory Care Program and consent of instructor. A variable credit course based on independent study contracted between an instructor and a student.

Robotics - See Electronics<br>Sales and Marketing - See Business<br>Science - See Anatomy/Physiology/Microbiology, Biology, Chemistry, Earth and Environmental Science, Energy Management, Engineering, Physics<br>Semiconductor Manufacturing - See Electronics<br>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 Social Science, Center Bldg./Rm. 403, (541) 463-5427.
SOC 108A Selected Topics in Women's Studies,
Women's Bodies, Women's Selves $\qquad$ ...................... 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 199 Special Studies: .3 credits See department for topics.
SOC 204 Introduction to Sociology. . 3 credits
Development and application of the sociological imagination, concepts, and perspectives concerning human groups, includes attention to socialization, culture, organization, stratification and societies. Examines fundamental concepts and research methodology. May be offered through Distance Learning.
SOC 205 Social Stratification and Social Systems $\qquad$ ... 3 credits Explores patterns of social inequality, or stratification, using sociological research and theory. Focuses on race, class, and gender inequality. May be offered through Distance Learning.
SOC 206 Institutions and Social Change. .3 credits
Sociological study of dynamic organizational nature of society through analysis of social change and major social institutions such as family, education, religion, economy, and political systems. May be offered through Distance Learning.
SOC 207 Women and Work. .3 credits Women perform nearly two-thirds of the world's work, receive onetenth 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 $\qquad$ 3 credits Love, sexuality, intimate partnerships, marriage, parenting, and family disruptions are analyzed in a social context. A sociological approach offers insights into our personal experiences and informs our perspectives on social policies that affect families and intimate relationships.
SOC 211 Social Deviance.
3 credits
The study of behavior that departs from a group or society's norms. Topics include delinquency and crime; sexual, religious and lifestyle deviance; deviant sub-cultures; society's reaction to deviance; explanations of causes of deviance and the tracing of its effects on individuals and society.
SOC 213 Race and Ethnicity .3 credits
This course explores a comparative history of racial dynamics with particular emphases on the way in which race, ethnicity, and class, inform these histories. A comparative sociological approach will be used in order to explore the process of racial information.
Throughout the course we will recuperate the histories of racialized groups and expose sites of oppression, struggle, and resistance.
SOC 215 Social Class $\qquad$ 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 3 credits
An examination of selected social problems-basic facts, effects on individual and society, and explanations. Problems will be selected from the following three areas, but not all topics will be covered each term. 1. Systemic problems: racial and sexual discrimination, inequality and poverty, militarization and war, ecological problems, overpopulation, urban and rural problems, life cycle problems. 2. Problems of specific institutions: government, economy, family, education, religion, and social services. 3. Personal pathologies: mental illness, suicide, alcoholism, and drug addiction.

SOC 280 Co-op Ed: Sociology .3-12 credits This course provides the student with sociology-related work experience in community 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 professional while earning college credit.

Spanish - See Language Studies

## Speech Communication

For information, contact Language, Literature and Communication, Center Bldg./ Rm. 457, (541) 463-5419.
SP 100 Basic Communication .................................................. 4 credits
Basic Communication is a survey course designed to provide students with an overview of communication as a field of study. Its aim is to help develop oral communication competencies needed to function effectively in a variety of communication contexts. A variety of theoretical topics in the discipline are addressed. The course attempts to build skills in interpersonal, small group, and public speaking. May be offered through Distance Learning.
SP 105 Listening and Critical Thinking $\qquad$ .4 credits
Analysis of listening behavior with an emphasis on developing an understanding and appreciation of listening as a vital element in the communication process. Designed to help students improve a variety of listening skills - such as attention, critical thinking, and memory - through exercises with diverse speakers and subjects. Students are urged to take Listening and Critical Thinking (SP 105) before Interpersonal Communication (SP 218). Also useful for English Language Learners preparing for the TOEFL exam.
SP 111 Fundamentals of Public Speaking $\qquad$ .4 credits
This course is designed to help students learn to express their ideas to a public audience with confidence and clarity. The aim is to teach students to speak in public by preparing presentations for use in various places to diverse audiences on a variety of occasions. In addition, students will learn to become critical listeners by analyzing others' presentations.

SP 112 Persuasive Speech $\qquad$ .4 credits
Speech 112 is designed to provide students with an understanding of the persuasive communication process so that they are able to prepare effective persuasive presentations and to evaluate persuasive messages they encounter. Students will demonstrate their proficiency through expository and persuasive speeches, written analyses, and argumentation practice.
SP 115 Introduction to Intercultural Communication. $\qquad$ . 4 credits This course is designed for people whose work, lifestyle, travel or interests will involve them in intercultural interactions. A variety of topics will illustrate how differeing values, beliefs, attitudes, and social systems affect verbal and nonverbal communication behaviors of people. The students will develop awareness, understanding, and sensitivity to cultural diversity of different nations and co-cultures within our own society. May be offered through Distance Learning.
SP 130 Business and Professional Speech $\qquad$ .4 credits
This course is designed for students who need to develop or enhance their presentation and briefing skills in business or professional settings. Special attention is given to the use of presentation aids commonly used in small group settings and the business world. The emphasis wil be on clarity, delivery, and organization. Students are required to prepare and deliver a variety of in-class presentations. May be offered through Distance Learning.
SP 218 Interpersonal Communication $\qquad$
$\qquad$
$\square$ This course is designed to assist students in using effective SP 218 interpersonal Communication ..................................... 4
This course is designed to assist students in using effective .4 credits practices of intra- and interpersonal communication 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 relastionships. Knowledge and skill building are used to enable improvement, with special attention selfconcept, listening, emotions, intimacy, verbal and non-verbal communicaiton. Learning to manage stress and conflict and to use assertive/supportive rather than aggressive/defensive messages are emphasized as a tool for improving relationships and for conducting more productive incidental relationships. Students are urged to take Listening and Critical Thinking (SP 105) before taking Interpersonal Communication. May be offered through Distance Learning.
SP 219 Small Group Discussion .. 4 credits The purpose of the course is to provide a setting in which students may increase their knowledge about the function and role of small group communication in the home and workplace. Students will have the opportunity to participate in a variety of small groups with single tasks. They will participate in an ongoing problem-solving small group.

SP 220 Communication, Gender and Culture $\qquad$ 4 credits
This course is intended for people who are interesed in increasing their understanding and awareness of differences in male and female communication styles. We will explore how communication, gender, and culture interact to influence perceptions and expectations of gender roles. May be offered through Distance Learning.
SP 221 Forensics 1-2 credits
SP 221, SP 222, SP 223 Forensics (Variable credit) These courses offer training in several novice-level to intermediate speaking events in preparation for participation in intercollegiate speech (forensics) competition. The aim of this activity is to enable students to perfect their speaking skills in the two primary forms of individual speaking events, platform speeches, and oral interpretation. These courses allow for flexibility so that individual students will work in their areas of interest and at their levels of skill development.

SP 222 Forensics. $1-2$ credits
See SP 221.
SP 223 Forensics. $\qquad$ 1-2 credits See SP 221.

SP 262 Voice and Articulation $\qquad$ .4 credits
This course offers the study and practice of 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 speakiers, public speakers, and English Language Learners, as well as others who want to improve the sound of their speech.
SP 280 Co-op Ed: Speech
.3-12 credits
This course provides relevant field experience related to the field of speech that integrates theory and practice while providing opportunities to develop skills, explore career options and network with professionals and employers. Students will generate learning objectives for the experience, journal progress toward learning objectives and evaluate themselves at the end of the term. Site supervisor will orient, support, guide, provide instruction and evaluate the student's performance. Co-op coordinator will visit site to meet with supervisor, discuss student performance, and do a final evaluation at the end of the term. Meet with the speech co-op coordinator the term before (if possible) to set up the internship.

## Spelling - See Study Skills <br> 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:
EL, RD and SKD - Contact Academic Learning Skills, Center Bldg./Rm. 218, (541) 463-5439.
CG - Contact the Counseling Department, Bldg. 1/Rm. 103, (541) 463-5299.
CG 199 Special Studies: $1-3$ credits See department for topics.
CG 215 Transition to the University. 3 credits
Transition to the University is designed for the student who plans to transfer to a four-year university within the next few terms. It is a three-credit transfer course which will prepare students to make a successful academic and personal transition from the community college to the university. Students in the course will receive instruction in academic and personal survival skills necessary for success at the university level.
EL 113 Connections: Specific Study Skills. $\qquad$ .3 credits
This course is a content-specific study skills course designed for students reading at a college level who wish to strengthen their study skills and strategies in a specific content area for success in the content course. The course is linked with content areas through a content-area course in which students are co-enrolled. The two courses (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 http://www.lanecc.edu/als/classesenspanol.htm.

EL 113A Connections: Special Study Skills 1 credit
This course is a content-specific study skills course designed for students reading at a college level who wish to strengthen their study skills and strategies in a specific content area for success in the content course. The course is linked with content areas through a content-area course in which students are co-enrolled. The two courses (EL113A and the content-area course) are either linked with extensive instructor collaboration or team-taught.
EL 115 Effective Learning 3 credits
This course is designed for students reading at college level who wish to strengthen their study skills and strategies. Students will learn how to take notes from lectures and textbooks, study for tests, improve memory, read and study from textbooks, manage time effectively, and use the library.
EL 115E Effective Learning: ESL $\qquad$ .3 credits This course is designed for English Language Learners who wish to strengthen their study and language skills. Students will learn how to take notes from lectures and textbooks, study for tests, improve memory, read and study from textbooks, manage time effectively, use the library, and communicate effectively. For a description of this ALS class in Spanish, see
http://www.lanecc.edu/als/classesenspanol.htm.
EL 115H Effective Learning: Health Science Majors $\qquad$ 3 credits
This course is designed for health occupation majors reading at a college level who wish to strengthen their study skills and strategies. Students will learn how to take notes from lectures and textbooks, study for tests, improve memory, read and study from textbooks, manage time effectively, and use the library.
RD 080 Preparatory College Reading ....................................... 6 credits Preparatory College Reading Prerequisite: Minimum level as determined on the college reading test. This is the entry level reading class offered by the Academic Learning Skills Department. Students will learn active reading strategies such as finding main idea and supporting details to improve textbook comprehension. Students will develop techniques for enlarging vocabulary and creating study tools. Brief reading selections from actual first year textbooks are part of this course. This course is also offered as a part of the Guided Studies Program.
RD 089 Academic Reading for ELL Students $\qquad$ . 3 credits Department consent required. Corequisite: WR089. This course is for English Language Learners. Students will learn active reading strategies such as finding the main idea and supporting details. Students will develop techniques for expanding their vocabulary and creating study tools. Readings will include both advanced ESL texts as well as short authentic readings.
RD 090 College Reading Skills $\qquad$ .3 credits
This is the second in the sequence of reading classes offered by the Academic Learning Skills Department. Students will learn to integrate active reading strategies such as finding main idea and supporting details, note taking, and mapping to comprehend longer college level reading selections. Students will learn how to draw thematic connections between a variety of readings.
RD 093 ESL: College Reading .3 credits
Prerequisite: Placement by reading/writing test. This is a course for English language learners. Students will learn reading strategies that will improve comprehension in reading such as reading for main idea, supporting detail, patterns of organization, and inference. Students will learn basic literary terminology and how to draw thematic connections between a variety of authentic texts including a novel, short stories, newspaper and journal articles, and poetry. In addition, students will learn to conduct basic library research and cite sources correctly. The course is designed so that students will increase their English language proficiency and improve their reading skills.

## Television - See Video Production

## Theatre Arts

For information, contact Music, Dance and Theatre Arts, Bldg. 6/Rm. 205, (541) 463-5209.

TA 140 Acting Shakespeare ...................................................... 4 credits
Students become "Shakespeare-friendly" through lectures and classroom activities. Introductory trainings include acting vocal/physical skills, swordplay, and Elizabethan song. Coached work on how to bring 400-year-old words alive. (Optional participation in public Term's End Shakespeare Showcase.)
TA 141 Acting 1 3 credits
introduces the student to basic acting skills. Class exercises focus on increased self-awareness, observation skills, relaxation techniques, overcoming stage fright, and introduction to character analysis and scene study. No prior experience necessary. This course prepares students for continuing on in the Beginning Acting class sequence.
TA 142 Acting 2 $\qquad$ 3 credits
Prerequisite: TA 141. Continuation of the Beginning Acting sequence. Students are introduced to monologue audition techniques, in-depth character analysis, and more advanced scene work.

TA 143 Acting 3 $\qquad$ .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 roleplaying. Participants put their creative energy into action, release their inhibitions, expand their imaginations, and sharpen their wits. This class is essential training for actors, and useful for others, too.

## TA 145 Improvisational Theatre 2

$\qquad$ .. 3 credits
Previous experience required. Students study and practice historical styles, and apply the principles of improvisation to character development and scene analysis as well as to everyday life.

TA 150 Technical Production 3 credits
This course provides training and experience for students who want to learn the necessary functions and operations behind-thescenes. Besides gaining technical expertise, 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 $\qquad$ $1-3$ credits Consent of the instructor. Designed to provide practical application of classroom theory. The course may be repeated for a maximum of nine credits. Should be taken by participants in a theatrical production of this department scheduled for public performance.
TA 164 Writing for the Theatre 1
. 3 credits
This first sequence focuses on the essentials of playwriting. Students experience a series of exercises; and listen to, record, and write pieces for live theatre. This class may be taken for a total of not more than three terms.
TA 241 Intermediate Acting 3 credits Prerequisite: TA 143. This course begins a three-term concentration on the problems of characterization. In preparation for various audition situations, students perform from theatre literature, commercial copy, film scripts, and television shows. This course is highly recommended for those students transferring to schools requiring entrance auditions and for anyone wishing to enter the business now. The three-course sequence may be repeated for a maximum of nine credits.
TA 242 Intermediate Acting .3 credits Prerequisite: TA 241. This course continues the concentration on the problems of characterization, with an emphasis on 'method' acting. Students learn to bring themselves to the role in an intimate way. A preparation for the third term in this series. The three-course sequence may be repeated for a maximum of nine credits.

TA 243 Intermediate Acting
Prerequisite: TA 242. This course continues the concentration on the problems of characterization, with an emphasis on acting for the camera. The three-course sequence may be repeated for a maximum of nine credits.

## TA 250 Technical Production 2

 .3 creditsPrerequisite: TA 150 The course provides advanced training and experience for students who want to learn the necessary functions and operations behind-the-scenes. Besides gaining technical expertise, students become familiar with stagecraft, design, lighting, sound, and crew work. This course is recommended for performers, stagehands and future arts producers in Music, Dance and Theatre, who need to know more advanced skills in stagecraft and backstage communication.
TA 253 Theatre Rehearsal and Performance. $\qquad$ . 1-3 credits
Designed to provide practical application of classroom theory and skills. Should be taken by participants in a theatrical production of the Music, Dance, and Theatre Arts Department that is scheduled for public performance. The course may be repeated for a maximum of nine credits.

TA 264 Writing for the Theatre 2 .3 credits Prerequisite: TA 164. A continuation of Writing for the Theatre 1, this sequence focuses on the rewriting process of script development, as students continue to work on projects. They learn to reshape events, they participate in readings, and analyze and critique each other's work. This course can be taken up to three terms.
TA 280 Co-op Ed: Performing Arts .3-12 credits Course provides the student with a theatre-related work experience in community businesses and industry. 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 college credit.

TA 298 Independent Study: 1-3 credits
A variable credit course based on independent study contracted between an instructor and a student.

## Tutoring

For information, contact Tutoring Services, Center Bldg./Rm. 210, (541) 463-5783.
ED 125 Tutor Training 1 ................................................................ 1 credit
Prerequisite: Employment as a tutor. Provides the basic College Reading and Learning Association (CRLA) certification for beginning tutors. The teaching format is very interactive with tutors supplying their own answers and teaching each other. Students learn how to facilitate learning.
ED 126 Tutor Certification - Advanced 1 credit Prerequisite: ED 125 and continued employment as a tutor. This class is designed for current LCC tutors with some experience. The tutors will study learning styles, cultural competence, and communication as it relates to tutoring and life. The teaching format is very interactive with tutors teaching and learning collaboratively. Tutors will gain a CRLA-Advanced certificate upon completion.
ED 127 Tutor Certification-Master Level. $\qquad$ .. 1 credit Prerequisite: ED 125, ED 126 and currently tutoring. Provides CRLA certification at the third and final level. Master tutors will gain additional skills in communication, critical thinking, leadership, mentoring, and self-motivation for students and self. Teaching format allows these master tutors to lead and teach others with guidance.

## Video Production

Also see Multimedia Design
For information, contact Art and Applied Design, Bldg. 11/Rm. 101, (541) 463-5409.
VP 151 Video Production 1/Camera .3 credits Prerequisite: ART 261, AUD 120 and FA 250. This course introduces elementary concepts of video production including digital video camera operation and digital non-linear editing and the necessity of pre-production planning to insure a smooth production process. Students are taught basic camera techniques, pre-production and production practices through hands-on learning to develop basic field video production skills combined with individual creativity and the importance of teamwork and deadlines. Projects will be 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 $\qquad$ 3 credits Prerequisite: VP 151. This course teaches 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 opportunity to learn advanced camera techniques, pre-production and production practices, combined with individual creativity and the importance of teamwork and deadlines. Projects will be produced in the context of learning the theory and practice of video production and computerized video editing combined with the applications of multimedia programs.

## Vocabulary - See Writing

Water Conservation
For information , contact Science, Bldg. 16/Rm. 253, (541) 463-3977.
SUST 101 Introduction to Sustainability $\qquad$ 3 credits Introduction to Sustainability will cover sustainability definitions, assessment and actions from a multidisciplinary perspective to help learners create a personal definition that will inform their actions. It will teach students how to understand the complex confluence of social systems, environmental economics and ecological literacy. Themes of pluralism, resource conservation and systems thinking will provide the framework to analyze how to meet ones basic needs of food, water, shelter, energy and transportation. Students will have the opportunity to work on hands-on projects.
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 105 Water Conservation: Residential

 4 creditsStudents will learn strategies to increase water conservation and efficiency at the residential level using proven water conservation strategies. This course will cover program development, water use, waste, auditing, efficiency measures and incentives as well as fixtures and appliances. Students will participate in hands-on activities.

WATR 107 Water Conservation: Outdoor $\qquad$ .4 credits
The outdoor conservation course focuses on efficiency at the residential level including water use and waste, efficiency measures, and landscape issues such as planning and design, irrigation, soils, mulch and maintenance. Theoretical work will be enhanced by hands-on outdoor learning.
WATR 150 Water Resource Economics s....

WATR 208 Water Conservation: Agricultural. 4 credits .4 credits This course will provide an overview of water efficiency in irrigated agriculture. Topics include water use, water waste, water efficiency, conservation, auditing, measurement, soil moisture monitoring and irrigation. Laser leveling and other emerging technologies will be discussed. The class will include field work with irigation controlers, field trips to local farms and nurseries and hands-on experience with irrigation auditing tools.

WATR 210 Water Conservation: Industrial / Commercial....... 4 credits This class will focus on retrofitting existing buildings and facilities to increase wise water use. Emphasis of the class will be water use, waste, efficiency and auditing for Commercial, Industrial andlnstitutional (CII) sites. Topics will include metering, sanitation, process water use, commercial kitchen, laundry and swimming pool water use, and heating and cooling systems. Students will be introduced to the concept of Industrial Ecology.
WATR 215 Integrated Water Management $\qquad$ .4 credits Prerequisite: SUST 101 and WATR 101 This class will examine a wide range of water uses and water issues in multiple settings and at various scales. Emphasis will be on the interaction between various resource uses and the effect of conservation measures. Students will analyze global, regional and local case studies.
WATR 220 Water Conservation:Program Development ......... 4 credits This capstone class will explore the design, implementation, maintainance and evaluation of water efficiency plans and programs. Emphasis will be on creating formal water conservation plans. Students will study how to make the business case for efficiency and how wise water use supports sustainability.

WATR 221 Water Mechanical Systems. $\qquad$ .4 credits
Prerequisite: WATR 210 This 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 technology. Types of equipment covered include: bathroom fixtures, clothes washers, water heaters, cooling towers, solar water heaters, fire systems, waste heat recovery systems, sterilizers, x-ray and photo processors, vehicle washing equipment, manufacturing cleaning equipment, and radiant floor heating.
WATR 261 Regional Water Policy $\qquad$ .3 credits
Explores policy, regulation, rights and law pertaining to the Pacific Northwest bioregion. Additional topics will 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 course provides the student with water conservation related field experience. 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 while earning credit toward a 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.
BT 030 Computer ABCs for Women in Transition ................... 3 credits Prerequisite: CG 220 (may be taken the same term). A course for students who are in the Women in Transition program, providing a supportive environment to learn basic computer operations. Through hands-on, in-class computer exercises and assignments, students will gain increased confidence in operating computers and prepare for future computer courses. Focus is on student success and integration with other programs in the learning community.
CG 100T College Success: WIT.. $\qquad$ .1-3 credits This course is designed to help present and past Women In Transition students explore the positive forms that strength can take in women's lives. Topics will include: Identifying healthy definitions of strength in various arenas of life (mental, emotional, physical); Exploring where and what to direct your strength toward; Defining and creating a personal strength plan that embodies key aspects of both internal and external forms of strength in your life. Using an experiential format, students will apply techniques and strategies to solving problems that interfere with student success and satisfaction. May be offered through Distance Learning. College success for Spanish-speaking women This credit and non-credit class is intended to reach Spanish-speaking women who are preparing to study at Lane Community College and want to learn how to be successful in the college level academics. This class is
offered in Spanish. The class will focus on Lane Community College systems, dealing with family-cultural barriers successfully, setting up an appropriate study environment, how-to manage time, forming good study skills, finding scholarships, and learning about student resources. Both non-traditional and high school students are encouraged to enroll for this class. (See Spanish translation below).

Teniendo Èxito en la Universidad Esta clase se dedica a preparar las Latinas para tener Éxito escolar en la Universidad. Se puede tomar para obtener crÈditos en Lane Community College o simplemente para su aprendizaje. Cualquier estudiante que es mujer y habla espaÒol puede tomar esta clase. La clase se da en EspaOol. La clase se enfocara en entender el sistema de Lane Community College, aspectos familiares/culturales, formando un ambiente que promueve estudiar, manejar el tiempo, como estudiar, encontrar dinero para estudiar, y conocer los recursos que apoyan los estudiantes.

College Success for Spanish-speaking women $\qquad$ 1-3 credits This credit and non-credit class is intended to reach Spanishspeaking women who are preparing to study at Lane Community College and want to learn how to be successful in the college level academics. This class is offered in Spanish. The class will focus on Lane Community College systems, dealing with family-cultural barriers successfully, setting up an appropriate study environment, how-to manage time, forming good study skills, finding scholarships, and learning about student resources. Both nontraditional and high school students are encouraged to enroll for this class. (See Spanish translation below)
Teniendo éxito en la Universidad Esta clase se dedica a preparar las Latinas para tener éxito escolar en la Universidad. Se puede tomar para obtener créditos en Lane Community College o simplemente para su aprendizaje. Cualquier estudiante que es mujer y habla español puede tomar esta clase. La clase se da en Español. La clase se enfocara en entender el sistema de Lane Community College, aspectos familiares/culturales, formando un ambiente que promueve estudiar, manejar el tiempo, como estudiar, encontrar dinero para estudiar, y conocer los recursos que apoyan los estudiantes.

CG 140T Career and Life Planning: WIT 3 credits Co-Requisite: CG 220 This course is designed to help students enrolled in the Women in Transition program plan their careers and their lives. Topics will include: Self - awareness (exploring and identifying values, interests, skills and personality styles): Career Exploration (available careers, careers that fit personal wants and needs, steps to pursuing career goals): and Decision Making (how to make decisions, weigh options, and set goals). Note: CG 140T is a Career and Life Planning class with an emphasis on issues for women in transition, there are also general Career and Life Planning courses offered by Counseling with overlap in content. Students may receive credit for either CG140 or CG140T.

CG 207 Life Transitions 2 $\qquad$ 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 LifeTransitions course. Topics include: Responding successfully to changing personal and professional demands; strengthening resiliency and self-esteem; establishing and maintaining healthy relationships; and setting, enacting and attaining personal, academic and career goals. Class activities will stress practical and personal application of course information. Successful completion of the first LifeTransition course is required.

CG 220 Life Transitions: WIT 4 credits
Co-requisite: CG 140T This course is designed to help students enrolled in the Women in Transition program navigate their current life transitions and explore positive new life directions. Topics include: life transitions; (understanding change, endings, losses and new beginnings): relationships; (patterns, identifying productive and damaging interactions, learning new skills): and personal growth; (self-esteem, coping with powerful emotions, healthy power, assertiveness.

EL 115T Effective Learning: Women in Transition $\qquad$ .3 credits
Prerequisite: CG220, can be taken in a previous term or concurrently. This course is designed for students who are in the Women in Transition program reading at a college level and who wish to strengthen their study skills and strategies. Students will learn how to take notes from lectures and textbooks, study for tests, improve memory, read and study from textbooks, manage time effectively, and use the library.

MTH 010T Whole Numbers, Fractions, and Decimals: WIT... 3 credits Prerequisite: Placement by the LCC math test or consent of the instructor. Students will review whole number skills and learn to compute with fractions and decimals. Universal math concepts will be integrated with the curriculum to increase students' abilities and to extend their understanding of basic math principles in preparation for higher level math courses. Effective math study strategies and math anxiety issues will be discussed to increase students' confidence in their abilities to succeed in math classes and to use math in daily life. MTH 010T is intended for students who need to strengthen their basic math skills before moving on to MTH 020.

MTH 020 Math Renewal. 1-3 credits
Prerequisite: MTH 010A or equivalent courses with a grade of "C-" or better, or pass a placement test through Testing Services. Prerequisite grades or test scores must have been completed within the past four terms. If you have taken a higher level math course than this and passed the course with a "C-" or better, you may not use this course for your degree/certificate requirements. This course begins with a review of whole number, fraction, and decimal arithmetic that includes rounding, estimation, order of operations, averages, and the solving of one-step equations. This review is followed by an introduction to ratios, proportions, percent, measurement, and basic geometry in a problem-solving context, with the earlier review skills integrated throughout. Some applications for technical careers will be incorporated for students in professional technical programs. Required: Scientific Calculator with Advanced Direct Algebraic Logic (D.A.L.), which allows entry of an expression in the exact order it appears on paper. [Purchase after instructor recommendation]. Students wishing to take MTH 020 in a variable credit, self-paced format must obtain instructor permission prior to registering. This permission can be obtained in the Math Resource Center on the first day of classes or just prior to the beginning of the term.

PE 183U Strength Training for Women. 1 credit A fun and active class designed for women of all ages, experience and conditioning levels. Use of barbells, dumbbells, weight machines, stability balls, bands, medicine balls, body weight resistance exercises and more, to tone and strengthen all major muscle groups and improve your general physical condition. Emphasis is on safe and correct techniques, while learning terminology and basic anatomy. Basic and specialized individual programs for beginners through advanced levels, tailored to your goals and experience.

## Women's Studies

For information, contact Social Science, 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 onetenth 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 $\qquad$ .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.
WS 298 Independent Study 1-3 credits
A variable credit course based on independent study contracted between an instructor and a student.

## Writing

For information about classes with course numbers that begin with:
WR115-245 - Contact Language, Literature and Communication, Center Bldg./Rm. 457, (541) 463-5419.
SKD and WR080-095 - Contact Academic Learning Skills, Center Bldg./Rm. 218, (541) 463-5439.

ENG 116 College Vocabulary $\qquad$ Students will acquire vocabulary that will increase their speaking, listening, reading, and writing vocabularies. Students will study the history of English, affixes and roots, pronunciation, dictionary and thesaurus use, as well as strategies for vocabulary acquisition and enrichment. Instruction will move at a faster pace, introduce more material, and deal with vocabulary at a higher level than Preparatory Vocabulary.

## SKD 085 Preparatory Vocabulary

 3 creditsStudents will acquire vocabulary skills that will increase their speaking, listening, reading, and writing vocabularies. Students will study word parts, pronunciation, dictionary skills, and techniques for vocabulary acquisition and enrichment.
WR 080 English Grammar and Sentence Writing.. $\qquad$ .. 6 credits
Prerequisite: Placement by the LCC reading/writing test or instructor consent, or a grade of C or better in RD080. Students will learn about parts of speech, subject/verb agreement,
pronoun/antecedent agreement, and basic sentence patterns. Also, students will study sentence types, standard punctuation, and rules of capitalization. Students will develop their ability to write standard English sentences that will demonstrate their mastery of these concepts.
WR 089 Academic Writing for ELL Students $\qquad$ 3 credits Department consent required. Corequisite: RD 089 This is a course for English Language Learners. Students will develop sentence, paragraph, and essay writing skills. They will also work on summary writing and personal reaction writing. Students will develop a clearly focused essay with adequate support using sentences without major grammatical error (verb tense, subjectverb agreement, etc.) Course activities may be enhanced through an extended workshop setting, an online module, or a servicelearning component.
WR 090 Paragraph Writing. $\qquad$ .3 credits
Prerequisite: A passing grade in WR080 or WR085B or XESL 0516J or XISL 0516J or WR089, or placement by the LCC reading/writing test, or recommendation of instructor. Students will learn a writing process for writing and revising basic expository paragraphs. In addition, students will practice paragraph structures, development of ideas in a paragraph, and sentence improvement. Students will submit papers using word processing software.

## WR 093 ESL: College Writing

 4 creditsPrerequisite: A passing grade in WR 089 or XESL 0516J or XISL 0516J or WR 090, or placement by the LCC reading/writing test, or recommendation of the instructor. English language learners (ELL students) 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.

WR 095 College Writing Fundamentals 4 credits Prerequisite: A passing grade in WR089 or XESL 0516J or XISL 0516J or WR090 or WR093, or placement by the LCC reading/writing test, or recommendation of instructor. Students will demonstrate control and understanding of the writing process: generate and organize ideas, write drafts, revise and edit paragraphs and multi-paragraph essays. Students will also use critical reading skills to analyze essays and improve their own writing. Students will produce writing that reflects knowledge of advanced grammar skills. Students will submit papers using word processing software. Course activities may be enhanced through an extended workshop setting, an online module, or a service learning component.
WR 105 Writing for Scholarships $\qquad$ .. 2 credits Prerequisite: WR 115 or placement test. This course is part of the "Show Me the Money" Learning Community. Students must coregister with CG 105, "Scholarships: Money for College." The course provides a systematic approach to writing essays required for scholarship applications. It will include frequent writing exercises with extensive revision of drafts to help students learn essay writing strategies, styles, and methods to express themselves clearly, effectively, personally, and genuinely. Assignments will be based on essay topics from the Oregon Student Assistance Commission application. NOTE: This two-credit writing course will not count toward a WR $115 / 115 \mathrm{~W}, 121,122,123$ or 227 writing course.
WR 115 Introduction to College Writing $\qquad$ .4 credits Prerequisite: Appropriate scores on Lane's Writing Placement Test or a passing grade (C- or better) in WR 095 or equivalent. This course emphasizes frequent writing, revision, and editing, to help students learn to express ideas clearly in logically organized essays. It also helps students develop analytic skills, so they can become critical thinkers, readers and writers. 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 fulfills some programs' writing requirements.

## WR 115W Introduction to College Writing:

Workplace Emphasis.
Prerequisite: Appropriate scores on Lane's Writing Placement Test or a passing grade (C- or better) in WR 095 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. Because the course serves as an introduction to college writing, it addresses the analytical and thinking skills essential for success in Writing 121, and fulfills some program writing requirements.
WR 121 English Composition: Exposition \&
Introduction to Argument $\qquad$ .4 credits
Prerequisite: Appropriate scores on Lane's Writing Placement Test or a passing grade (C- or better) in WR 115. This is the fundamental course for all writing students that 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 thesis. Students should understand their subject matter, audience, purpose, and point-of-view, and demonstrate that understanding through the organization and development of their essays. Students should analyze and evaluate other writers' work to sharpen their critical abilities as readers and writers. Because some students may go directly from WR 121 to WR 123, instructors will assign at least one argumentative essay and introduce basic principles of argumentation and research. May be offered through Distance Learning.
WR 122 Composition: Style \& Argument $\qquad$ .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: Exposition and Introduction to Argument, WR 122 Composition: Style and Argument emphasizes the development of argumentation skills and the control of style to suit a variety of writing situations. Both subjects-argument and style-are presented in the context of critical reading and the writing of academic essays. May be offered through Distance Learning.

WR 123 Composition: Research $\qquad$ .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 goals of WR 121 and, in some cases, WR 122, this course emphasizes skills needed to write the 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 through Distance Learning.
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. 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 through Distance Learning.

## WR 240 Creative Nonfiction <br> $\qquad$ 4 credits

Prerequisite: A passing grade of (C- or better) in WR121 or a passing score on the English department's waiver exam or waived based on instructor's evaluation of student writing. This course is designed to introduce students to the genre of Creative Nonfiction, in which they will learn the conventions and techniques of the genre through guided creative writing projects. Students will learn how to implement narrative, back story, pacing, and characterization by reading the work of other students and published authors, whose work will serve as models for the students. The readings will include the various modes of the genre such as autobiography/memoir, personal essay, nature and/or science writing, and literary journalism. Students will produce work shop 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 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 other exercises, peer responses, and a journal. Workshop dicussions are often used along with instructor feedback to guide revision and editing of student stories.

WR 242 Introduction to Imaginative Writing: Poetry .4 credits Prerequisite: A passing grade (C- or better) in WR 121, or a passing score on the English Department's waiver exam, or waived based on instructor's evaluation of student writing. Writing 243 deals with writing poetry. The goals of the course are to help students: 1) learn the elements of poetry; 2) develop an interest in reading poems by well-known poets; 3) develop an interest and ability in writing poems; 4) read and write poems effectively; 5) discover and develop talents; 6) receive constructive criticism of their writing; 7) learn to be confident in their critical evaluations of their peers; and 8) gain a better understanding of themselves and others.

WR 255 Poet in the City. .. 4 credits Prerequisite: A passing grade (C- or better) in WR 121, or a passing score on the English Department's waiver exam, or waived based on instructor's evaluation of student writing. WR 245 is a poetrywriting course that encourages participatory learning through writing poetry in both the classroom and alternative settings throughout the community. This course uses a holistic approach to learning, recognizing the student as a member of a college classroom and an outside community. As students study the form and style of poetry, they will experience poetry emotionally and intellectually. After students write, read, and team-teach poetry in community outreach settings, students will return to the traditional classroom to reflect on that engagement through guided writing assignments.

## WR 280 Co-op Ed: English/Writing

$\qquad$ 3-12 credits
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 will generate learning objectives for the experience, journal progress toward learning objectives and evaluate themselves at the end of the term. Site supervisor will orient, support, guide, provide instruction and evaluate the student's performance. Co-op coordinator will visit site to meet with supervisor, discuss student performance, and do a final evaluation at the end of the term. Meet with the English/Writing co-op coordinator the term before (if possible) to set up the internship.
WR 298 Independent Study: Writing ..1-3 credits A variable credit course based on independent study contracted between an instructor and a student.

## 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 Resouces, and the Multicultural Center. For complete information about these resources see pages 24 through 37.

Registration, Costs and Payment Methods To learn about registration, costs and payment methods for these training opportunities, consult the current class schedule or call the program of interest. For information about credit and refund policies, see page 23 of this catalog.

## Continuing Education

Continuing Education (CE) offers hundreds of noncredit courses each term in career and technical (vocational) training, employment training, computers, consumer/money, art, music, foreign language, home/house/garden, health and health occupations, human development, recreation, outdoor programs, and general interest areas.
CE also offers short-term training and upgrading for a wide range of professional fields. In some cases, students can earn continuing education units, industry certification, or meet state and/or national professional examination preparation requirements. Current noncredit technical trainings available through CE are described in this catalog, Aspire Magazine and the quarterly web class schedule.
Enrollment in most courses is open to any interested person over 16 years of age. A few courses have prerequisites. A list of course offerings and registration information is included in Aspire Magazine, mailed each quarter to area residents. Aspire Magazine also is available on the main campus, at the Downtown Center, at all outreach centers, and at lanecc.edu prior to the beginning of each term.

Tuition and fees for noncredit classes are published in Aspire Magazine and on the web class schedule.

Instructors have expertise in the subjects they teach. People interested in teaching a CE course may contact a coordinator at the CE office at the Downtown Center or call (541) 463-5252.

## Continuing Education Training Programs

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, wordprocessing, and desktop design software, including AutoCAD, web programming, and database creation and application. Many computer trainings are available online.

Massage Therapist Program This program is designed to prepare students to sit for the Oregon State Board of Massage Therapists Certification Exams and has been approved by the Oregon Board of Massage Therapists. The program also provides hours toward continuing education for LMTs. Students must successfully complete required courses of anatomy and physiology, kinesiology and pathology, applied massage,
communication and ethics, professional practices, hydrotherapy, labs and clinical. Contact hours and program content are subject to change. For current information, visit lanecc.edu/ce.

Nursing Assistant This training provides 150 hours of instruction in basic nursing procedures. It includes theory and clinical hours. Upon successful completion, students may sit for the Oregon State Board of Nursing (OSBN) certification exam. A current CPR card is required before applying for the certification exam. The program is OSBN approved. For more information, visit lanecc.edu/ce.
Phlebotomy Upon completion of two courses, Phlebotomy I and Phlebotomy II, and a 120 -hour Cooperative Education clinical placement, 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.

## Real Estate Associate Broker or Property Manager License

The coursework satisfies the State of Oregon requirements for becoming a licensed real estate associate broker. The courses are highly beneficial to persons seeking to become licensed in real estate and to better understand real estate as an investment vehicle to financial independence. For more information, visit lanecc.edu/ce.

Fashion Design This course of study consists of 190 hours of instruction which includes core classes and elective classes. This course trains individuals for entry level positions in fashion design. For more information, visit lanecc.edu/ce.

Jewelry Making and Marketing This course of study consists of 150 hours of core classes and 50 hours of elective classes spread over four terms. Upon completion of this course of study, students will have a comprehensive knowledge of the jewelry industry. For more information, visit lanecc.edu/ce.

## Workshops, seminars, institutes, professional development

Topics include supervisory leadership, project management, workplace communication, business writing, quality improvement, customer service, workplace safety, conflict resolution, team building and many others available by request. These learning opportunities are designed to be easily accessible to working people. They are offered throughout the term, mornings, afternoons, evenings, and weekends in half-day or full-day formats as individual sessions or as ongoing series. For more information, call (541) 463-5252.

## Catch the ExpressLane

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

## Adult Basic and Secondary Education

Lack of basic skills is often a barrier to getting or keeping a job. The ability to read, write and compute at the 9th grade level is now the minimum required for entry-level employment. Higher paying jobs and employment in the 21st century will require higher level basic skills plus new skills such as computer literacy, problem solving, teamwork, and learning to learn.

Admission Requirements All students must be 18 years of age or older, or have a release-referral from the local public school district if 16 or 17 years of age, or have Lane Community College homeschool release and verification of current homeschool registration from ESD. (This applies to in-school and out-of-school youth. The decision to release a student is made by local school district officials in accordance with Oregon Revised Statutes and local school district policy).

Admission Procedures Class locations, orientation and registration information are available in the quarterly class schedule or on the department website at lanecc.edu/abse. For more information, call (541) 463-5214.
Many of the college's academic and student services are available to all students. Examples include Career and Employment Services, Counseling, Disability Resouces, and the Multicultural Center. For complete information about these resources see pages 24 through 37.
Registration, Costs and Payment Methods To learn about registration, costs and payment methods for Adult Basic and Secondary Education, consult the current class schedule or call (541)463-5214.

## Adult Skill Development

Adult Skill Development offers a variety of pre-college level alternatives for adults who need to brush up on basic reading, writing, or math skills for work, college entrance or passing the GED exam.

Class times are flexible and offered during the day and evening in many locations in Lane County. All new students must attend an orientation session.

## General Education Development (GED)

Lane Community College offers classes to prepare teens and adults to take the GED exam. Preparation is offered in all five test areas: social studies, science, reading, writing, and math. The structure of classes differs from location to location and offers a combination of small group instruction, individual attention and practice testing.
The official GED tests can be taken in Testing Services on main campus.

## Core College Connection

Lane's Adult Basic and Secondary Education (ABSE) department provides tuition-free core college classes that will help you:

- Prepare for or improve score on Lane Community College placement tests or the Ability to Benefit test.
- Develop reading comprehension skills and strategies
- Renew or increase math skills
- Develop writing and grammar skills


## Adult Basic Skills Development (ABSD)

ABSD serves adults with special needs. Classes are offered in academics, employment skills and life skills at the Downtown Center.

Registration Students or referring agency should call (541) 463-5945, Monday through Friday, 8 a.m. to 5 p.m. for more information on the admission process.


## English as a Second Language

English as a Second Language (ESL) provides English language instruction for English language learners who need to improve their English skills for work, community, academic, or personal goals. Courses are designed to help students with everyday communication as well as with transitions to work or to other training and academic programs, including credit and noncredit programs in community colleges or universities.

This noncredit program enrolls students from more than 40 different nations, including Asian, Latino, European, and Middle Eastern cultures. All classes are culturally mixed, and all instruction is conducted exclusively in English.

Registration Call (541) 463-5253 for day classes at Main Campus or (541) 463-4935 for evening classes at the Downtown Center, or visit the office in Building 11, Room 201 at 4000 East 30th Avenue, Monday-Friday 8:30 a.m.-4:30 p.m. or 1059 Willamette Street, Room 210, Monday and Wednesday 4-7 p.m. New and returning students must make an appointment to take an English placement test. Placement tests are available at scheduled times both day and evening. There is no minimum skill level for entry to classes.

ESL Classes Instruction includes seven levels of integrated skills ESL classes including a College Transition class, supplementary classes in ESL Reading/Writing, ESL Listening/ Speaking, TOEFL Preparation, and multilevel classes at outreach sites.

Volunteer ESLTutors Enrolled students can be matched with volunteer tutors. Community members may contact Amy Gaudia, (541) 463-5919 to learn more about becoming a volunteer tutor.

International ESL Students (IESL) International students whose TOEFL score is lower than 475 (or 153 on the computer-based test) may be issued an I-20 to obtain a student visa to attend ESL classes. International students are integrated into ESL classes and pay an International Student fee comparable to international student tuition in the credit program. Deadlines to submit applications vary each year but are usually a month prior to the start of each term.

Questions concerning international student admissions should be directed to Jane Marshall, International ESL Admissions, Lane Community College, 4000 East 30th Avenue, Eugene, OR 97405; telephone: (541) 463-3404.

International students on student visas must enroll for a minimum of 18 hours of class per week. Other students in the U.S. on nonimmigrant visas may enroll in ESL classes for a fee on a spaceavailable basis.

## Inglés como Segundo Idioma

(ESL por sus siglas en inglés) proveé instrucción a personas cuya lengua materna es otra que inglés y que necesitan mejorar su inglés para lograr sus metas personales, académicas, laborales y comunitarias. Las clases han sido creadas con el propósito de facilitar la comunicación diaria, además de ayudar a los estudiantes a crecer laboralmente o a entrar a otros estudios y programas académicos, incluyendo programas con o sin valor curricular del Community College (escuela superior) y de universidades.

Este programa sin valor curricular admite estudiantes de más de 40 diferentes naciones, incluyendo Asiáticos, Hispanos, Europeos y del Medio Oriente. Todas las clases son culturalmente combinadas y toda la instrucción es exclusivamente en inglés.

Inscripción Llame al (541) 463-5253 para clases matutinas en el Main Campus o al (541) 463-4935 para clases vespertinas en el Downtown Center. También puede visitar una de nuestras oficinas: Salón 201 del Edificio 11, que se ubica en la dirección 4000 E. 30th Ave (de lunes a viernes de las 8:30 a las 4:30), ó la que se encuentra en 1059 Willamette Street, Salón 210 (de lunes a miércoles de 4 a 7 de la tarde).
Los estudiantes que quieren iniciar clases por primera vez, o los que están regresando a clases después de un tiempo de ausencia, deben hacer una cita para tomar un examen de inglés para colocarse en un nivel. Citas para los exámenes de colocación están disponibles en horas predeterminadas por la manana y la tarde. No hay ningún requisito mínimo de conocimiento de inglés para entrar al programa.

Clases de ESL Se ofrecen siete niveles de inglés, incluyendo una clase de College Transition. También se ofrecen clases adicionales de Comprensión Auditiva y Conversación, Escritura y Lectura, y Preparación para el TOEFL. Así mismo, se ofrecen clases de niveles múltiples de inglés y de que se ubican en sitios más accesibles a la comunidad.

Tutores Voluntarios Los estudiantes generalmente se identifican con los tutores voluntarios. Los miembros de la comunidad pueden contactar a Amy Gaudia al (541) 463-5919 para saber más acerca del entrenamiento de tutores voluntarios.

Programa Internacional ESL (IESL) A los estudiantes internacionales que no han alcanzado una calificación de 475 en el TOEFL (o 153 en el examen por computadora) se les puede dar una forma I-20 para obtener una visa de estudiante y asistir a clases de ESL. Estos estudiantes internacionales son integrados a las clases del Programa Principal ESL y pagan una cuota de estudiante internacional comparable a la Inscripción de los estudiantes internacionales participando en el programa con valor curricular. Las fechas limitadas para entregar las solicitudes varían cada año, pero generalmente son un mes antes de empezar cada trimestre.

Si tiene preguntas con respecto a estudiantes internacionales, debe comunicarse con Jane Marshall, Ingreso de Internacional ESL, Lane Community College, 4000 East 30th Avenue, Eugene, OR 97405; teléfono: (541) 463-3404.

Los estudiantes internacionales con visas estudiantiles deben inscribirse por un mínimo de 18 horas por semana. Otros estudiantes en EEUU con visa no-inmigrante se pueden inscribir en clases de ESL por una cuota en base al espacio disponible.


## El Centro de Mujeres

El Centro de Mujeres de Lane Community College brinda el programa para mujeres "Transiciones". Si tiene interes llame 463-3253.

## Community Services

## Center for Meeting and Learning

This 35,000 square-foot conference and event venue on Lane's main campus features a 6,900 square-foot main event space, high-tech auditorium, breakout rooms, demonstration kitchen, computer training lab, and a spacious lobby with alcoves. The center offers full service, in-house catering focusing on local and seasonal selections and provides Culinary Arts and Hospitality Management students the opportunity to work side-by-side with the center's professional staff in a learning lab environment. Profits from the center help fund a Hospitality Management faculty position at Lane. Booking an event at the center helps support education. The center accomodates campus, community, and regional events of all types. Call (541) 463-3500 to book an event or visit lanecc.edu/cml.

## Community Center for Family Counseling

Counseling and Continuing Education at Lane sponsor the Community Center for Family Counseling, informally known as Saturday Circus. Call (541) 463-5234.

Both credit (CG 211) and noncredit learners (at no charge) can attend parent education/child guidance sessions at the Saturday Circus, 9 a.m. - noon, Saturdays (Thursdays or Fridays in the summer) at Lane's Downtown Center. Participants can view family counseling sessions that illustrate principles and skills for improving relationships with children and participate in exercises and discussion. An advanced class (CG 212 for credit and noncredit learners at no charge) helps participants refine implementation of principles and skills. Childcare for children age three (and out of diapers) through elementary school age is available upon arrangement. Outgrowths of the Saturday Circus are noted below.

- Each term the Improving Parent-Child Relationships telecourse (CG 213) combines real-life, in-home interactions between parents and children with segments of interviews in which a counselor discusses with parents the application for principles and skills for improving relationships. Telesessions are cablecast as well as available at the main campus Library and outreach centers.
- An understanding anger class (CG 214) provides a goaldirected approach for improving self-management and effectiveness in responding to others who express anger.
- In collaboration with the Oregon Society of Individual Psychology, the Saturday Circus offers an Annual Conference on Families. Learners can participate through Continuing Education or as credit students (CG 299).


## English As A Second Language

See page 247.

## KLCC-FM Radio

klcc.org
KLCC 89.7 FM - a listener-supported public radio station licensed to Lane Community College - provides NPR news, local and regional news, and a wide world of intelligent music to over 88,000 people in the Eugene/Springfield area and western and central Oregon. Musical genres include jazz, folk, blues, and world beat. KLCC consistently ranks among the top five public stations in the country for market impact.

Broadcasting 24 hours a day with 81,000-watts of power, KLCC is operated by a professional staff and volunteers from the community. It is funded by the Corporation for Public Broadcasting, Lane Community College, the business community, and the listening audience. KLCC is a charter member of National Public Radio.

## Lane Family Connections

Lane Family Connections is a community-based child care resource. For more information, see page 27.

## Library

The Library provides resources for students, faculty, staff, and community residents. For more information, see page 30 .

## Music, Dance and Theatre Arts

The department presents concerts and performances available to the community. For information, see pages 31 .

## Senior Companion Programs

The Senior Companion Program of Lane County (SCP), is sponsored by the college and is funded in part by the Corporation for National and Community Service.
SCP recruits and trains low-income seniors to work with adults who need extra assistance to live independently. They offer companionship and friendship to to older adults and people with disabilities by assisting with simple chores, providing transportation, and adding richness to their lives. Senior Companions are reimbursed for costs incurred through their service. Companions are assigned to 30 agencies throughout Lane County and every year provide over 60,000 hours of service to over 400 clients. SCP clients receive assistance, and companions benefit from training and meaningful community work. For information, call (541) 463-4630.

## Specialized Support Services

Specialized Support Services $\left(S^{3}\right)$ provides employment training and education to adult students with intensive support needs. $\mathrm{S}^{3}$ operates as a cooperative venture between the college, Lane County Office of Developmental Disabilities, Full Access Brokerage, Mentors Oregon Brokerage, and the State of Oregon's Division of Human Services. S $^{3}$ offers individual and small group instruction that addresses social skill development, on-the-job training, work crew skills in socially integrated settings, competitive employment placement, as well as community inclusion activities to adults with developmental disabilities.
As a means of providing vocational training and actual work experience for its students, $S^{3}$ contracts to provide services to various public and private organizations. Services include confidential shredding, collating and assembling publications, paper recycling, bulk mailings, packaging , small parts assembly, and employee placement with on-the-job training and follow-along support in the employers' workplace. Additional services include janitorial, laundry work, and kitchen crews. $S^{3}$ has a central office on main campus and other jobsites in the community. For information, call (541) 463-3959.

## Business and Workforce Development

Many of the college's academic and student services are available to all students. For complete information about these resources, see pages 24 through 37 .

Registration, Costs and Payment Methods To learn about registration, costs and payment methods for these programs, consult the current class schedule or call the department that offers the program of interest. For information about credit and refund policies, see page 23 of this catalog.

## Business Development Center and Customized Employee Training

The Business Development Center and Customized Employee Training is located at the Wildish Building, 1445 Willamette St., Suite 1, Eugene. Business hours are 8:30 a.m. to 5 p.m., Monday through Friday. Call (541) 463-5255 or visit LaneBDC.com.

The Business Development Center and Customized Employee Training (Lane BDC) provides practical information and a wide range of educational services and resources for business success. Whether assistance is needed with an established business or starting a new one, the BizCenter can help.

## At the Lane BDC, participants can:

- develop business skills in workshops and classes for owners and employees.
- network with other owners and learn proven business practices in one of the center's comprehensive business management programs.
- develop strategies to improve business with the help of a business advisor.
- find assistance in writing business plans and loan proposals and in preparing financials.
- develop your employees through customized trainings.
- find helpful information from the books and literature in the Resource Library.
Lane BDC, founded in 1982, is a member of the Oregon Small Business Development Center Network and is actively involved in the economic development efforts of Lane County and the State of Oregon.


## Services for Small Business Owners

A combination of one-to-one and classroom instruction, peer sharing, and lab hours provides an opportunity for business owners to learn new skills, improve existing ones, and learn from peers' real-life experiences, as well as from experienced business owners presenting in class. A Resource Library is available with reference resources, handouts, business magazines, and research information to assist business owners with research.

## Develop Strategies with Business Development Center Advisors

- Free In-person Business Advising Business advisors are available, by appointment only, to help business owners develop strategies for improving their business. Professional, confidential advising services for new and established businesses are no cost to the client and underwritten by the SBA, the State of Oregon Economic and Community Development Department, and Lane Community College. For start-up business owners, we suggest the First

Steps in Business and/or Going Into Business before receiving free business advising. Find solutions for many business questions through our advising, resources, and referrals.

- Online Business Advising

For those who can't get away, online advising is available at LaneBDC.com/client_intake.htm, where an advisor will contact you as soon as possible.

- Technology and Innovation Business Advising Advising for technology- or innovation-based firms is available to assist with business development, strategic planning, and product development processes. Call (541) 463-5255 for an appointment, or visit bizcenter.com to sign up for free advising at the center.


## Classes and Workshops for Business Owners

Classes and workshops are designed to provide the business owner with strategies and practical skills necessary to operate a successful business. What is learned in class tonight can be used tomorrow. Start-up through advanced topics include first steps in business, going into business, planning, financial management, marketing, business software applications, and more. Offerings (classes, workshops, and online courses) vary each term. To receive more information, visit LaneBDC.com, or call the center for a schedule.

## Early Stage Entrepreneurial Training and Business Start-up Strategies

Going Into Business: Next Steps in Business This class covers the A-Zs of owning and operating a small business. It teaches business start-up fundamentals necessary for a solid beginning. Business advising is provided after the class is completed. Visit LaneBDC.com, or see the class schedule for details.

## Small Business Management Year I: Foundations (SBM I)

The first year of the Small Business Management Program Year I: Foundations is segmented into 3 modules to focus on the critical basics. Marketing, Finance, and Operations modules deliver real business results through a combination of interactive learning and one-on-one advising. The goal of the program is having each business leave each module with a plan they can execute. Modules consist of five evening classes with a mixture of lecture, guest speakers, group discussion, and activities. The one-on-one coaching in SBM I is designed to fast-track implementation of key concepts, and provides the small business owner with access to a professional business consultant who is available to help them improve their business.

For more information and an application for the SBM I program, contact smithge@lanecc.edu or call 463-4614.

## Business Management for the Business Owner

Lane BDC currently offers business owners on-site business advising and an interactive class environment, which allow for networking with other business owners/managers.

## Small Business Management Year II: Systems (SBM II)

The Small Business Management program is a unique combination of 10 monthly classroom sessions and one-on-one personal coaching in which your business is the textbook. SBM II is focusing on growing the business through understanding, creating, and implementing systems within the business. This year of the program is designed for those businesses looking to expand into having employees or who already have a nonownership workforce. Class topics include: Strategic Planning: Plan/Do/Check/Act, Introduction to the E-Myth, Systems Thinking, Performance Reviews and Evaluations, CRM Systems and Solutions, Process Creation and Documentation, Financial Statement Strategies, Marketing: Systems, Leadership and Ethics, and class customized topics.
Acceptance into the program is based on an evaluation of the business by the instructor with businesses having completed the SBM I program having first preference. Classes start in the fall with open enrollment possible with instructor approval. For more information and registration, please contact 463-4614 or smithge@lanecc.edu.

## Small Business Management Year III: Advanced Concepts (SBM III)

Building on the SBM I and SBM II years, this series explores a variety of more advanced concepts. Continuing the unique combination of 10 classroom sessions and one-on-one personal coaching, businesses work on mastering the earlier concepts while fine tuning their operation with the new material. SBM III is designed for those businesses that have completed the Small Business Management: Systems series. During the tenth session qualified third-year business owners will receive a certificate of recognition.Class topics include: Workplace Profiles, Facilitation Skills, Sales Management, Board of Directors, Sustainability, Job Costing, Budgeting Processes, Risk Management, Exit Strategies, and customized topics
Classes start in the fall with open enrollment possible with instructor approval. For more information and registration, contact smithge@lanecc.edu or call 463-4614. - Smith

Agricultural Business Management In partnership with Oregon State University and Lane County Extension Service, Farm Business Management services are intended for full-time or part-time farm operators and managers. Designed to help achieve business and family goals through improved farm management and organization, this comprehensive and practical approach to farm management combines classroom training with on-site visits and advising. The curriculum includes classroom sessions once a month and individualized horticultural and business management appointments with instructors to provide personalized and confidential application of classroom topics.
Non-Profit Management This program was created to help build sustainable non-profit organizations through better business practices. Executive directors, board members, and staff learn to focus time, energy, and funds to bring optimal benefits to stakeholders. The program includes course work, group networking and mutual problem solving, and on-site
visits with a business advisor.

## eDev (Lane MicroBusiness)

eDev is a nonprofit organization offering business development services to individuals and communities. eDev also offers a $\$ 3$ -to- $\$ 1$ matching grant to low-income entrepreneurs. Please visit www.edev.org or contact Leah Murray, program coordinator, at 463-4619 for information on classes, schedules, and services.
Advanced Leadership and Business Communications Management Program (ALBCM), This program is designed to help develop advanced leadership and communication skills and is an open enrollment program allowing entry at any time in the year. ALBCM is based on the proven Toastmaster business communications curriculum with the addition of a leadership track, coaching, and mentoring. Call 463-5255 for information and costs. The program meets at the Wildish Building from noon -1 pm , every Monday except when college is closed.

## Sustainable Business Management Program Climate Masters at Work

You can take action to save money by reducing your business's carbon footprint in a class that will more than pay for itself in savings.
The training will provide: practical strategies for lowering expenses and reducing emissions through efficiency in facilities, packaging, materials selection, transportation, and more; financing leads for money saving resources, keys to developing a greenhouse gas emissions inventory and action plan, support with implementation, intern assistance from trained LCC Energy Management students, climate change basics, five months of follow up with LCC's Business Development Center, including an implementation focused class each month and one-on-one advising. Receive 20 hours of low-cost training in exchange for 20 hours of internal cost-savings work.
Sponsored by: University of Oregon Climate Masters, Meyer Fund for Sustainability in Education, Eugene Water and Electric Board, Environmental Protection Agency, City of Eugene; Eugene Chamber of Commerce, Springfield Chamber of Commerce, Oasis, and Lane Community College Business Development Center.
For more information and registration contact
climlead@uoregon.edu, (541) 346-0786,
http://climlead.uoregon.edu

## Innovation Business Management Program

This 10 -month program covers getting your invention or innovation to market from both manufacturing and marketing perspectives. Curriculum includes design, materials selection, prototyping, manufacturing, order fulfillment, marketing, sales, licensing and patenting. Program includes monthly classroom sessions with guest speakers, networking with other innovators as well as individual advising, and instruction about financial viability analysis, planning and developing the business of your innovation. New group starts in the fall with open enrollment all year. Contact Gene Hamacher, coordinator/instructor, at
(541) 463-4623 or hamacherg@lanecc.edu.

## Customized Employee Training

Employee Training Services Available Lane offers any kind of training a public or private organization may need. We customize learning experiences to help local businesses and agencies, from start-ups to established enterprises, meet specific employee-learning needs.
Each course, workshop, skills session, hands-on practicum, training series, or one-time presentation is tailored specifically to fit the firm. Because we plan and deliver content and instruction that is affordable and can be used to improve employee performance, a firm saves time and money in expanding their employees' skills, while increasing employee morale and efficiency (thereby decreasing the rate of employee departures or "churn").
A company can also take advantage of our services at its worksite, through our mobile computer lab, on our campus, or at any other convenient site. We can present trainings in any format, in person, online, and by other communications transmission modes. We can design course content to include role-playing and practical competency-testing, or we can bring a simple dog-and-pony show for quick and timely employment needs.
Examples of trainings we can design and deliver range from computer and office support (Microsoft and other software, programming and operating languages, CAD, and network certifications), to customer service, leadership development, and business and professional communication skills. Industryand manufacturing-specific courses, as well as equipment- and tool-use trainings, can be designed and delivered to fabricationand production-driven businesses. And, we provide trainings based on "best practices" in sales, business development, marketing, and human relations applicable to all organizations. In addition, we offer both noncredit and credit-pathway courses, so employees can "try out" career skills and job proficiencies on a one-time basis, earn a professional certificate, or earn credit applicable to a degree, should they so desire.

## SkillSoft e-Learning

Develop training programs to meet your company's growing needs through e-learning from SkillSoft. By delivering training online, employers can reach their employees wherever they are and at a lower cost than classroom training. With online courses from SkillSoft, everything is included for formal training and instant problem solving. SkillSoft covers the full range of training needs with the largest library of online courses in the world. For information, contact (541)463-4615.

Mobile Computer Lab The college also can provide a classroom on wheels. This 40 -foot vehicle is equipped with nine desktop computer training stations, a laser printer, a network server, and the latest software to help meet the computer training needs of most organizations. Lane can schedule the Mobile Computer Lab for any time, for any shift, at any convenient location.

Call (541) 463-5255 for a free training needs assessment appointment and to schedule customized trainings.

## Workforce Development

The Workforce Development Department is a grant funded department that administers three different programs.
The Workforce Network The Workforce Network, located in Building 19, Rooms 260-284 is the delivery of workforce development services to adults and dislocated workers in Lane County through a One-Stop career center system. The goal is twofold: 1) to assist with individual job search activities and 2) to help build a skilled and educated workforce that can meet the needs of the contemporary workplace.
The Workforce Network utilizes a consortium approach and is an alliance with the following Lane County organizations:

- Department of Human Services
- Lane Community College
- Lane Workforce Partnership
- Oregon Employment Department
- Vocational Rehabilitation Services

The Workforce Network provides state-of-the-art resources for the community through the following no-cost services.

## Businesses

- qualified, pre-screened job applicants for open positions
- assistance with out-placements, if necessary
- opportunity to use Lane facilities for interviewing

Job Seekers and those facing lay-offs

- skills assessment
- career exploration
- skill upgrading
- resume preparation
- job search strategies
- job search workshops
- information on the local labor market and job openings
- information on community resources
- internet access to employment and training resources
- community voice mail
- individualized and group support

The no-cost services are available to anyone seeking career advancement. Job search workshops are scheduled regularly. Employers and job seekers are both encouraged to call (541) 463-5223 to access services.

The Progress Program The staff provides enhanced retention and advancement services to newly employed TANF clients and are stationed within the local Department of Human Services offices. For information, call (541) 463-5877.
The Welfare Reform JOBS program This program is administered through Workforce Development in partnership with the Department of Human Services. Services include:

- job search skills, job readiness, work experience and retention for Welfare recipients in the Florence and Reedsport area. Employers are encouraged to call (541) 686-7786, ext. 253 with job openings. The program will provide confidential applicant screening and refer qualified candidates.
- parenting, life skills, educational assessment, GED preparation through Lane Community College for teen parents in Cottage Grove. For information, call
(541) 463-4218.


## 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.


Paul Holman, associate broker, Florence, appointed December 2002, elected May 2003, re-elected May 2005, term expires June 30, 2009
Zone 1-Western part of college district


Tony McCown, college access coordinator, Eugene, elected May 2007, term exires June 30, 2011
Zone 2-Northern part of college district


Pat Riggs-Henson, employment specialist, Springfield, elected May 2005, term expires June 30, 2009
Zone 3-Marcola and Springfield part of college district


Susie Johnston, conference planner, Pleasant Hill, elected May 2005, term expires June 30, 2009
Zone 4-Eastern part of college district


Pat Albright, retired teacher, Eugene, appointed April 2007, elected May 2007, term expires June 30, 2011
Zone 5-Central Eugene part of college district


Roger C. Hall, radiologist, Eugene, elected March 1991, re-elected March 1995, re-elected March 1999, re-elected May 2003, re-elected May 2007, term expires June 30, 2011 At-Large-Position 6


Robert Ackerman, attorney, Eugene, elected July 1965, re-elected March 1969, elected July 1999, elected May 2007, term expires June 30, 2011
At-Large-Position 7

## Administration

The college is administered by the president, under authority delegated by the Lane Community College Board of Education, with assistance from vice presidents, executive deans, division deans, and directors.

- Mary Spilde, President; at Lane since 1995. Ph.D. Oregon State University; M.Ed. Oregon State University; B.S., L.L.B. University of Edinburgh
- Sonya Christian, Vice President for Academic and Student Affairs; at Lane since 2003. Ph.D. University of California; M.S. University of Southern California; B.S. University of Kerala, India
- Greg Morgan, Chief Financial Officer; at Lane since 2006. M.S. University of Southern California; B.S. Brigham Young University
- Dennis Carr, Chief Human Resource Officer; at Lane since 2003. M.S.I.R. University of Oregon; B.S. Hiram College


## Emeriti

The late Dr. Eldon G. Schafer was named president emeritus by the Board of Education in 1985. Dr. Schafer served as Lane president from 1970-85.

Dr. Dale Parnell was named president emeritus by the Board of Education in 2004. Dr. Parnell was Lane's founding president and served from 1965-68. He became a national leader in the community college movement.

## Oregon State Board of Education

As one of Oregon's 17 publicly supported community college districts, Lane operates under the general direction of the Oregon State Board of Education.

- Jerry Berger, Salem
- Leslie Shepherd, Hammond
- Brenda Frank, Klamath Falls
- Artemio Paz, Jr., Springfield
- Nikki Squire, Bend
- Duncan Wyse, Portland
- Lewis Frederick, Portland

State Department of Education administration includes:

- Susan Castillo, State Superintendent of Public Instruction
- Cam Preus, Commissioner, Department of Community Colleges and Workforce Development


## Lane Community College Budget Committee

The Budget Committee analyzes the administration's annual budget proposal. The 2009-2010 Budget Committee includes the Board of Education and the following members:

- Rick Yecny, term expires 2009, Peace Health financial officer, Florence
- Stefan Ostrach, term expires 2009, Union Representative, Springfield
- Marsten Morgan, term expires 2009, Architect, Cottage Grove
- Carmen X. Urbina, term expires 2010, school district family and community coordinator, Eugene
- Chris Matson, term expires 2010, Marketing and Political Consultant, Eugene
- Dennis Shine, term expires 2008, retired college instructor, Springfield
- Rayna Luvert, term expires 2011, Senior Outreach Coordinator, Eugene


## Advisory Committees

More than 600 volunteers are appointed by the Lane Community College Board of Education to 45 advisory committees. These committees offer advice and assistance to instructional programs, enabling the college to tie its programs closely to current practices in the world of work and to employment opportunities.

All of the college's career and technical programs, as well as most noncredit programs, have advisory committees. The college also has advisory committees for programs and services such as KLCC, English as a Second Language, and Small Business Management.

The Career and Technical Education Coordinating Committee provides oversight for all advisory committees.
Members of the advisory committees may change during the year. Current lists are managed by the Office of Academic and Student Affairs.

## Lane Community College Foundation

The Lane Community College Foundation raises and invests funds for scholarships, programs and capital needs.
Program support The state provides only a portion of the funding necessary to support instructional programs. Gifts from individuals and businesses strengthen Lane's ability to provide education and career training to nearly 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, please pick up a brochure in the Counseling office or check on-line.
## Staff

For fall term 2008, Lane employed 1,001 full- and part-time faculty and staff. A list of contracted and part-time instructional staff follows.


## Full-Time Instructional Staff

## Academic Learning <br> Skills/ESL/Tutoring

Lindsley, Catharine D. department chair; B.A. Lewis \& Clark Col.; Ed.M. Oregon State Univ.
Coleman, Liz E. B.A. Univ. of Oregon
Gayle-Reddoor, Susan C. B.A. Univ.Calif Riverside; M.A. Univ.Calif Riverside
Johnston, Stephen D. B.A. Univ.Mass Boston; M.A. Univ. of Oregon
McKenzie, Judith C. B.A. Evergreen State Col.; M.A. Goddard Col.

McQuiddy, Stephen J. B.A. Univ. of Oregon; M.F.A. Univ. of Oregon

Mitchell, Adrienne C. B.A. Univ. of Oregon; M.A. Univ. of Oregon; M.Ed. Univ. of Oregon
Pray, Elaine V. A.A. Canada Col.; B.A. San
Francisco State Univ.; M.A. San Diego State Univ.
Simoni, Cristina L. B.A. Mills Col.; M.A. Univ. of Oregon

## Adult Basic and Secondary Education

DeWolf, Dawn B. division dean; B.S Montana State Univ.Billings; M.Ed. Oregon State Univ.
Clark, Dennis S. B.S. Univ.Wisc Oshkosh; M.S. Univ. of Oregon

Foust, Mary E. B.S. Univ. of Oregon; M.A. Oregon State Univ.
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; Teachng Engl Speakr Othr Lang; Elem Education Teaching Cert
Lamoreaux, Alice A. B.A. Univ. of Oregon;
M.S. Univ. of Oregon

O'Brien, James S. B.S. Univ. of Oregon
Pardew Grutta, Christine E. B.A. McDaniel Col.; M.A. Univ. Maine Orono
Simon, Michael F. B.A. Westrn Illinois Univ.; M.A. Westrn Illinois Univ.

Whitenack, Alice A. B.S. Univ. of Oregon; M.S. Univ. of Oregon

Young, James K. B.A. Rice Univ.

## Advanced Technology

Bergen, Dean E. A.S.E. Master Cert.; I.C.A.R. Instr. Cert.; Glasurit and Diamont Refinement/Collision Rep. Shop Management and Establishment; John Bean Steering and Suspension Cert; Chart Frame Equip Cert; Journeyman and Shop Manager
Bridges, Jon H. B.A. St Marys Col. Ca; FAA Private Pilot Single Land; USAF Flight Engineer C5/C130
Clark, Alan B. A.S. Lane Community Col.; CAT/Cummins/Detroit Eaton Svc; Journeyman; ASE Cert Master, Truck

Croker, Paul C. Interim department dean U.S.A.F. Cert. Mechanical Accessories Equip.; Environmental Systems Repair Cert.; L.P. Gas Cert.; A.S.E. Master Cert. Technician; Master Cert. RV Technician
Hill, Allen D. Dipl. Lincoln Tech InstPennsauken; C.E.R.T.1. Santa Monica Col.; A.A. Santa Monica Col.; Journeyman Machinist
Huntington, Mark M. C.E.R.T.1. Pinellas Tech Ed Ctr-Clearwate; M.S. Eastern Washington Univ.
Keen, Leonard R. Member of Assoc. of General Contractors of Oregon; State of Oregon Carpenter Apprenticeship Program; Journeyman
Kimball, Daniel G. I.C.A.R. Inst. Cert.; 3M Systems Auto Refinement/Collision Rep. John Bean Steering and Alignment Cert.; SHARK Laser Cert.; Binks Spray Finishing Cert.; Journeyman
Laskey, Al A.S. Lane Comm Col; Welding Technology; CPIM American Production and Inventory Control Society; CWI American Welding Society; CWE American Welding Society; SMAW, GTAW, GMAW, FCAW Certified; Journeyman, Operations Manager, Business Owner
Mathers Kelly Universal Technical Institute Automotive graduate; ABK nomination; ASE master certified; All Data certified; EPA 609 license; Ford customer service certificate; Indentifix certified
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

## Art Division

Williams, Rick R. department chair; B.S.J. Univ. of Texas - Austin; M.A. Univ. of Texas Austin
Bird, Jeffery S. B.S. Col. St Rose; M.F.A. Univ.Mass Amherst; M.A. Suny Coll Oswego
Grosowsky, Adam B.A. Evergreen State Col.; M.F.A. Univ.lowa; M.A. Univ.Iowa

Hughes, Teresa B. B.S. Univ. of Oregon Imonen, Lee C. B.A. Willamette Univ.; M.F.A. Univ. of Oregon
Keene-Wilson, Meredith A. A.A. Orange Coast Col.; A.A.S. Lane Community Col.
Lowdermilk, Susan K. B.F.A. Colorado State Univ.Ft Collins; M.F.A. Univ. of Oregon
Motouji, Satoko B.A. Univ. of Oregon; B.A. Ritsumeikan Univ; M.F.A. Univ.Mass Amherst

Rohr, Thomas B.S. Univ. of Michigan; M.F.A. Louisiana State Univ.
Rubick, Thomas M. B.A. Calif St Univ.Long Beach; M.A. Kent State Univ.Kent
Salzman, Andreas B.S. Univ. of Wisconsin; M.F.A. Univ. of Minnesota Twin Cities

Simms, Merrick L. B.A. Calif St
Univ.Hayward; 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

## Athletics

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

## Aviation Academy

Bird, Keith D. A.S. Lane Community Col.; FAA Inspection Authorization; FAA Airframe and Powerplant
Gustafson, Bruce L. B.A. Univ. of Oregon; FAA Transp Pilot Mulit Land; FAA Ground Instructor Advanced; FAA Instructor Single Engine; FAA Ground Instructor Instrum; FAA Transp Pilot Single Land; FAA MEI (Multiengine Instruct); FAA Flight Instructor, CFII
McGlynn, Brian J. B.A. Loyola Marymount Univ-Los Angl; M.P.A. Univ.Southern California; FAA Mechincal Examiner; FAA Airframe and Powerplant; FAA Inspection Authorization; FAA Private Pilot Single Land
Povenmire, Harlo K. B.A. San Diego State Univ.; M.S. Univ.Illinois Urbana; FAA Ground Instructor AI; FAA Comm Pilot Glider; FAA Flight Instructor AIMG; FAA Transport Pilot ASMEL

## Business

Culver, Christopher D. B.S. Univ. of Oregon; M.B.A. Univ. of Oregon; Certified Public Accountant
Grant-Churchwell, C. B.S. San Jose State Univ.; M.S. San Jose State Univ.
Kimble, Sharon R. B.S. Westrn Carolina Univ.; M.Ed. Westrn Carolina Univ.
Maitland, Laura A. B.S. James Madison Univ.; M.Ed. Western Oregon Univ.
O'Rourke, Kaaren B.S. Portland State Univ.; M.B.A. Portland State Univ.; M.S. ECommerce National Univ
Paschall, Annie C. B.A. Duke Univ.; M.S. Univ.Missouri Columbia; Certified Public Accountant

## Business Development Center and Employee Training

Lindly, James L. department chair; B.S. Univ. of Oregon; M.B.A. Univ. of Oregon; Charterd Prpty Casualty Undwtr; Cisco Certified Design Assoc

## 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
Stermer, Julianne L. B.A. Portland State Univ.; M.A. Washington State Univ

## Computer Information Technology

Williams, Mark P. department chair; B.A. Univ. of New Mexico-Albuquerque; M.S. Univ.of New Mexico-Albuquerque
Bailey, James L. B.S. Oregon State Univ.; M.S. Brigham Young Univ.Utah; Ph.D. Oregon Health Sci Univ.
Bricher, Gary P. B.S. Univ. of Oregon; B.S. Univ. of Oregon; M.S. Univ. of Oregon; Cisco Certified Network Assoc
Good, Marilou B.S. Univ.Minnesota Minneapolis; M.S. Univ. of Oregon
Little, Ronald K. B.S. Montana State Univ.Bozeman; M.S. Portland State Univ.
Loft, Linda L. B.A. Univ. of Oregon; M.S. Univ. of Oregon
Ross, Gerald J. B.A. Suny Buffalo; M.A. Univ. of Oregon; Teacher Corps Graduate

## Cooperative Education

Brokaw, Thomas R. A.A.S. Lane Community Col.; Oregon EMT Paramedic; NAEMT Prehospital Trauma LS In; Advanced Life Support Instruct; CPR Certified
Candee, Stephen M. B.S. Univ. of Oregon; M.S. Univ. of Oregon

Clemons, Marvin L. B.S. Univ.Wisc Waukesha; M.S. Univ. of Oregon; Sec Principal/Superintendent
DelNero, John E. B.A. Calif St Univ.Hayward; M.A. Univ. of Oregon; M.S. Univ. of Oregon

Driscoll Norma L. A.S. Lane Com. Col.; B.S. Linfield Col. McMinnville; R.R.T.R.C.P.
Fike, Charles E. B.A. Northwest Christian Univ.
Gaul, Shannon I. B.A. Adrian Col.; M.Ed. Univ.Toledo; Licensed MassageTherapist
Gribskov, Laurie S. interrum division dean B.S. Univ.Calif Los Angeles; M.S. Univ. of Oregon; Ph.D. Univ. of Oregon
Harcleroad, Jeanne B.S.N. Univ. of lowa; M.S.N. Univ. of California, San Francisco Registered Nurse
Hughes, Teresa B. B.S. Univ. of Oregon
Kelsch, Jamie L. A.A.S. Lane Community Col.; A.G.S. Lane Community Col.; B.S. Linfield Col.
McCully, Joe B.S. Univ. Denver; International Univ. cert. Hospitality Educator, AHM
Oldham, Garry A. B.S. Univ. of Oregon; M.S. Univ. of Oregon
Pinkas, Tamara L. B.A. Univ.Calif Santa Cruz; M.S. Univ. of Oregon

Pittman, Martha E. A.A.S. Regents Clg-Univ. State of Ny; C.M.A.; Registered Nurse
Rubick, Thomas M. B.A. Calif St Univ.Long Beach; M.A. Kent State Univ.Kent
Scott, Lawrence R. B.S.C. Univ.of Victoria Canada; B.S.C. Univ.of Victoria - Canada; M.A. Antioch Univ-Yellow Springs

Stermer, Julianne L. B.A. Portland State Univ.; M.A. Washington State Univ
Thompson, Susan J. A.A. Los Angeles City Col.; B.A. Calif St Univ.Los Angeles; M.A. Calif St Univ.Los Angeles
Watrous, Merrill K. B.A. Scripps Col.; B.A. Occidental Col.; M.Ed. Santa Clara Univ.
Wearne Dorothy R. B.S. Univ. of Oregon; M.S. Univ of Oregon

Weiss, Doug O. A.A. Palomar Col.; A.S. Schoolcraft Col.; CET Intl Society of Elect Tech

## Counseling

De Leon, Jerry F. department chair; 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
Blood, Timothy L. B.S. Albion Col.; M.S. Univ. of Oregon
Ganser, Debra J. B.S. Univ. of Oregon; M.S. Univ. of Oregon; National Certified Counselor
Hampton, Anthony A.A. Chabot Col.; B.A. Univ.Texas Pan American; M.Ed. Univ.Texas Pan American
Harris, Mark C. B.A. Sonoma State Univ.; M.A. Sonoma State Univ.

Landy, Beth S. B.S. Cal Poly - San Luis Obispo; M.S. Univ. of Oregon; Career Dev Facilitator Inst; National Certified Counselor
Litty, Carolyn L. B.S. Univ.Calif San
Francisco; M.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
Parthemer, Mary S. department chair; A.A.S. Whatcomm Community Coll; B.A. Western Washington Univ.; M.S.W. Arizona State Univ.; LicensedClinical Social Worker
Salter, Christina L. B.A. New Clg -
Univ.South Florida; M.S. Univ. of Oregon; National Certified Counselor; Cert Licensed Prof Counselor
Siegfried, Juliana 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.Hayward

## Culinary Arts and Hospitality

Aherin, Lisa PhD. Univ. of Idaho; MA. Col. of Santa Fe
Crosthwaite, Chris Diploma, Southern Alberta Institute of Technology; Comm Col Instructional Cert, Lethbridge Col/Univ of Lethbridge; Certified Chef de Cuisine, Canadian Culinary Institute; Cert. Executive Chef; Cert. Culinary Educator, ACI
McCully, Joe B.S. Univ. of Denver; M.S. Florida International Univ; Cert Hospitality Educator, AHM
Wanstall, Clive B. Dipl. Thanet Technical Clg; Cert Cookery London Inst; Cert Basic Cookery London Inst; Cert Executive Chef, ACF

## Employee Wellness Program

Simmons, Wendy S. B.A. Univ.Calif Irvine; M.S. Univ. of Oregon; Licensed Massage Therapist; Cert Wellness Coach

## English as a Second Language

Lindsley, Catharine D. department chair; B.A. Lewis \& Clark Col.; Ed.M. Oregon State Univ.
Bakshi, Indira M. B.S. Purdue Univ.West Lafayette; M.A. Univ. of Texas Austin

Henninger-Willey, Tracy L. B.A. Northwstrn Col. Ia; M.A. Univ.lowa
Johnson, Norman A. Dipl. Regent Clg Br Columbia; B.A. Seattle Pacific Univ.; M.A. Univ. of Oregon
Seifert, Christine A. B.A. Univ.Calif Davis; M.Ed. Oregon State Univ.

Todd Le Douarec, Annick M. B.A. Univ. of Oregon; M.A. Univ. of Oregon; M.B.A. Univ. of Phoenix

## Florence Center

Purscelley, Robert R. department chair; A.A. Lane Community Col.; B.S. Univ. of Oregon; M.S. Univ. of Oregon

## Health and PE

Bates, Rodger D. division dean; B.S. Boise State Univ.; M.Ed. Oregon State Univ.
Cousar, Susie J. B.A. Calif St Univ.- Chico; M.S. Oregon State Univ.; First Aid Instructor Cert
Gaul, Shannon I. B.A. Adrian Col.; M.Ed. Univ.Toledo; Licensed Massage Therapist
Hastie, Marisa L. B.S. Gonzaga Univ.; M.S. Univ. of Oregon
Herbold Sheley, Sharrie A. B.A. Calif St Univ.- Chico; M.A. Calif St Univ.- Chico
MonDragon, Sean E. B.S. Calif St Univ.Hayward; M.S. Calif St Univ.Hayward
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; Licensed Massage Therapist; Cert Wellness Coach
Thompson, Susan J. A.A. Los Angeles City Col.; B.A. Calif St Univ.Los Angeles; M.A. Calif St Univ.Los Angeles
Weissfeld, Lynne R. B.S. Univ. of Oregon; M.S. Univ. of Oregon

## Health Clinic

Arbuckle, Kathleen M. B.A. Oregon State Univ.; B.S.N. Oregon Health Sci Univ.; M.N. Oregon Health Sci Univ.; Registered Nurse; F.N.P.

Kilmer, Dorothy O. B.S.N. Univ. of Utah; M.N. Univ. of Utah; F.N.P.

Wilkes, Nadine D. A.A. Univ.Kentucky Lexington; B.S. Univ.St Francis II; Registered Nurse

## Health Professions

Batterson, Jane L. A.A. Univ.of South Dakota-Vermillio; B.S. Univ. of Oregon; M.Ed. Oregon State Univ.; Registered Dental Hygenist
Blickle, Thomas P. A.A.S. Portland Community Col.; B.A. Univ. of Oregon; M.S. Oregon Health Sci Univ.; Cert Hospice \& Palliative Care; Registered Nurse
Brokaw, Thomas R. A.A.S. Lane Community Col.; Oregon EMT Paramedic; NAEMT Prehospital Trauma LS In; Advanced Life Support Instruct; CPR Certified
Canale, Suzanne B.S.N. Plattsburgh State Univ.; M.S. Univ. of Oregon; M.N. Oregon Health Sci Univ.; Registered Nurse

Clark, Leslie W. A.A.S. Clark Col.; B.S. Concordia Univ. Or; M.Ed. Concordia Univ. Or
Cummins, Michelle R. A.A.S. Lane
Community Col.; B.S. Oregon Institute of Technology; Registered Dental Hygenist
Driscoll, Norma L. A.S. Lane Community
Col.; B.S. Linfield Col.; R.R.T.; R.C.P.
Erickson, Abby M. A.A. Lane Community Col.; B.S. Univ.Evansville
Garner, Annette B.S.N. Univ.Akron; M.S.N. Case Western Reserve Univ; A.H.A.; G.S.N.
Hagan, Sharon S. B.S. Idaho State Univ.; M.S. Westrn Kentucky Univ.; Registered Dental Hygenist
Hancock, Marlene R. B.S. Calif St Univ.Sacramento; M.S.N. Vanderbilt Univ.
Harcleroad, Jeanne; B.S.N. Univ of lowa; M.S.N. Univ of California, San Francisco; Registered Nurse
Kavanaugh, Rita S. A.A.S. Diablo Valley Col.; B.A. Calif St Univ.Hayward; Registered Dental Hygenist; Bilingual Spanish/English
Killen, Janet L. A.S. Grossmont Cmty Col.; A.A.S. Saddleback Col.; B.S.N. Oregon Health Sci Univ.
Lynch, Mary Lou L. B.S.N. Mount St Marys Coll Chalon; M.N. Oregon Health Sci Univ.; Registered Nurse
McCready, Douglas C. A.S. Lewis \& Clark Col.; M.N. Univ. of Utah

## McCugh, Margerat

McDonald Shari
Miller, Denise K. B.S.N. Pacific Lutheran Univ.; M.A.T. Evergreen State Col.
Naylor, Elizabeth H. B.A. Univ.Colorado Boulder; M.S. Univ.Wisc Stout/Menomonie; Registered Dietician
Nearing, Francine B.S.N. O.H.S.U.; M.S.N. Indiana State Univ.; RN

## Novicky, Elizabeth

Pittman, Martha E. A.A.S. Regents ClgUniv.State of Ny; C.M.A.; Registered Nurse
Powell, Tamberly M. M.S. Oregon State Univ.
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## *Lane

Community College ${ }^{\text {w }}$
ACHIEVING DREAMS

## LANE PROVIDES COURSES

## FOR EVERY KIND OF DREAMER

# Pre-Chiropractic 

 Women's StudiesArt ${ }^{\text {Aght Tachnology }}$
Welding ethnic Studies thergy Management Psychology Accounting Human Services
Environmental Science Biology Drofting Graphic Design Automotive Technology Culinary Arts


[^0]:    *These offices and facilities also can be reached during evening hours.

[^1]:    H Meets Human Relations/Social Science requirement
    M Meets Mathematics requirement
    P Meets PE/Health requirement
    R Required for AAS degree-see page 48
    S Meets Science/Math/Computer Science requirement
    W Meets Written Communications or English Composition requirement

[^2]:    Standard footnotes:

    * Prerequisite required

    A Meets Arts/Letters requirement
    B Must be passed with grade of "B-" or better to use as a prerequisite
    D Degree or certificate requirement; must be passed with grade of "C-" or better
    G Must be taken for a grade, not P/NP; major requirement

[^3]:    H Meets Human Relations/Social Science requirement
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    W Meets Written Communications or English Composition requirement

[^4]:    Standard footnotes:

    * Prerequisite required

    A Meets Arts/Letters requirement
    B Must be passed with grade of " $\mathrm{B}-$ " or better to use as a prerequisite
    D Degree or certificate requirement; must be passed with grade of "C-" or better
    G Must be taken for a grade, not P/NP; major requirement

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    R Required for AAS degree-see page 48
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    W Meets Written Communications or English Composition requirement

[^7]:    Standard footnotes:

    * Prerequisite required

    A Meets Arts/Letters requirement
    B Must be passed with grade of " $\mathrm{B}-$ " or better to use as a prerequisite
    D Degree or certificate requirement; must be passed with grade of "C-" or better
    G Must be taken for a grade, not P/NP; major requirement

[^8]:    H Meets Human Relations/Social Science requirement
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    P Meets PE/Health requirement
    R Required for AAS degree-see page 48
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    W Meets Written Communications or English Composition requirement

[^9]:    H Meets Human Relations/Social Science requirement
    M Meets Mathematics requirement
    P Meets PE/Health requirement
    R Required for AAS degree-see page 48
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    W Meets Written Communications or English Composition requirement

[^10]:    Standard footnotes:

    * Prerequisite required

    A Meets Arts/Letters requirement
    B Must be passed with grade of "B-" or better to use as a prerequisite
    D Degree or certificate requirement; must be passed with grade of "C-" or better
    G Must be taken for a grade, not P/NP; major requirement

[^11]:    H Meets Human Relations/Social Science requirement
    M Meets Mathematics requirement
    $P$ Meets PE/Health requirement
    R Required for AAS degree-see page 48
    S Meets Science/Math/Computer Science requirement
    W Meets Written Communications or English Composition requirement

[^12]:    Standard footnotes:

    * Prerequisite required

    A Meets Arts/Letters requirement
    B Must be passed with grade of " $\mathrm{B}-$ " or better to use as a prerequisite
    D Degree or certificate requirement; must be passed with grade of "C-" or better
    G Must be taken for a grade, not P/NP; major requirement

[^13]:    H Meets Human Relations/Social Science requirement
    M Meets Mathematics requirement
    P Meets PE/Health requirement
    R Required for AAS degree-see page 48
    S Meets Science/Math/Computer Science requirement
    W Meets Written Communications or English Composition requirement

[^14]:    H Meets Human Relations/Social Science requirement
    M Meets Mathematics requirement
    P Meets PE/Health requirement
    R Required for AAS degree-see page 48
    S Meets Science/Math/Computer Science requirement
    W Meets Written Communications or English Composition requirement

[^15]:    H Meets Human Relations/Social Science requirement
    M Meets Mathematics requirement
    P Meets PE/Health requirement
    R Required for AAS degree-see page 48
    S Meets Science/Math/Computer Science requirement
    W Meets Written Communications or English Composition requirement

[^16]:    Standard footnotes:

    * Prerequisite required

    A Meets Arts/Letters requirement
    B Must be passed with grade of "B-" or better to use as a prerequisite
    D Degree or certificate requirement; must be passed with grade of "C-" or better
    G Must be taken for a grade, not P/NP; major requirement

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    M Meets Mathematics requirement
    P Meets PE/Health requirement
    R Required for AAS degree-see page 48
    S Meets Science/Math/Computer Science requirement
    W Meets Written Communications or English Composition requirement

[^18]:    Total Credits $\quad 19-20$

[^19]:    Standard footnotes:

    * Prerequisite required

    A Meets Arts/Letters requirement
    B Must be passed with grade of " $\mathrm{B}-$ " or better to use as a prerequisite
    D Degree or certificate requirement; must be passed with grade of "C-" or better
    G Must be taken for a grade, not P/NP; major requirement

[^20]:    H Meets Human Relations/Social Science requirement
    M Meets Mathematics requirement
    P Meets PE/Health requirement
    R Required for AAS degree-see page 48
    S Meets Science/Math/Computer Science requirement
    W Meets Written Communications or English Composition requirement

[^21]:    H Meets Human Relations/Social Science requirement
    M Meets Mathematics requirement
    P Meets PE/Health requirement
    R Required for AAS degree-see page 48
    S Meets Science/Math/Computer Science requirement
    W Meets Written Communications or English Composition requirement

[^22]:    Standard footnotes:

    * Prerequisite required

    A Meets Arts/Letters requirement
    B Must be passed with grade of "B-" or better to use as a prerequisite
    D Degree or certificate requirement; must be passed with grade of "C-" or better
    G Must be taken for a grade, not P/NP; major requirement

[^23]:    H Meets Human Relations/Social Science requirement
    M Meets Mathematics requirement
    P Meets PE/Health requirement
    R Required for AAS degree-see page 48
    S Meets Science/Math/Computer Science requirement
    W Meets Written Communications or English Composition requirement

[^24]:    Standard footnotes:

    * Prerequisite required

    A Meets Arts/Letters requirement
    B Must be passed with grade of "B-" or better to use as a prerequisite
    D Degree or certificate requirement; must be passed with grade of "C-" or better
    G Must be taken for a grade, not P/NP; major requirement

[^25]:    H Meets Human Relations/Social Science requirement
    M Meets Mathematics requirement
    P Meets PE/Health requirement
    R Required for AAS degree - see page 48
    S Meets Science/Math/Computer Science requirement
    W Meets Written Communications or English Composition requirement

[^26]:    Standard footnotes:

    * Prerequisite required

    A Meets Arts/Letters requirement
    B Must be passed with grade of "B-" or better to use as a prerequisite
    D Degree or certificate requirement; must be passed with grade of "C-" or better
    G Must be taken for a grade, not P/NP; major requirement

[^27]:    H Meets Human Relations/Social Science requirement
    M Meets Mathematics requirement
    P Meets PE/Health requirement
    R Required for AAS degree-see page 48
    S Meets Science/Math/Computer Science requirement
    W Meets Written Communications or English Composition requirement

[^28]:    Standard footnotes:

    * Prerequisite required

    A Meets Arts/Letters requirement
    B Must be passed with grade of "B-" or better to use as a prerequisite
    D Degree or certificate requirement; must be passed with grade of "C-" or better
    G Must be taken for a grade, not P/NP; major requirement

[^29]:    H Meets Human Relations/Social Science requirement
    M Meets Mathematics requirement
    P Meets PE/Health requirement
    R Required for AAS degree-see page 48
    S Meets Science/Math/Computer Science requirement
    W Meets Written Communications or English Composition requirement

[^30]:    Standard footnotes:

    * Prerequisite required

    A Meets Arts/Letters requirement
    B Must be passed with grade of " $\mathrm{B}-$ " or better to use as a prerequisite
    D Degree or certificate requirement; must be passed with grade of "C-" or better
    G Must be taken for a grade, not P/NP; major requirement

[^31]:    Standard footnotes:

    * Prerequisite required

    A Meets Arts/Letters requirement
    B Must be passed with grade of "B-" or better to use as a prerequisite
    D Degree or certificate requirement; must be passed with grade of "C-" or better
    G Must be taken for a grade, not P/NP; major requirement

[^32]:    H Meets Human Relations/Social Science requirement
    M Meets Mathematics requirement
    P Meets PE/Health requirement
    R Required for AAS degree-see page 48
    S Meets Science/Math/Computer Science requirement
    W Meets Written Communications or English Composition requirement

[^33]:    H Meets Human Relations/Social Science requirement
    M Meets Mathematics requirement
    P Meets PE/Health requirement
    R Required for AAS degree-see page 48
    S Meets Science/Math/Computer Science requirement
    W Meets Written Communications or English Composition requirement

[^34]:    H Meets Human Relations/Social Science requirement
    M Meets Mathematics requirement
    P Meets PE/Health requirement
    R Required for AAS degree-see page 48
    S Meets Science/Math/Computer Science requirement
    W Meets Written Communications or English Composition requirement

[^35]:    Costs in Addition to Tuition (estimate)*
    Books
    \$1,600

    * Subject to change without notice.

[^36]:    H Meets Human Relations/Social Science requirement
    M Meets Mathematics requirement
    P Meets PE/Health requirement
    R Required for AAS degree-see page 48
    S Meets Science/Math/Computer Science requirement
    W Meets Written Communications or English Composition requirement

[^37]:    Suggested Course of Study:
    WR 121 English Composition: Exposition and Introduction to Argument*,3,G $\qquad$
    WR 122 or 123 Composition: Style and Argument or Research ${ }^{*}, 3, \mathrm{G}$
    MTH 097 Geometry*.
    MTH 111 College Algebra** ${ }^{*}$
    MTH 112 Trigonometry*G. $\qquad$45

    AAOT Speech requirement ${ }^{G}$
    $\qquad$
    AAOT Health requirement ${ }^{1}$3-4
    AAOT Arts and Letters requirement 1,2,3,G ..... 10
    AAOT Social Science requirement $1,2,3, \mathrm{G}$. ..... 9
    PSY 201 and PSY 202 General Psychology G ..... 6CH 221, 222, 223 General Chemistry*,3,G.
    15CH 241, 242, 243 Organic Chemistry ${ }^{*}, 3, \mathrm{G}$
    BI 211, BI 212, Z 213 Principles of Biology $3, \mathrm{G}$ ..... 15
    PH 201, 202, 203 General Physics*,3,G ..... 15
    Total Credits 110-111

    * Prerequisite required
    G must be taken for a letter grade and earn a grade of a C orhigher

    1 See science advisor for course selection
    2 One Social Science or Arts and Letters course needs to meet Cultural Diversity Requirement
    3 Program prerequisite-see advisor for other choices

[^38]:    Standard footnotes:

    * Prerequisite required

    A Meets Arts/Letters requirement
    B Must be passed with grade of " $B$ " or better to use as a prerequisite
    D Degree or certificate requirement; must be passed with grade of "C-" or better
    G Must be taken for a grade, not P/NP; major requirement

[^39]:    H Meets Human Relations/Social Science requirement
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    P Meets PE/Health requirement
    R Required for AAS degree - see page 48
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    M Meets Mathematics requirement
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    R Required for AAS degree-see page 48
    S Meets Science/Math/Computer Science requirement
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[^41]:    Standard footnotes:

    * Prerequisite required

    A Meets Arts/Letters requirement
    B Must be passed with grade of " $B$ " or better to use as a prerequisite
    D Degree or certificate requirement; must be passed with grade of "C-" or better
    G Must be taken for a grade, not P/NP; major requirement

[^42]:    H Meets Human Relations/Social Science requirement
    M Meets Mathematics requirement
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[^43]:    * Note: BI 101, BI 102, BI 103 course numbers have suffixes to indicate different special emphasis topics. BI 101E, BI 101F, BI 101I, BI 101J, etc., are considered equivalent. Thus, only one of the BI 101's and one of the BI 102's and one of the BI 103's can be used to meet the science requirement.

