1989-90 Catalog

Lane Community College

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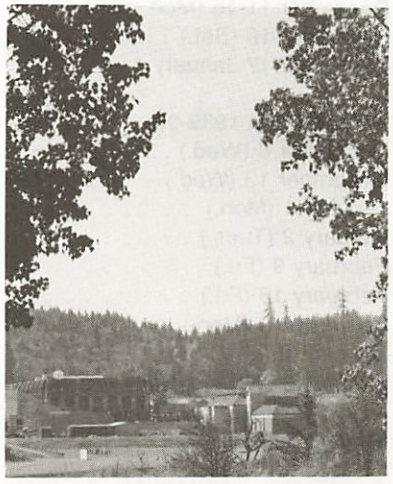


Front cover photograph: Proxy Falls in Lane County. Photo by Michael Kevin Daly, Eugene, Oregon.

This catalog was prepared with assistance from: Susan Sutton, editor; Mildred Holly, curriculum specialist; Judy Dresser, Assistant to the Vice President for Instruction; Trish Hamer, typesetter; Shirley Nagy, layout artist; Dan Welton, principal photographer.

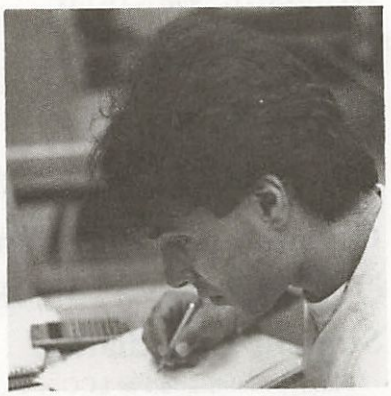
HAPPY 25th LCC

A party to the future!

Academic Calendar 1989-90

Summer Term 1989-90

June 6 (Tues.) . . . . . Registration begins
June 19 (Mon.) . . . . . Summer Term begins
July 4 (Tues.) . . . . . Independence Day Holiday
July 15 (Sat.) . . . . . First 4-week session ends
July 17 (Mon.) . . . . . Second 4-week session begins
August 12 (Sat.) . . . . . Second 4-week & 8-week sessions end
August 14 (Mon.) . . . . . Third 4-week session begins
September 9 (Sat.) . . . . . 12-week & Third 4-week sessions end

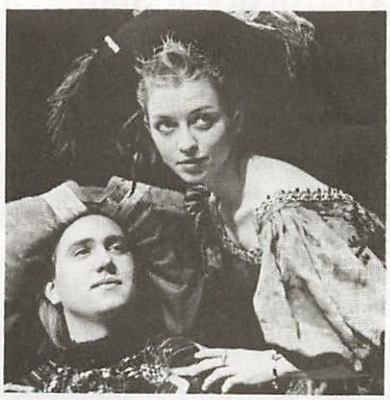


Fall Term 1989-90

September 6 (Wed.) . . . . . Registration begins
September 15 (Fri.) . . . . . New Student Registration begins
September 25 (Mon.) . . . . . Fall Term begins
November 9 (Thurs.) . . . . . Last day to withdraw with no grade record
November 10 (Fri.) . . . . . Veterans Day Holiday
November 17 (Fri.) . . . . . Last day for grade option changes
November 23-24 (Thurs.-Fri.) . . . . . Thanksgiving Holiday
December 1 (Fri.) . . . . . Last day for schedule changes
December 11-16 (Mon.-Sat.) . . . . . Fall Term Examination Week
December 16 (Sat.) . . . . . Fall Term ends
December 17-January 1 . . . . . Christmas Break

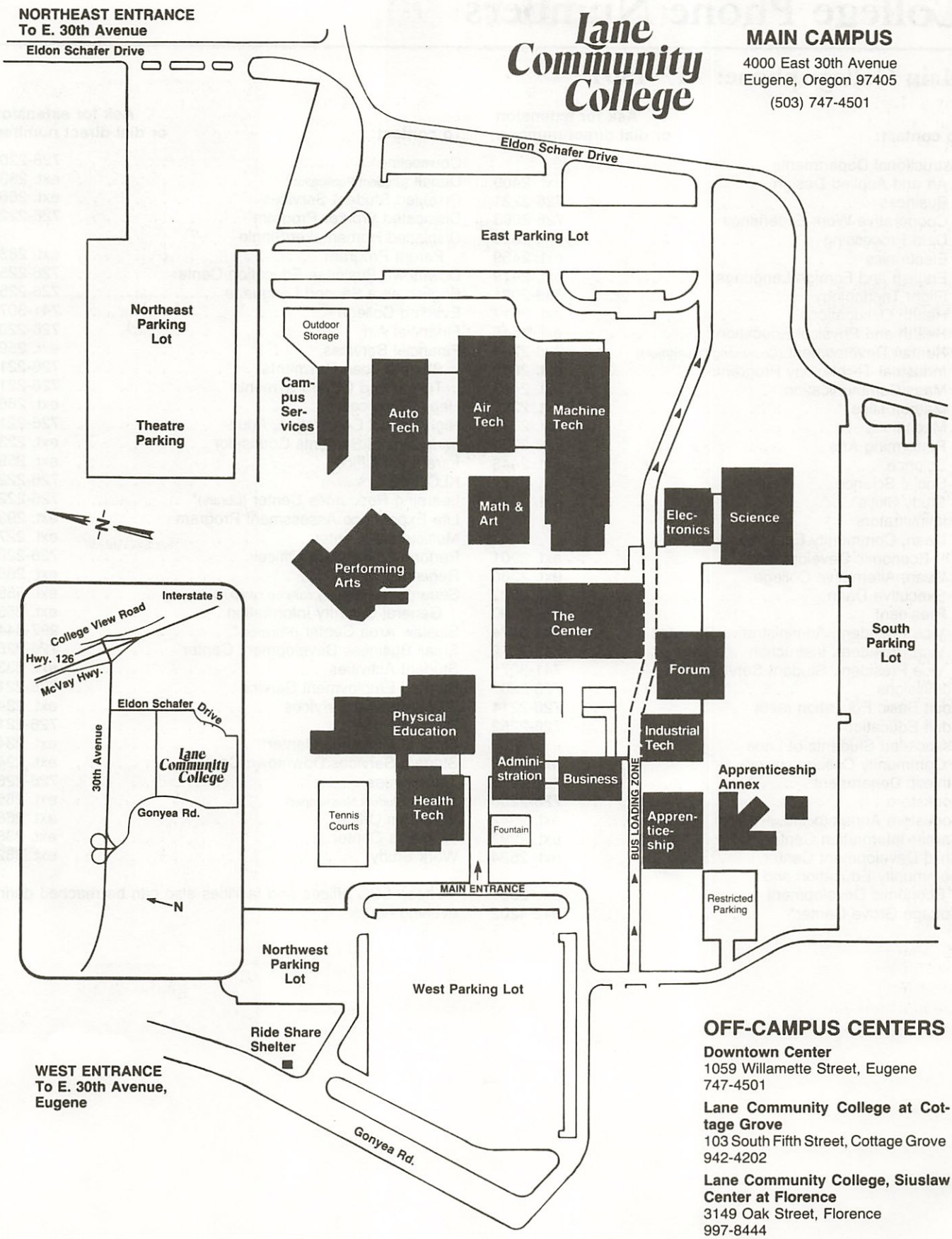
Winter Term 1989-90

December 6 (Wed.) . . . . . Registration begins
December 13 (Wed.) . . . . . New Student Registration begins
January 1 (Mon.) . . . . . New Year's Holiday
January 2 (Tues.) . . . . . Winter Term begins
February 9 (Fri.) . . . . . Last day to withdraw with no grade record
February 16 (Fri.) . . . . . Last day for grade option changes
February 19 (Mon.) . . . . . Presidents' Day Holiday
March 2 (Fri.) . . . . . Last day for schedule changes
March 12-17 (Mon.-Sat.) . . . . . Winter Term Examination Week
March 17 (Sat.) . . . . . Winter Term ends
March 18-March 25 . . . . . Spring Break



Spring Term 1989-90

March 7 (Wed.) . . . . . Registration begins
March 14 (Wed.) . . . . . New Student Registration begins
March 26 (Mon.) . . . . . Spring Term begins
May 4 (Fri.) . . . . . Last day to withdraw with no grade record
May 11 (Fri.) . . . . . Last day for grade option changes
May 25 (Fri.) . . . . . Last day for schedule changes
May 28 (Mon.) . . . . . Memorial Day Holiday
June 1 (Fri.) . . . . . Graduation
June 4-9 (Mon.-Sat.) . . . . . Spring Term Examination Week
June 9 (Sat.) . . . . . Spring Term ends



OFF-CAMPUS CENTERS

Downtown Center
1059 Willamette Street, Eugene
747-4501

Lane Community College at Cottage Grove
103 South Fifth Street, Cottage Grove
942-4202

Lane Community College, Siuslaw Center at Florence
3149 Oak Street, Florence
997-8444

College Phone Numbers

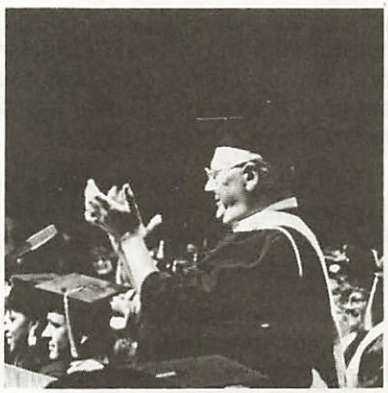
Main College phone: 747-4501

To contact:	Ask for extension or dial direct number:
Instructional Departments	
Art and Applied Design	ext. 2409
Business	726-2221
Cooperative Work Experience	726-2203
Data Processing	ext. 2826
Electronics	ext. 2459
English and Foreign Language	ext. 2419
Flight Technology	689-2021
Health Occupations	ext. 2617
Health and Physical Education	ext. 2545
Human Development (Counseling Department)	726-2204
Industrial Technology Programs	ext. 2843
Mass Communication	ext. 2473
Mathematics	ext. 2392
Mechanics	ext. 2379
Performing Arts	726-2209
Science	ext. 2446
Social Science	ext. 2427
Study Skills	ext. 2439
Administrators	
Dean, Community Education and Economic Development	ext. 2901
Dean, Alternative College	ext. 2360
Executive Dean	ext. 2302
President	726-2200
Vice President, Administrative Services	741-3074
Vice President, Instruction	741-3072
Vice President, Student Services	741-3075
Admissions	726-2207
Adult Basic Education (GED)	726-2214
Adult Education*	726-2252
Associated Students of Lane Community College (ASLCC)	ext. 2330
Athletic Department	726-2215
Bookstore	726-2256
Bookstore Annex (Downtown Center)	ext. 2942
Career Information Center	ext. 2297
Child Development Center	ext. 2524
Community Education and Economic Development	ext. 2901
Cottage Grove Center*	942-4202

To contact:	Ask for extension or dial direct number:
Counseling*	726-2204
Denali (Student Publication)	ext. 2830
Disabled Student Services	ext. 2662
Dislocated Worker Program	726-2223
Displaced Homemaker/Single Parent Program	ext. 2837
Downtown Business Education Center	726-2251
English as a Second Language	726-2253
Evening College	741-3077
Financial Aid	726-2205
Financial Services	ext. 2595
Student Loan Payments	726-2210
Tuition and Other Payments	726-2210
Health Services	ext. 2665
High School Completion, Adult	726-2214
International Students Counselor	ext. 2239
Intramural Office	ext. 2599
KLCC (Radio Station)	726-2224
Learning Resources Center (Library)*	726-2220
Life Experience Assessment Program	ext. 2939
Multicultural Center	ext. 2276
Performing Arts Box Office	726-2202
Registrar	ext. 2685
Security* (emergency calls on campus)	ext. 5555
General Security Information	ext. 2558
Siuslaw Area Center (Florence)*	997-8444
Small Business Development Center	726-2255
Student Activities	ext. 2336
Student Employment Service	726-2217
Student Legal Services	ext. 2340
Student Records	726-2213
Student Resource Center*	ext. 2342
Student Services Downtown Center	ext. 2940
Telecourses	726-2260
Torch (Student Newspaper)	ext. 2655
Veteran's Office	ext. 2663
Women's Center	ext. 2353
Work Study	ext. 2822

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

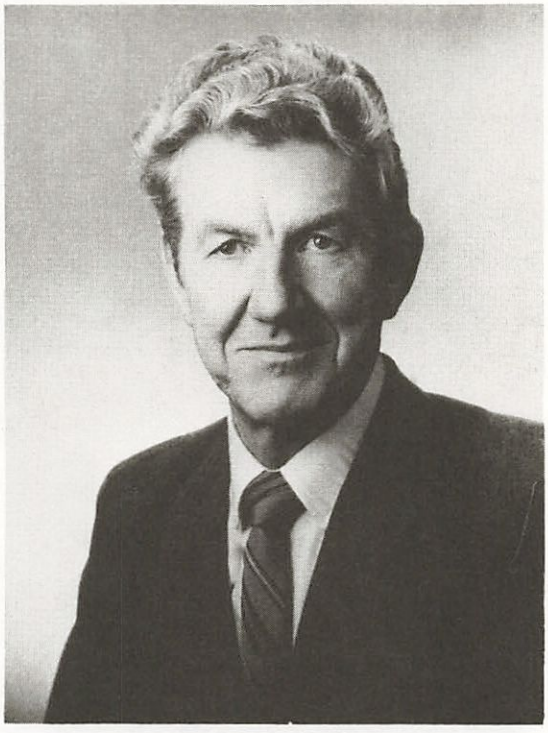
About LCC



Welcome to Lane Community College

We are delighted to know that you are interested in finding out more about Lane Community College. As you look through this catalog, you will discover that Lane truly is a comprehensive college, providing opportunities for education, job training, and personal development. Since opening in 1965, LCC has achieved excellence in meeting the needs of District residents and students. Our emphasis is student success. In 1985 LCC was selected as one of the top five community colleges in the United States by a national panel of education experts. This year, the College is celebrating its 25th birthday.

Just as our programs and services are diverse, so are the students who enroll in LCC classes. Some have never attended college before, while others already have a degree and are pursuing a new goal. They range in age from teens to retirement years and come from many national, racial, ethnic, and economic backgrounds.



LCC offers more than 50 career and vocational programs. Students may earn a certificate or degree in many of these career fields. Many students begin working toward a baccalaureate degree here before transferring to a four-year college or university. They also may take a course to upgrade their job skills, or explore a special interest in community education classes.

The College provides many other services that benefit the community ranging from the Small Business Development Center to the English as a Second Language Program which helps non-English speaking people learn new communication skills.

At Lane we keep an eye on the future, because we know our students are concerned with their futures. The curriculum is changed as the community's needs change. We have an exceptionally talented teaching staff, noted for creativity and innovation.

We strive to make the College's offerings accessible to students in our District. Tuition is low, and classes are held throughout the College District. In addition to the main campus, located between Eugene and Springfield, we have teaching centers in Florence, Cottage Grove, and downtown Eugene. Other facilities include the Flight Technology Center, at Eugene's Mahlon-Sweet Airport, and special learning centers at Heceta House and Siltcoos Station on the coast near Florence. Telecourses offer another way to take classes.

This catalog describes the programs and services of Lane Community College. This section provides basic information about the College and its operations. Subsequent sections outline community education offerings, student information and services, and the programs and courses of the College.

We hope you will join us as a student. If you need more information or assistance in planning your education, please talk with a member of our helpful counseling staff.

Best wishes to you in your educational endeavors.

Sincerely,

Jack Carter
President

The People's College

Lane Community College is a public, co-educational institution. Its mission is to place educational opportunities within reach of all young people and adults.

College History

Lane was established to provide comprehensive, high-quality education to meet the needs of district residents. LCC offered classes for the first time in July 1965 and will celebrate its 25th anniversary throughout the 1989-90 academic year. By fall of that first year, LCC was offering 13 state-approved vocational programs, including mechanics, business, and nursing. The College now offers more than 50 vocational programs, as well as transfer courses and programs that lead to the associate's degree and can be applied to similar baccaluareate degree programs at four-year schools after transferring from LCC. Students have shown they perform well at four-year schools after transferring from LCC.

Anyone 18 or older may enroll in credit programs—no high school diploma is needed. Individuals under 18 can attend if they obtain approval from their high school principal or if they already have received their high school diploma. Anyone may enroll in adult education programs.

College District

The College serves a 5,000 square-mile area stretching from the Pacific Ocean to the Cascade Mountains. The District includes most of Lane County, as well as Monroe Elementary School District in Benton County, Harrisburg Union High School District in Linn County, and a small area in northern Douglas County. The population is about 270,000.

Operating Budget

Lane Community College is funded by local property taxes, state revenues, and tuition and fees. The 1988-89 general budget was $32,586,208, of which approximately 42.4 percent came from local property taxes, 21.6 percent from tuition and fees, and 26.9 percent from state funding. State funding was based on 6,806 of LCC's total enrollment of 7,200 full-time equivalent (FTE) students.

LCC also has a foundation, an independent, nonprofit corporation which raises funds to support programs for which tax monies are insufficient or unavailable. Projects are selected for funding by the Foundation's board of trustees.

Accreditation

LCC is accredited by the Northwest Association of Schools and Colleges and numerous vocational and professional accrediting associations, including:

- The Associate Degree Nursing program accredited by the National League for Nursing
- Dental Hygiene and Dental Assisting programs accredited by the American Dental Association.
- Respiratory Care program accredited by the American Medical Association.
- Real estate broker and salesperson license courses approved by the State of Oregon Real Estate Division.
- Banking and Finance program certified by the Board of National American Institute of Banking.
- Flight Technology training approved by the Federal Aviation Administration.

- Aviation Maintenance program certified by the Federal Aviation Administration.
- Electronics Department is authorized training center for VERSACAD Corporation.

Programs and Services

Lane Community College offers:

- Career and vocational training.

  Programs vary in length from a single term to two years, often take education and experience into account, and are tied to regional personnel needs. More than 50 credit programs are offered at LCC, including Business Management, Flight Technology, Associate Degree Nursing, and Criminal Justice.

- Lower division college courses.

  Students can complete the first two years of college at LCC and transfer credits to four-year colleges and universities. Lower division college courses also are important to many LCC career and vocational programs.

- Developmental and remedial education.

  LCC helps students improve basic skills. Some courses offer options for different ability and skill levels.

- Services for business and industry.

  Through numerous programs—Small Business Development Center and services of the Training and Development Department—the college helps business owners and others improve profitability and productivity.

- Continuing education.

  Noncredit offerings help people improve job skills, achieve personal growth, and get apprenticeship training.

- Career and educational counseling.
- Cultural activities.

  Plays, concerts, and other activities add to this area's cultural life. The Performing Arts Department sponsors many of these activities.

- Library.

  Library cards are available to District residents.

Enrollment

During the 1988-89 academic year, 31,600 different people enrolled in LCC classes. Of these, 12,500 enrolled in credit programs and 21,300 in noncredit Community Education programs and classes. The average age was 28 and the age range was 12 to 87.

Facilities

The College has a 292-acre campus on 30th Avenue in Eugene. The campus has received awards for ease of access for the disabled and for the quality and maintenance of landscaping. About one-third of the construction money came from local taxes and two-thirds from state and federal grants.

In addition to the main campus, Lane Community College maintains teaching centers and other facilities at a number of locations throughout the District, including Florence, Cottage Grove and downtown Eugene.

The Downtown Center at 1059 Willamette Street in Eugene is centrally located and convenient for those who live, work, or shop downtown.

Lane Community College at Cottage Grove, 103 South Fifth Street, Cottage Grove, provides educational services for residents in the southern and eastern parts of the College District.

Lane Community College, Siuslaw Center at Florence, 3149 Oak Street, Florence, serves residents in the western part of the District. Cultural, vocational, business, and general interest workshops are offered through the Center.

Siltcoos Station, located south of Florence on Siltcoos Lake, is a facility used for environmental and outdoors-related classes.

Heceta House, 13 miles north of Florence, is maintained by LCC under a special use permit lease with the U.S. Forest Service. The historic house is used by some of the College's departments for special study sessions.

LCC's Flight Technology program offers ground and flight courses at its facilities at Eugene's Mahlon Sweet Airport.

The College offers credit classes via television to most communities in the District.

Awards

In April 1985, LCC was named one of the country's five exceptional community colleges by a national panel of community college experts who considered teaching excellence, student success, accessibility, and strong presidential leadership. In 1972, the College was recognized by the U.S. Office of Education as one of the six best examples of a comprehensive technical-vocational community college.

The College's national reputation for excellence also has earned it membership in the League for Innovation in the Community College. Through the League, LCC exchanges innovative ideas and practices with some of the best community colleges in the United States.

LCC has received national recognition for efforts to reduce energy usage. The College's energy management program cut electrical consumption to half that of 1976. The College also has become nationally known for its innovative efforts in the area of organizational productivity.

Governance

LCC Board of Education

Seven elected, nonpaid persons comprise the Board of Education and have primary authority for establishing policies governing the operation of the College and adopting the College's annual budget. Their charge is to oversee the development of programs and services which they believe will best serve the needs of the people of the LCC District.

The Board holds public meetings on the second Wednesday evening of each month in Room 216 of the Administration Building on the Main Campus. Additional meetings are held as needed. The public is welcome to attend.

Chuck Ivey, retired, Veneta, 1988 to present; term expires 1992.

Zone 1–Western part of the College District.

James B. Pitney, farmer, Junction City, 1975 to present; term expires 1991.

Zone 2–Northern part of the College District.

Pat G. Riggs, community service worker, Springfield, appointed April 1989; elected to term beginning July 1,1989; term expires 1993.

Zone 3–Marcola and Springfield school districts.

Mae Westfall Cook, social services, Cottage Grove, 1988 to the present; term to expire 1992. Resigned 1989. Position to be filled.

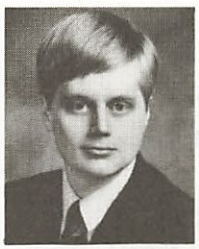
Zone 4–Southern and eastern parts of the College District.

Mary L. Unruh, development and public relations, Eugene, 1982 to present; term to expire 1990. Resigned 1989. Position to be filled.

Zone 5–Central Eugene

Larry P. Perry, educator, Eugene, 1975 to present; term expires 1991.

At-Large



Martin E. Lewis, University of Oregon student, Eugene, 1986 to present; term expires 1990.

At-Large

Administration

The College is administered by the President, under authority delegated by the LCC Board of Education, with assistance from vice presidents, deans, and department heads.

- **John E. Carter,** Interim President; at LCC since 1967. M.Ed. University of Oregon; B.S. Southern Oregon College.
- **Jacquelyn M. Belcher,** Vice President for Instruction; at LCC since 1986. J.D. University of Puget Sound, M.A. University of Washington, B.S. Marymount College.
- **Richard A. Hillier,** Vice President for Administrative Services; at LCC since 1987. Ed.D. Nova University, M.S. Indiana University, B.S. University of Rhode Island.
- **Robert B. Marshall,** Interim Vice President for Student Services; at LCC since 1965. M.Ed. Pennsylvania State University; B.A. Pennsylvania State University.
- **Larry J. Warford,** Executive Dean, Office of the President; at LCC since 1978. Ph.D., University of Oregon; M.Ed. University of Northern Iowa, B.A. University of Northern Iowa.
- **James E. Ellison,** Dean for Alternative College; at LCC since 1967. M.S. Oregon State University, B.S. Oregon State University.
- **Larry D. Murray,** Dean for Community Education and Economic Development; at LCC since 1968. M.S. University of North Dakota, B.S. University of North Dakota.

Emeriti

The late **Eldon G. Schafer** was named **President Emeritus** by the Board of Education in 1985. Dr. Schafer served as LCC President from 1970 to 1985.

Oregon State Board of Education

As one of Oregon's 15 publicly supported community college districts, LCC operates under the general direction of the Oregon State Board of Education.

- **Michael Holland,** Commissioner, Office of Community College Services.
- **Thelma Elliot,** Portland;
- **Clifford Freeman,** Portland;
- **Ruth Hewett,** Salem;
- **Don Kruse,** Roseburg;
- **Jane Reyneke,** Grants Pass;
- **Felipe Veloz,** La Grande.

State Department of Education administration includes:

- **Verne Duncan,** Superintendent of Public Instruction;
- **Ronald D. Burge,** Deputy Superintendent.

Citizen Committees

Individual citizens of the College District serve on committees that assist the College in planning for and providing for the needs of the District.

LCC Budget Committee

The Budget Committee assists the LCC Board of Education in analyzing the Administration's annual budget proposal. 1989-90 members are:

- **Larry Brown,** term expires 1990, Vice President, Jerry Brown Co., Junction City.
- **Mae Westfall Cook,** term expires 1990, Executive Director, Community Sharing, Cottage Grove.
- **Catherine Lauris,** term expires 1989, retired editor, University of Oregon, Eugene.
- **Scott Meer,** term expires 1990, student, Crow.
- **Sharon Smith,** term expires 1991, attorney, Hershner, Hunter, Moulton, Andrews & Neill, Eugene.
- **C. Peter Sorenson,** term expires 1989, attorney, Eugene.
- **Cindy Weeldreyer,** term expires 1990, secretary, Cottage Grove.

Advisory Committees

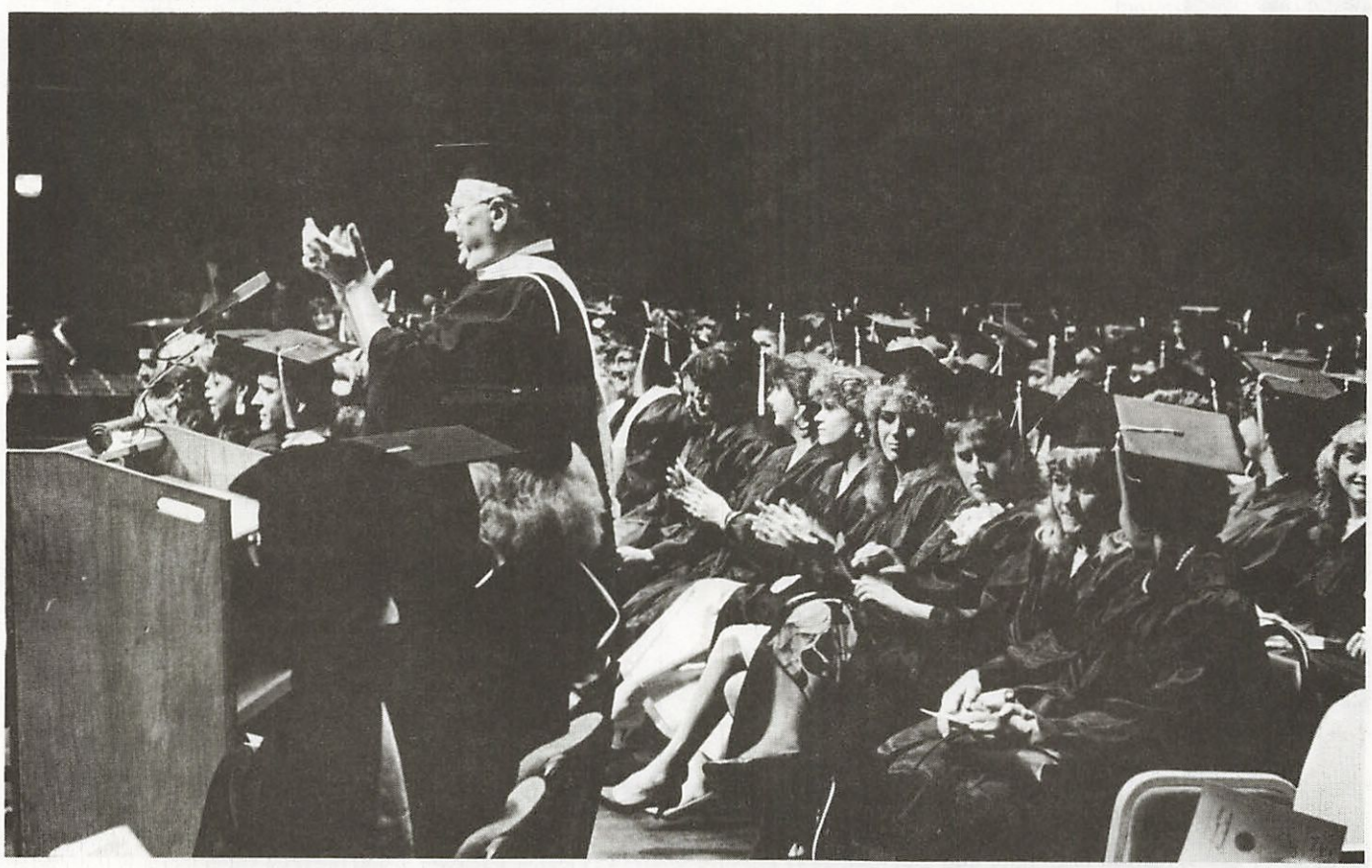
Several hundred volunteers are appointed by the Lane Community College Board of Education to 49 advisory committees. These committees offer advice regarding instructional programs, enabling the College to tie its programs closely to current practices in the world of work and to employment opportunities.

Each of the College's vocational programs has an advisory committee. The College also has advisory committees that take a general view of vocational education, women's programming, high school relations, and evening programs.

Members of the advisory committees may change during the year; current lists are available from the Office of Instruction or from an individual department.

LCC Foundation Board

A board of trustees assists the LCC Foundation by selecting projects to benefit from fund raising efforts. The Foundation is an independent, nonprofit corporation which raises funds to support programs for which tax monies are insufficient or unavailable.



Community Education and Economic Development

Community Education and Economic Development

The Community Education and Economic Development Division is a highly diversified element of Lane Community College offering a wide variety of educational programs throughout the college district. These may be credit or noncredit, vocational or avocational.

Hundreds of personal and professional development noncredit programs are offered through Adult Education. College High offers college level courses at area high schools.

The Adult Basic Education and English as a Second Language programs offer a variety of precollege educational activities to adults interested in improving basic reading, writing, and computational skills. The Adult High School and Life Experience Assessment programs issue high school diplomas to students interested in completing their high school education. The Work Activity Center provides developmental and prevocational training for developmentally disabled adults.

The division's economic development activities are focused in the Small Business Development Center, and the Training and Development Department, which offers Customized Training and Employment Skills Training opportunities, as well as short-term training programs for local business and industry.

The Siuslaw Area Center, located in Florence, and the Cottage Grove Center provide a wide range of educational programs and services. Both Centers provide credit and noncredit instruction and counseling services to area residents.

Specific information about individual programs and departments is listed below and on the following pages.

Off-Campus Centers

The off-campus centers, located in Cottage Grove and Florence, provide a wide range of educational programs and services to residents of southern and western Lane county. Programs and services include:

- G.E.D. certification and Adult High School Diploma courses.
- A variety of vocational classes leading to one-year certificates and two-year degrees.
- Lower division college transfer classes in areas such as art, business management, computer training, Cooperative Work Experience, English, math, office administration, physical education and social science.
- Enrichment classes (noncredit) in areas such as arts & crafts, bookkeeping, conversational foreign languages, dance, computers, photography, physical exercise, sewing, small business operations and typing. Seasonal workshops are also offered such as clam digging, cross country skiing, mushroom gathering, snow camping, and white water rafting.
- Career Information System which is available at no charge. It contains information about 260 Oregon occupations.
- Small Business Counseling by appointment. Small Business classes and workshops.
- Classes and workshops are developed as community needs are identified.

Lane Community College at Cottage Grove is located at 103 S. 5th Street. For more information, call 942-4202.

The Lane Community College Siuslaw Center at Florence is located at 3149 Oak Street. For more information, call 997-8444.

Adult Education Classes

Adult Education offers hundreds of noncredit courses each term in vocational-technical training, business, computers, consumer/money, the arts, foreign languages, home arts, health and health occupations, human development, recreation, and general interest areas.

Adult Education offers short-term training programs and continuing education for a wide range of professional fields. In some cases, students can earn continuing education units, certification, or state and/or national professional examination preparation requirements. Current noncredit vocational programs available through Adult Education are described in the Programs section of this catalog and in the Class Schedule and Report each term.

Enrollment in most courses is open to any interested person over the age of 16. A few classes have prerequisites. A list of course offerings and registration information is included in LCC's Class Schedule and Report, mailed each quarter to area residents. The schedule also is available on the main campus and at the Downtown Center about a month prior to the beginning of each term.

Tuition for noncredit classes may vary, but usually is $1.25 per hour; tuition for a typical 30-hour class is $37. Rent and materials fees may apply in some cases. Students age 62 or older pay $15 for each class plus any fees.

Instructors are practitioners in the subjects they teach. People interested in teaching an Adult Education class may contact a coordinator at the Adult Education office at the Downtown Center.

A course usually can be established on request if a qualified instructor is available and at least 12 people enroll. Businesses or community groups may have specialized classes developed for them by contacting an Adult Education Coordinator.

Alternative Programs

Lane Community College offers a variety of pre-college level alternative programs for adults. These include Adult Basic Education (which includes basic skill development and General Education Development (GED) preparation), Adult High School Completion, the Life Experience Assessment Program, and English as a Second Language. Such programs are designed for adults whose educational needs are varied.

The Adult High School program is designed to provide adults age 16 and above an opportunity to complete their secondary education and earn an adult high school diploma. The Adult Basic Education (ABE) program provides adults the opportunity to acquire basic academic knowledge and practical living skills. The GED program also prepares adults to earn a GED certificate of equivalency. ABE classes are available for disabled adults, and ABE/GED classes are conducted for jail inmates. English as a Second Language (ESL) is designed to teach survival English and promote a general cultural orientation for non-English speaking residents of the community

Adult High School

Lane Community College, in cooperation with local school districts located within the college district, offers an Adult High School program (AHS). The AHS is a college-based alternative

secondary education program designed to provide a flexible way for adults wishing to study for the high school diploma they did not earn earlier in their lives. To accomplish this, the AHS has two components: (1) a classroom-based program (Adult High School - AHS) and (2) an experience-based option (Life Experience Assessment Program - LEAP).

Enrollment Procedures

The AHS accepts all eligible residents of the LCC district. To be eligible for enrollment in the adult diploma program, a student must be:

- a resident of a public school district located within the college district
- legally out of school
- 16 years of age or older (If under 18 years of age, the student must be referred to the AHS program by an authorized representative of a local school district. The LEAP option is only available to students 18 years of age and older.)

Upon admission, all students are required to take the Degrees of Reading Power (DRP) test. Foreign students are required to take the Structured Test - English Language (STEL). This test demonstrates a foreign student's competency in reading, writing, and speaking, at a level consistent with that required to participate successfully in the program.

Requirements for the Adult Diploma

To qualify for an adult diploma, each student must satisfactorily complete Oregon's Adult High School Diploma credit requirements, as well as demonstrate competence levels in the areas of English communication, computation, and analysis.

The following areas of competence from the Oregon Adult High School Diploma Program manual are required of all adult program graduates:

Communication: Read, Write, Speak, Listen, Reason

- Demonstrate active listening process
- Practice appropriate oral communication
- Read with comprehension
- Find and use reference materials
- Interpret visual communication
- Write in a correct manner

Computation: Mathematics

- Use whole numbers, fractions, decimals, percentages
- Apply English and metric measuring skills
- Understand graphs and charts
- Demonstrate knowledge of ratio and proportion
- Formulas
- Geometric relationships

Upon completion of all Adult Program credit and competence requirements, AHSP students are awarded an Adult High School Diploma in June.

Adult High School (Classroom Option)

Adult High School classes are based on the traditional concept of earning credit for attending and completing a sequence of instructional activities and assignments.

Adult High School classes address Oregon's adult credit and competency requirements. Competencies from the Oregon Adult High School Diploma Program manual have been included in the courses.

Adult High School classes are six weeks in length and offer flexible scheduling. Each class requires six hours of in-class work per week. A student may take up to four classes during each six-week session.

Students can start classes at the beginning of each six-week session, and register the week before classes begin as noted in the HSC schedule. Both in-school and out-of-school

youths under 18 years of age must bring release/referral forms signed by an authorized school district representative as part of the entry procedure. The local representative is often located in the high school the student would attend if he/she were in school. The release/referral of a student under age 18 in the AHS is based on decisions of local school officials made in accordance with the practices, policy, and philosophy of the local school district and the Oregon Revised Statutes.

Without local district referral, a 16-or 17-year-old cannot earn the Adult High School Diploma.

Out-of-school adults age 18 and above are admitted automatically, but should provide LCC with copies of all previously transcripted work. The exact registration dates and times as well as tuition and fee schedules can be obtained by calling the Adult High School program office at 726- 2214.

The Adult High School office is open 8 a.m. to 8:30 p.m. Monday through Thursday, and 8 a.m. to 5 p.m. on Friday.

Life Experience Assessment Program (Assessment Option)

The Life Experience Assessment Program is designed for mature adults. The program awards Adult Program credits based on proven skills and knowledge. It also creates a flexible program plan for the completion of remaining credits.

Out-of-school adults age 18 and above are admitted to the Life Experience Assessment Program automatically but are asked to provide the LEAP office with transcripts of all previous high school work completed in grades 9 through 12. In addition, students are requested to provide any transcript, training record, standard test results, or record of work done in any other supervised educational experience. In many cases, credit may be obtained for this additional experience.

To receive life experience credit for a "required" course, the student must demonstrate or verify the knowledge and skills required in the Planned Course Statements for the particular course.

"Elective" credits are more broadly defined, and a wide range of life experiences may be considered worthy of elective credit. In general, an "elective" may be awarded to students who demonstrate or document knowledge or skill development in any bona fide interest area at a level consistent with that which might be obtained from an adult or high school course in the same subject area. Work experience, club, or church-related activities, and hobbies are examples of sources of experience that often prove credit-worthy.

Most students, however, complete their diploma requirements through a combination of life experience credits, directed study, and course work taken through High School Completion or college credit classes.

The Life Experience Assessment Program office is located at the Downtown Center, 1059 Willamette Street, Eugene. The office is open 8 a.m. to 8:30 p.m. Monday through Thursday, and 8 a.m. to 5 p.m. on Friday. For additional information about fees and locations, contact the Life Experience Assessment Program office or call 747-4501, ext. 2939.

Adult Basic Education/GED Program

The Adult Basic Education (ABE) Program provides instruction in basic skills and in the application of those skills to daily life situations. Emphasis is placed on reading, writing, and arithmetic at beginning and intermediate levels. As students become proficient in basic skills, they are encouraged to continue their work in pursuit of the GED Certificate of Equivalency or the Adult High School Diploma.

The GED is a nationally recognized credential which shows educational achievement considered equivalent to a high school education. The General Education Development (GED) preparation program provides instruction in five areas tested on the GED exam including reading, science, social studies, writing, and math. Predictive GED tests are given which predict the scores the student will obtain.

Students enter ABE/GED programs in pursuit of a variety of personal goals. Many attend to build up basic skills in order to function more capably in today's society. Many times these skills are the key to overcoming barriers in obtaining employment or advancing in the job they presently hold. Many seek help in practical skill areas such as obtaining a driver's permit, reading and interpreting income tax forms, or reading and understanding newspaper stories. ABE/GED instructors help students reach their goals and focus on providing the basic academic tools necessary for personal, social, and economic independence and success. Students who have acquired high school level knowledge and skills often seek the GED Certificate of Equivalency.

Adults are often successful improving basic skills in the ABE/GED programs. The instruction is individualized and based on assessment of each student's needs in relationship to his or her educational goals. This allows students to begin at any time during the term and to work at their own pace. Tutoring is available.

Class times are flexible and offered morning and evening throughout the College district including LCC main campus and LCC Downtown Center in Eugene; the Cottage Grove Center; Siuslaw Area Center in Florence; Lane County Jail; and various locations in Veneta, Springfield, and Oakridge. In cooperation with local agencies, ABE operates a program for the developmentally disabled, as well as physically disabled adults.

No tuition is charged for these classes which are available to adults age 16 and older. Students 16-17 years of age are required to obtain a release/referral form from a local school district recommending the ABE and/or GED programs.

Additional information about the ABE/GED programs can be obtained by contacting the ABE/GED office in the Apprenticeship Building on the main campus or by calling 726-2214.

English as a Second Language

English as a Second Language (ESL) is an educational program designed to provide non-English speaking people with speaking, reading, and writing skills up to a level which will enable them to survive in the community or prepare them for entry into programs such as ABE, GED, AHSC, community college or university-level education.

ESL instruction is organized into four skill-level classes in order to serve the needs of students with widely divergent cultural and educational backgrounds. Presently, the four skill levels addressed are beginning, low-intermediate, high-intermediate, and advanced. In all classes, instructors work closely with students on language improvement and cultural adaption.

Most ESL classes are held at the LCC Downtown Center at 1059 Willamette Street. Classes are held both during day and evening hours. There is no tuition for these classes, and textbooks are provided at no cost to the student. Upon enrolling, each student takes an English language skill test and is assigned to the appropriate class. New students are welcome at any time. Placement and testing of new students takes place at least two times each week. Volunteer tutors are available at no cost to assist students with language learning and cultural adaptation.

Further information can be obtained by calling the ESL office at the Downtown Center.

College High Program

LCC's College High Program brings college-level classes to high school students in their local school districts. The program provides an early orientation to college and an opportunity for students to earn both college and high school credits.

College High classes are taught in a high school during regular school hours or in the evenings. Course offerings have included English literature and composition, science, mathematics, social science, performing arts, and art and applied design.

More information about the College High Program can be found in the Student Information section of this catalog under Academic Programs and Procedures.

Customized Training

The Training and Development Department offers Customized Training programs, both credit and noncredit, to business, industry, public agencies, and community groups for their employees or members. Training may range from a one-hour workshop to a three-month or longer course, with enrollment open just to the particular organization's employees. Existing LCC courses can be customized, or an entirely new training may be developed to fit specific needs.

For additional information, contact Customized Training in the Training and Development Department in the Apprenticeship Annex Building on the main campus, phone 726-2223.

Downtown Technology Center

The Lane Community College Downtown Technology Center provides noncredit computer instruction to all members of the community over 16 years of age. This new facility located in the Downtown Center at 1059 Willamette St. offers both IBM/Compatible and Apple Macintosh classes. The facility operates year-round, offering day, weekend and evening sessions. Classes include introductory level for beginners and more advanced sessons for experienced users. All classes are taught hands-on, using modern equipment, and enrollment is limited to one computer per student. Open lab times are available for students enrolled in Downtown Technology Center computer classes. You may call the Downtown Technology Center at 747-4501, ext. 2944 for current class information.

Employment Skills Training

Over the past four years, LCC's Training and Development Department received federal Job Training Partnership Act (JTPA) funds to operate the Office and Accounting Skills Training and Dislocated Worker programs.

The Office and Accounting Skills Training Program provides six-month clerical skills training to Lane County's economically disadvantaged residents. The Dislocated Worker Program provides career life planning, job search assistance, and in some cases skills upgrading or retraining, to unemployed Lane County residents who lost their jobs due to changes in the economy. In 1987, LCC's Dislocated Worker Program received the National Alliance of Business' Distinguished Performance Award, thus designating it the outstanding Dislocated Worker Program in the nation for that year.

The federal Job Training Partnership Act (JTPA) funds for these activities were administered locally by the Southern Willamette Private Industry Council. For more information, contact the Training and Development Department at LCC, phone 726-2223.

Small Business Development Center

The Lane Community College Small Business Development Center provides services and resources to Lane County small business, farm businesses and professional organizations. The center is active in economic development in Lane County and served as the model for 20 other centers throughout the state that form the Oregon Small Business Development Center Network.

The center, located at the LCC Downtown Center, provides business counseling, training, and resources, including an extensive business library. A new program, the Government Procurement Office, provides businesses with updated information and techniques for doing business with the federal government.

The center offers three noncredit business management programs that teach small business owners or potential business owners about business organization, operations, and recordkeeping. The Small Business Management program, Farm Business Management program, and Business Basics Certificate program are described in the Programs section of the catalog under Noncredit Programs. In its programs, the center uses college faculty, paid consultants, and private resource specialists.

For more information about the programs offered by the Small Business Development Center, call 726-2255.

Work Activity Center

The Work Activity Center (WAC), located at 1149 Willamette St., is a cooperative venture involving Lane Community College and the Oregon Division of Human Resources to provide training to developmentally disabled adults. The types of skill development the WAC addresses include social development, vocational training, crew employment, supported work, and competitive employment placement.

As a means of providing pre-vocational training and actual work for the clients, the WAC sells services to various public and private organizations. These services include collating and assembling publications, sorting paper for recycling, labelling and sorting bulk mailings, packaging (skin packaging, heat shrink, blister pack, and die-cutting), and small parts assembly. Additional services include janitorial, grounds work, kitchen crews, and operaiton of a training deli.

For further information about the Work Activity Center, contact Howard Bird, coordinator, 747-4501, ext. 2920.

Student Information

How to get started at LCC

Admissions

Start planning now. There are many programs at Lane Community College. Students are encouraged to read about the various choices to find what is best suited to their needs.

The college provides learning opportunities for all those who can profit from its courses and programs. However, the college does limit the number of students for some programs. To make sure there is room in a program, students need to contact the LCC Admissions Office as soon as possible. LCC is also a good place to start if students are uncertain about their educational goals.

Call, write, or visit the LCC Admissions Office on the second floor of the Center Building to receive information and applications. Call 726-2207 or write Admissions, Lane Community College, 4000 East 30th Avenue, Eugene, OR 97405.

Who may enroll at LCC Anyone who is at least 18 years of age or a high school graduate may enroll at LCC. If 18 years of age or older, no high school diploma is necessary. If under 18, a person must be a high school graduate or follow one of the three procedures listed below.

- If a student is currently enrolled in high school with plans to enroll at LCC after graduation, a counselor has forms to fill out and information about admission to the college.
- If a student is under 18, *not* a high school graduate and *not* attending high school, the student must have graduated from a high school completion program or have a G.E.D. certificate to enroll at LCC. Verification will be required when an application for admission is submitted.
- If a student is under 18 and wants to take classes at LCC for dual credit (college credit *and* high school credit) or wants to attend LCC's High School Completion program, information is available from the high school counselor or principal about a release to attend LCC. (When the student has the release form, it must be submitted to LCC's High School Completion Office before the student can enroll in credit classes.)

Complete an application for admission Applications are available from the LCC Admissions Office and should be returned to that office as soon as possible. Verification of a student's social security number (student identification number) should be included with the application (a copy of the student's social security card, for example). Students are encouraged to apply as early as possible. The first persons to apply have the earliest registration times and widest selection of courses. (Admission to LCC does not assure that all classes in a student's major will be available.)

A program orientation is required of new students. Applicants are notified of the orientation date and time by Admissions or Student Records personnel.

Skills Check Students enrolling for more than eight credits are required to check their skills in reading, writing and math. Waivers are possible for students with previous college experience or other extenuating circumstances. Contact the Testing Office for more information.

Programs with special admission procedures If a student plans to major in Flight Technology, Associate Degree Nursing, Practical Nursing, Dental Hygiene, Dental Assisting, Medical Records Technology, Medical Office Assistant, or Respiratory Care, special admission procedures are necessary. (Double asterisks identify these programs on the back of the application for admission.) Contact the Admissions Office for information about special application packets.

Transcripts from other schools Records of high school or other college work are not necessary for admission to LCC. However, official transcripts from schools the student has attended since high school are needed for Financial Aid, Veterans' benefits, or to apply toward graduation from an LCC program.

Physical Exams If a student plans to major in Flight Technology, Associate Degree Nursing, Practical Nursing, Medical Records Technology, Medical Office Assistant, Dental Assistant, Dental Hygiene, Respiratory Care; or participate in any varsity sport, a physical examination by a licensed physician is required before the student registers for the first term.

In-District Preference Students classified as residents of the college district (see Residency Determination under Money Matters in this section of the catalog) are given preference in acceptance to special programs in Health Occupations.

International Students are admitted to Lane Community College in limited numbers. Certain criteria must be met for acceptance. Official records of all upper secondary school work, including a certificate or diploma, and of any additional education above that level; acceptable scores on the TOEFL (475); and evidence of financial responsibility are required. Proof of the TOEFL test scores or college-level transcripts with at least 45 term (30 semester) credits with a 2.50 cumulative grade-point average is required before application materials will be released. Adequate funds must be available as no LCC scholarship assistance is given to international students, and immigration authorities rarely give work permits.

The deadline for submitting an application for admission is August 25 for Fall Term, December 1 for Winter Term, and March 2 for Spring Term. No new international students are accepted for Summer Term. Applications from international students will not be accepted after those dates, and all materials required of the applicant must have been received by the college prior to the deadline. Questions concerning international students should be directed to the Admissions Specialist, Lane Community College, 4000 East 30th Avenue, Eugene, Oregon 97405.

Transfer Students Students transferring from other institutions of higher education will have credits accepted at LCC for college-level courses successfully completed in fully accredited colleges and universities. Students are advised to consult with a counselor or visit the Student Records Office soon after admission to determine the transferability of courses taken at other colleges, and how those courses meet requirements in the student's LCC program.

Off-Campus Centers Admissions and registration for LCC courses at the Downtown Center in Eugene, the Siuslaw Area Center at Florence, Cottage Grove Center, and other classes scheduled away from the main campus, may be completed at each of the centers.

Registration

New Students If students have finished all of the admission requirements, they are ready to begin the registration process. Students should have received a registration permit when they applied for admission. That card must be validated at the pro-

gram orientation and at the Testing Office before a student can register. See the academic calendar for registration days.

Returning Students (Students who have taken classes at LCC) Students register according to the returning student registration schedule in the current term schedule of classes. Students who have not taken classes at LCC within the last year must go to the Student Records Office and reactivate their files.

All Students may register at their appointed time or at any later scheduled registration time. As a convenience to students, Lane Community College offers a telephone registration process known as ClassLine. Using a touch-tone telephone, students can register for classes from home, place of work, or at the college. Instructions for the telephone registration process are detailed in the LCC class schedule publication each term. All money owed to the college from previous terms must be paid before registering for the current term.

Schedule Changes Students may change their schedules at any time after their original registration through ClassLine. If the schedule change requires payment of additional tuition and fees, the student will be given a deadline for submitting that payment to the Financial Services Office.

After the first week of the term, some classes will require the instructor's consent to enroll. If consent is needed, the student will be notified when making the class request.

Students may drop classes through the seventh week of the term with no record appearing on the transcript. After this time, instructor consent is required to drop a class. Each department will authorize the drop by entering the authorization (consent) into the ClassLine system. Once consent is given to drop a class, a "W" will appear on the transcript. If the instructor chooses not to give consent, the student will receive the grade earned. Refunds for reduction of class loads below 11 credit hours will be based on the official date that the drop is processed.

No schedule changes will be processed after the tenth week of the term; however beginning the second week of the following term, adds and credit increases for prior terms may be processed through Student Records with a grade change form. A $1 fee will be assessed for all such changes in addition to any tuition and class fees. Changes cannot be made for drops and withdrawals which were not processed by the tenth week schedule change deadline.

Other good starting points

There are a number of different places on campus to get assistance or information if you are thinking about going to school. One of these is the Counseling Department. Its services are described elsewhere in this section of the catalog.

Guided tours of the LCC campus are available to anyone in the community, and can be scheduled for weekdays. Tours of the entire campus or special interest areas may be arranged.

To arrange a tour, contact Shan Titus, coordinator of High School Relations, in the Admissions Office.

Counseling/Advising Center

Second floor, Center Building

The Counseling/Advising Center is an important part of the Counseling Department. The goal of the center is to help students meet their educational goals. It also is an excellent place to get general information, academic advising, vocational, and personal counseling. Students may drop by the center to meet with staff or make an appointment.

For more information about the center and other Counseling Department services, read the Counseling and Human Development Department section of the catalog.

Veterans' Office

Second floor, Center Building

Students who may be eligible for veterans' benefits should contact the Veterans' Office for information on how to apply. Each student receiving benefits is responsible for scheduling classes which apply to an agreed upon program and for making satisfactory progress toward that goal. Each student is responsible for notifying the office of any changes in personal data, career goals, or changes in class schedule. The Veterans' Office arranges for counseling and tutorial services to veterans.

Office hours are 8 a.m. to 1 p.m. and 2 p.m. to 5 p.m., Monday through Friday.

Students receiving veterans' benefits must demonstrate progress each term toward a degree in an identified program of study. No benefits will be paid for a class not specifically required to earn the degree declared for Veterans' Administration (VA) purposes.

Advance Payment Policy Students eligible for VA benefits may apply for an advanced payment anywhere from 120 to 30 days prior to the first day of the term. Processing of the application takes from 6-8 weeks after it is submitted to the VA and the first payment includes pay for all days in the month the term begins and the following month of the term.

Confirmed Enrollment Applications received from students eligible for VA benefits within 30 days prior to the first day of the term or later are held for processing no sooner than the first day of the term and after registration has been completed. The VA takes 6-8 weeks to process the award for benefits and the first payment includes retroactive pay back to the first day of the term.

Payment For payment purposes, 12 credits are considered full-time attendance; 9-11 credits are three-quarter time; and 6-8 credits are half-time. In variable credit classes, the VA pays only for the minimum number of credits. Those who satisfactorily complete a greater number of credits are paid retroactively after grades are reported. Credit requirements vary during summer term.

Chapter 106 (Reserve) Benefits Developmental courses offered at LCC are not applicable for payment by the VA for those using Chapter 106 benefits. Students enrolled under this chapter must carry a minimum of 6 credits. If at any time credits fall below 6, certification will be cancelled.

Previous Training (prior credits) It is the student's responsibility to obtain official transcripts from all schools and colleges they have previously attended.

The student will receive VA benefits for only ONE term unless all transcripts are submitted to the LCC Veteran's Office during the student's first term at LCC.

Telecourses and Independent Study The VA limits the number of Telecourses and Independent Study credits that can be taken each term to apply toward VA payment to a total of 5 credits.

A "resident" class must be taken along with telecourses and independent study classes. The student must attend and earn the credits in the resident class for it to count and to be entitled to payment for the telecourses and independent study credits.

Satisfactory Progress For VA purposes, the acceptable minimum grade point average (GPA) for each term is 1.70. The acceptable minimum cumulative GPA is listed below. If the term or cumulative GPA falls below the minimum, a student is placed on academic probation for the following term.

Accepted Minimum Cumulative Grade Point Average

Credits Earned	GPA (minimum)
0-30	1.70
31-45	1.80
46-65	1.90
66-85	1.95
86-100+	2.00

A cumulative GPA of 2.00 is the minimum GPA acceptable to qualify for any degree, diploma, or certification of completion award from Lane Community College.

Students dropping classes after the fourth week of a term should provide the LCC Veterans' Office with a statement indicating any mitigating circumstances. This statement will be sent to the VA for consideration in determining any overpayment. Students are responsible for notifying LCC's Veterans' Office of any change in course load (adds, drops, cancelled classes, or withdrawal from classes).

Unsatisfactory Progress The student and the Veterans' Administration will be notified of unsatisfactory progress at the conclusion of any term upon failure to meet minimum standards of academic progress for three consecutive terms, receipt of only F, Y, or NP grades. The student will be given two weeks to respond; after that time, the VA will be notified of unsatisfactory progress and benefits may be terminated.

Notification of Standards Each student using VA educational benefits will receive a copy of the standards of satisfactory academic progress at the time of initial certification. These standards apply to all eligible persons using educational benefits administered by the Veteran's Administration.

Further information on veterans' benefits is available at the Veterans' Office, Room 213 in the Center Building.

Women's Awareness Center
Transitions to Success
Women's Program

Second floor, Center Building

If you are thinking about returning to school after years at home or because you want better career options...

If you need help solving problems that are making it hard to stay in school (housing, counseling, shelter from battering, health care, for example)...

If you want to get involved with other people, call or stop by the Women's Awareness Center.

A specially trained staff will provide you with information about people and services on campus and in the community that can ease the transition to school. They also can provide information and encouragement to keep you going if you hit rough spots.

Other information at the center includes bulletin boards on coming events and groups, a lending library, card files on "helps" in the community, and extensive resource files covering topics related to changing social patterns such as single parents, two career marriages, women's issues, mid-life career changes, civil rights legislation, minority issues.

Both women and men are welcome. Visit the small lounge at the center to relax over a cup of coffee, study, meet with people, or receive support and information from Women's Center staff.

Transitions to Success
Displaced Homemaker/Single Parent Program

Transitions to Success is a program to assist displaced homemakers and single parents become economically self-sufficient through access to education, training, and employment. The program includes:

- One-term, six-credit class focusing on life/career planning, decision making and assertiveness skills, self exploration, and esteem-building.
- Enrollment in long- or short-term training programs, cooperative work experience or on-the-job training according to each participant's needs.
- Assistance with childcare and transportation expenses, tuition, fees and supplies.
- Ongoing, staffed support groups.
- Job search and placement assistance.

Women's Program

The Women's Awareness Center and Transitions to Success are activities of the Women's Program at LCC. The goal of the Women's Program is to ensure that women have a chance to develop to their full potential, unencumbered by sex stereotyping.

The work of the Women's Program takes many forms, including consulting with college staff and students to accomplish sex equity and working with departments to develop classes which meet the needs of women students. Some of these include:

- Life Transitions workshops for people returning to school (Human Development Department).
- Women's Studies classes to better understand changing social patterns in today's societies (Social Science Department).
- Math Renewal classes to help people overcome fear of mathematics (Math Department).
- Assertiveness classes to help people communicate needs more clearly (Human Development Department).
- Brown bag talks that offer information about matters of concern to women in today's world.

These efforts to achieve equity are assisted by the Women's Program Advisory Committee. This group of citizen volunteers is appointed by the LCC Board of Education and includes women and men from local businesses and industry, agencies, and organizations.

Multicultural Center

Room 409, Center Building

Students who would like to share their culture with others can call or visit the Multicultural Center. The Center has been established as a racism-free zone.

The Multicultural Center offers special support services to minority and international students to ensure their academic success. The center provides a comfortable, low-pressure atmosphere where students may obtain information regarding admission, registration, course and program planning, and tutors.

The center provides information and referral services to students, staff, and community through multicultural events, a list of speakers, bulletin boards, and a reference library.

Students are encouraged to come and enjoy the company of other students at the Multicultural Center. The center is open 9 a.m. to 5 p.m., Monday through Friday during the academic year.

Support Services for Disabled Students Program

Room 213C, Center Building

LCC promotes equal educational opportunities for disabled students through its commitment to a barrier-free campus. The Disabled Student Services program supports this commitment by providing in-class services, advising, resource/referral information, adaptive equipment and advocating for the removal of attitudinal and architectural barriers.

These services are available to permanently and temporarily disabled students in credit, audit, high school completion and adult education classes.

We encourage faculty and staff to contact the Disabled Student Services office with questions and concerns about acommodating disabled students.

The program offers a variety of services at no charge to the student including:

Academic Advising
- Admission/registration assistance
- Program planning

In-class Services
- Early registration for students receiving direct services and the visually-impaired
- Relocation of classes if necessary
- Sign language interpreting
- Notetaking
- Textbook recording
- Tutoring (including learning disabled)
- Mobility aid
- Test proctoring

Adaptive Equipment
- TDD – telecommunications device for the deaf
- Personal fm loop systems – on loan
- Talking calculator – on loan
- Perkins brailler – on loan
- Closed circuit televisions
- Brailled elevator control panels
- Computer speech synthesizers – a one-credit class must be taken to access this equipment which is offered through the Disabled Student Services office
- Minor emergency wheelchair repair

General Support
- Awareness information
- Resource/referral information
- Advocacy
- Accessibility map
- Disabled Advisory Club
- Emergency evacuation training
- Liaison with staff and community

In addition, The Disabled Student Services Office provides limited individualized services depending on the needs of disabled students. Students requiring attendant care while on campus must provide their own attendants.

To receive services, contact the coordinator of Disabled Student Services at 747-4501, ext. 2662, VOICE, or 741-3079, TDD (for hearing impaired only), Center Building, room 213C, as soon as possible each term for scheduling purposes.

Other departments that provide services include the following:

- The Counseling department offers personal counseling, career/life planning, and a Career Information Center which has specific career/job interviewing information for the disabled.
- The Health and Physical Education Department teaches a PE Correctives course for temporarily or permanently disabled persons. The instructor sets up up an individualized exercise program for each student.
- There are three computer labs for student use (there is a small fee each term). All the labs have speech synthesizers for Apple and IBM computers, lap boards, detachable keyboards and raised tables. The Center Lab has a closed-circuit television, braille label maker, and computer manuals on cassette tapes. A one-credit class must be taken to access the speech synthesizers.
- The Library has an electric door, cassette players/recorders, raised study tables, and a closed-circuit television. The staff will assist in ordering materials from the Oregon State Library Services for the Blind and Physically Handicapped.
- The Study Skills department has individualized instruction, support instruction, large print books, tape players, language master tapes, low level computer programs and raised tables.
- The Student Health Center provides limited restroom and medication assistance, a cot room for resting, elevator keys, lockers, and parking permits. A wheelchair, walker, and crutches are available on loan.

The physical campus has an interconnecting ramp system which makes most buildings accessible. Restrooms, pay phones, and emergency phones are also accessible.

For more information, contact the coordinator of Disabled Student Services at 741-4501, ext. 2662, VOICE, or 741-3079, TDD.

Evening Services

Based on student demand and available financing, the college endeavors to offer a wide range of night credit classes. Many daytime services are available evenings. The descriptions in this catalog of various services list the hours these services are available to students.

The Counseling/Advising Center is open Monday through Thursday from 5 to 7 p.m. throughout the academic term. The Career Information Center is open Monday and Tuesday until 7 p.m., and the Testing Office is open Monday and Thursday until 7 p.m. throughout the academic year. Call Student Services at the Downtown Center, 747-4501, ext. 2940, for evening hours in that location.

Admissions, Student Records, Financial Aid, Financial Services, and Veterans' Office personnel are available until 7 p.m. on four evenings during fall, winter, and spring terms to help students with registration (see the term class schedule for dates). For the balance of the term, any transcript orders, change of address, application for admissions, etc., may be requested through a drop box near the Admissions Office.

Saturday Services

Based on student demand and available financing, the college endeavors to offer numerous credit classes on Saturday. A variety of support services are available to students on Saturday.

The following services are available from 9:30 a.m. until 1:30 p.m. on Saturday: Counseling/Advising/Admissions, Food Services, Library. The Math Resource Center and a Microcomputer lab are open on Saturdays. The Bookstore, Financial Aid and Student ID Cards are available from 9:30 a.m. until 1:30 p.m. the first two Saturdays of each term. For more information regarding Saturday services call the Weekend College Office, 741-3077.

Other Resources

Child Development Centers

LCC has three Child Development Centers located on campus: the Infant Center, the Toddler Center, and the Preschool Center. The centers serve a dual role: first as a laboratory for students in Early Childhood Education, and second, as a service to student and community parents. Children six weeks to five years old are accepted according to priorities established by the advisory committee. Applications are available in the Home Economics or Health Occupations Department offices, and should be filed as far in advance as possible before the beginning of the term for which attendance is required.

All centers are open from 7 a.m. to 6 p.m. The program for all centers is planned and supervised by professional Early Childhood Education specialists to give a rewarding social and educational experience to each child. Fees are charged on a half- or full-day basis.

One of two classes is required for parents or guardians of children enrolled in the Child Development Centers. Parents will be expected to enroll in either Child Development (HDFS 226) or Child Care and Guidance (7.102) before their child has completed three terms in the Child Development Center.

Housing

Lane Community College does not provide dormitory facilities. Many students reside in rental apartments throughout the Eugene-Springfield area. LCC's Student Resource Center provides free housing referral services to LCC students. For further information and assistance, contact the Student Resource Center on the second floor of the Center Building.

Academic Programs and Procedures

Lane Community College is a comprehensive community college, offering noncredit classes, vocational classes, and lower division college classes.

This section of the catalog describes credit offerings.

The college offers more than 50 vocational programs. Some lead to one-year certificates, and some to two-year associate degrees. Many of the classes required to complete two-year programs can be transferred to four year institutions. Others are strictly vocational and may not.

In addition to the classes required by vocational programs, the college offers lower division (freshman and sophomore) college credit classes so that a student may complete the first two years of college at LCC. Students planning to transfer to a four-year school are encouraged to plan their program with an LCC counselor or advisor.

LCC also offers a variety of different ways students can learn. These include traditional lecture or lecture lab classes, as well as many hands-on classes and open-entry/open-exit classes that permit students to begin and end the class when they wish and work at their own pace.

Off-Campus Centers The college offers classes at several locations in addition to the main campus. These include the Downtown Center on the Eugene Mall, the Siuslaw Area Center in Florence, and the Cottage Grove Center.

Evening Classes for credit are offered on the main campus and at off-campus centers. By selecting from among these classes, students can earn college transfer credit or work toward a certificate or degree in one of LCC's vocational programs. Evening courses are listed in the class schedule publication each term. For more information about evening opportunities, call the LCC Counseling Center.

Saturday Classes for credit are offered on the main campus and the Downtown Center. Students can earn college transfer credit or work toward a certificate or degree in one of LCC's vocational programs. Saturday classes are listed in the class schedule publication each term. For more information about Saturday classes, call the LCC Counseling Center, 726-2204 or the Weekend College Office, 741-3077.

Telecourses present an increasingly popular option. They are college credit classes developed by educators and media specialists for television viewing. They include weekly telelessons, required written and reading assignments, and periodic examinations. Course instructors are available for assistance by phone or in person. Students can view television courses at home, in the LCC library, and at some off-campus centers.

Between 14 and 20 telecourses are offered each term. Topics include child development, computers, consumer education, business, science, psychology, and sociology.

LCC telecourses are available on a number of different channels. Most are available in Eugene-Springfield; others are shown throughout Lane County.

Tuition for telecourses is the same as for other courses. In addition, students pay a fee per telecourse.

Students receiving financial aid or veterans' benefits should be aware there may be limitations on the number of telecourses they may take and still retain benefits.

For more information about LCC's telecourses, call Cynde Leathers, Telecourse Coordinator, at the main campus.

College High LCC's College High Program brings college-level classes to high school students in their local school districts. The program provides an early orientation to college and an opportunity for students to earn both college and high school credits. During the 1987-88 school year approximately 300 students participated in the program.

Classes are taught in a high school during regular school hours or in the evenings, by LCC instructors or by high school instructors approved by LCC.

College High classes are similar to those offered in a regular LCC program, including course content, textbook, and length of course. A $500 per course cost is charged to the high school district, which may be shared among students in the course, or subsidized by the district. The college credits earned through this program can be transferred to other postsecondary schools.

The program seeks to meet the needs of Lane County area school districts for expanded course offerings in both vocational and academic areas. Courses have included English literature and composition, mathematics, science, social science, study skills, performing arts, and art and applied design.

For more information about the College High Program, students, parents, or school districts should contact the Office of Instruction at LCC's main campus.

Degrees, Certificates, and Diplomas

Students are required to fulfill degree requirements that are in effect as of the term they enter LCC. Students who return to school after an interruption will be required to complete their degree under the requirements in effect when they reenter the College.

Associate of Arts Degree College Transfer

The Associate of Arts Degree is awarded to students who satisfy the following requirements:

- Complete a minimum of 93 credit hours.
- Complete the following:
  - English Composition, nine credit hours from one of the following sequences with a grade of C or better: Writing 120, 121, and either 123 or 227; Writing 121, 122, and either 123 or 227
  - Math 100 (Four credits; or demonstrative equivalent competency. College transcript of courses of equivalent level with a grade of C or better will meet this requirement.)
  - Physical Education/Dance Activity, three credit hours to be completed in three or more terms. One class repeat allowed. The third time class is taken it must be at a higher level.
  - Health, three credit hours, HE 250, HE 251, or HE 199.
  - Math/Science, four classes, two of which must be four credits each from the following: Mathematics (Math 100 is not included), Physical Science, Chemistry, Electronics*, Biology, Physics, Geology, Computer Science (Programming Language classes only)**, Physical Anthropology, Physical Geography (Geog 101), Zoology.
  - Arts and Letters, three classes of at least three credits each from the following: Art, Literature, Theater Arts, Foreign Language, Music, Effective Learning, Speech, Journalism, Writing, Listening.
  - Social Science, three classes of at least three credits each from the following: Anthropology, Economics, Geography, History, Political Science, Psychology, Sociology, Women's Studies, Consumer Education, Philosophy, Religion.
  - A sequence of three additional courses of at least three credits each chosen from Math/Science, Arts and Letters, or Social Science.
  - Sufficient elective credits to meet the 93 credit hour requirement.
- Attend at least two terms, including the last term, and earn at least 24 credits at Lane Community College.
- Earn a cumulative grade point average of at least 2.00.
- For a second degree, complete 24 additional credits.
- There are no waivers for this degree.
- There are some general limitations in satisfying degree requirements:
  - Students choosing elective courses to meet the 93 credit requirement may apply a maximum of 24 credits from the following areas: Vocational-technical courses (no more than 12 credits); Physical Education (no more than nine in addition to the three required credits); Individual Music Lessons (no more than 12).
  - No more than 25 percent of the credits required for this may be taken credilt-by-assessment.
  - A maximum of 18 credits of Supervised Field Experience and/or Cooperative Work Experience may be applied to electives.
  - The developmental courses listed below *may not* be used in satisfying degree requirements:

    Advanced Eng. Grammar/Sentence Writing (0.525.7)
    Basic English Grammar/Sentence Writing (0.525.3)
    Basic Math Review (Mth 20)
    Basic Paragraph Writing (1.525.4)
    Basic Reading/Spelling (0.525.5A)
    Beginning Algebra (Mth 60)
    Decimals (0.605)
    Elementary Algebra (Mth 65)
    Fractions (0.605.1)
    Language Lab (0.593.1)
    Learning Skills Lab (0.593)
    Learning Styles & Concentration (0.529.6)
    Math Renewal (Mth 20)
    Memory Improvement (0.529.8)
    Morphographic Spelling (0.525.2)
    Notetaking Skills (0.529.3)
    Occupational Math 1 (Mth 50)
    Occupational Math 2 (Mth 55)
    Phonetic Spelling (0.525.1)
    Prep Vocabulary (0.527)
    Problem Solving (0.527.1)
    Read, Write, Spell 1 (0.525.5)
    Read, Write, Spell 2 (0.525.6)
    Reading Comprehension (0.529)
    Test Taking (0.529.7)
    Textbook Reading & Studying (0.529.5)
    Time Management (0.529.4)

    *College transfer only. Electronics course that meets the Science requirement is Passive Solar Design GS 127.
    **Computer Science - Programming Language Courses:
    Advanced Assembler Language (CS 291)
    Assembler Language Programming (CS 290)
    Business Data Processing (CS 242)
    Concepts of Computing (CS 121, with lab)
    Intro to Business Data Processing (CS 241)
    Intro to Computer Science 1: Pascal (CS 201)
    Intro to Computer Science 2: Advanced Pascal (CS 203)
    Intro to Numerical Computation (CS 133)
    Programming Information Systems (CS 270)

Associate of Science Degree College Transfer

The Associate of Science Degree is awarded to students who satisfy the following requirements:

- Complete a minimum of 93 credit hours.
- Complete the following:
  - English Composition, nine credit hours from one of the following sequences with a grade of C or better: Writing 120, 121, and either 123 or 227; Writing 121, 122, and either 123 or 227
  - Math 100 (Four credits; or demonstrative equivalent competency. College transcript of courses of equivalent level with a grade of C or better will meet this requirement.)
  - Physical Education/Dance Activity, three credit hours to be completed in three or more terms. One class repeat allowed. The third time class is taken it must be at a higher level.
  - Health, three credit hours, HE 250, HE 251, or HE 199.
  - Math/Science, ten or more classes which total at least 36 credits from the following: Mathematics (Math 100 is not included), Physical Science, Chemistry, Electronics*, Biology, Physics, Geology, Computer Science, (Programming Language classes only)**, Physical Anthropology, Physical Geography (Geog 101), Zoology.
  - Arts and Letters, three classes of at least three credits each from the following: Art, Literature, Theater Arts, Foreign Language, Music, Effective Learning, Speech, Journalism, Writing, Listening.
  - Social Science, three classes of at least three credits each from the following: Anthropology, Economics, Geography, History, Political Science, Psychology, Sociology, Women's Studies, Consumer Education, Philosophy, Religion.
- Attend at least two terms, including the last term, and earn at least 24 credits at Lane Community College.

- For a second degree, complete 24 additional credits.
- There are no waivers for this degree.
- Earn a cumulative grade point average of at least 2.00.
- There are some general limitations in satisfying degree requirements:
  - Students choosing elective courses to meet the 93 credit requirement may apply a maximum of 24 credits from the following areas: Vocational-technical courses (no more than 12 credits); Physical Education (no more than nine in addition to the three required credits); Individual Music Lessons (no more than 12).
  - No more than 25 percent of the credits required for this degree may be taken credit-by-assessment.
  - A maximum of 18 credits of Supervised Field Experience and/or Cooperative Work Experience may be applied to electives.
  - The developmental courses listed below *may not* be used in satisfying degree requirements:

Advanced Eng. Grammar/Sentence Writing (0.525.7)
Basic English Grammar/Sentence Writing (0.525.3)
Basic Math Review (Mth 20)
Basic Paragraph Writing (1.525.4)
Basic Reading/Spelling (0.525.5A)
Beginning Algebra (Mth 60)
Decimals (0.605)
Elementary Algebra (Mth 65)
Fractions (0.605.1)
Language Lab (0.593.1)
Learning Skills Lab (0.593)
Learning Styles & Concentration (0.529.6)
Math Renewal (Mth 20)
Memory Improvement (0.529.8)
Morphographic Spelling (0.525.2)
Notetaking Skills (0.529.3)
Occupational Math 1 (Mth 50)
Occupational Math 2 (Mth 55)
Phonetic Spelling (0.525.1)
Prep Vocabulary (0.527)
Problem Solving (0.527.1)
Read, Write, Spell 1 (0.525.5)
Read, Write, Spell 2 (0.525.6)
Reading Comprehension (0.529)
Test Taking (0.529.7)
Textbook Reading & Studying (0.529.5)
Time Management (0.529.4)

*College transfer only. Electronics course that meets the Science requirement is GS 127 Passive Solar Design.

**Computer Science - Programming Language Courses:
Advanced Assembler Language (CS 291)
Assembler Language Programming (CS 290)
Business Data Processing (CS 242)
Concepts of Computing (CS 121, with lab)
Intro to Business Data Processing (CS 241)
Intro to Computer Science 1: Pascal (CS 201)
Intro to Computer Science 2: Advanced Pascal (CS 203)
Intro to Numerical Computation (CS 133)
Programming Information Systems (CS 270)

Associate of General Studies Degree

The Associate of General Studies Degree combines transfer and vocational credits and is awarded to students who satisfy the following requirements:

- Complete a minimum of 93 credit hours.
- Complete the following:
  - English, nine credit hours with a minimum grade of C, chosen from one sequence of the following groups: Communication Skills 1, 2, 3; Writing 120, 121, 123/ 227; Business English 1,2, Business Communications, or Writing 121, 122, 123/227.

- — Math 100 (four credits) or four one-credit modules taken from Occupational Mathematics 1 and/or Occupational Mathematics 2, or demonstrative equivalent competency with a grade of C or better.
- — Physical Education/Dance Activity, three credit hours to be completed in three or more terms. One class repeat allowed. The third time class is taken it must be at a higher level.
- — Health, three credit hours, HE 250, HE 251, or HE 199.
- — Math/Science, four classes, two of which must be at least four credits from the following: Mathematics (Math 100 is not included), Physical Science, Chemistry, Electronics*, Biology, Physics, Geology, Computer Science, (Programming Language classes only)**, Physical Anthropology, Physical Geography (Geog 101), Zoology.
- — Arts and Letters, 12 credit hours from the following: Art, Literature, Theater Arts, Foreign Language, Music, Effective Learning, Speech, Journalism, Writing, Listening.
- — Social Science, 12 credit hours from the following: Anthropology, Economics, Geography, History, Political Science, Psychology, Sociology, Women's Studies, Consumer Education, Philosophy, Religion.
- — Sufficient elective credits to meet the 93 credit hour requirement.

- ○ Attend at least two terms, including the last term, and earn at least 24 credits at Lane Community College.
- ○ For a second degree, complete 24 additional credits.
- ○ There are no waivers for this degree.
- ○ Earn a cumulative grade point average of at least 2.00.
- ○ There are some general limitations in satisfying degree requirements:
  - — Students choosing elective courses to meet the 93 credit requirement may not apply more than nine Physical Education credits, in addition to the three required (excluding Professional Activity classes).
  - — No more than 25 percent of the credits required for this degree may be taken credit-by-assessment.
  - — A maximum of 18 credits of Supervised Field Experience and/or Cooperative Work Experience may be applied.
  - — A maximum of 12 credits in developmental courses listed below may be applied.

Advanced Eng. Grammar/Sentence Writing (0.525.7)
Basic English Grammar/Sentence Writing (0.525.3)
Basic Math Review (Mth 20)
Basic Paragraph Writing (1.525.4)
Basic Reading/Spelling (0.525.5A)
Beginning Algebra (Mth 60)
Decimals (0.605)
Elementary Algebra (Mth 65)
Fractions (0.605.1)
Language Lab (0.593.1)
Learning Skills Lab (0.593)
Learning Styles & Concentration (0.529.6)
Math Renewal (Mth 20)
Memory Improvement (0.529.8)
Morphographic Spelling (0.525.2)
Notetaking Skills (0.529.3)
Occupational Math 1 (Mth 50)
Occupational Math 2 (Mth 55)
Phonetic Spelling (0.525.1)
Prep Vocabulary (0.527)
Problem Solving (0.527.1)
Read, Write, Spell 1 (0.525.5)
Read, Write, Spell 2 (0.525.6)
Reading Comprehension (0.529)
Test Taking (0.529.7)
Textbook Reading & Studying (0.529.5)
Time Management (0.529.4)

*Electronics classes which meet the Science requirement:
Introduction to Electronics (6193)
Intro to Electronics Lab (6194)
Intro to Digital Electronics (6190)
Networks and Passive Circuits (6195)
Active Devices (3472)
Electrical Theory 1 (6229)
Electrical Theory 2 (6230)
Digital Electronics 1 (6206)
Digital Electronics 2 (6207)
Semiconductor Devices 1 (6245)
Semiconductor Devices 2 (6246)
Strength of Materials 1 (6107)
Passive Solar Design (GS 127/6327)

**Computer Science - Programming Language Courses:
Advanced Assembler Language (CS 291)
Assembler Language Programming (CS 290)
Business Data Processing (CS 242)
Concepts of Computing (CS 121, with lab)
Intro to Business Data Processing (CS 241)
Intro to Computer Science 1: Pascal (CS 201)
Intro to Computer Science 2: Advanced Pascal (CS 203)
Intro to Numerical Computation (CS 133)
Programming Information Systems (CS 270)

Associate of Applied Science Degree

The Associate of Applied Science Degree is awarded to students who satisfy the following requirements:

- ○ Complete the required courses and credit hours prescribed for any structured occupational program of at least 93 credit hours.
- ○ Complete the following:
  - — Written Communications, three credits to be chosen from Writing 120, 121, 122, 123 or 227; Communication Skills 1, 2, 3, Business English 1, Business English 2 (grade of C or higher).
  - — Basic Mathematics Review, Math Renewal or Business Math, (three credits) with a grade of C or better or demonstration of equivalent competency.
  - — Health, three credit hours, and/or Physical Education (PE 170, 180, 190, or one credit "D" prefixed dance activity) courses for three terms. The third time class is taken it must be at a higher level.
  - — The courses used to meet these requirements may not be used to meet any of the 12 credit hours or areas of general requirements.
- ○ The 93 credit hours shall include a college requirement of at least 12 credit hours of general education from the following course areas with at least three credit hours from each area:
  - — Humanities: Art, Literature, Theater Arts, Foreign Language, Music, Effective Learning, Speech, Journalism, Writing, Listening.
  - — Science and Mathematics: Mathematics, Physical Science, Chemistry, Electronics*, Biology, Physics, Geology, Computer Science (Programming Language classes only).**
  - — Social Science: Anthropology, Economics, Geography, History, Political Science, Psychology, Sociology, Women's Studies, Consumer Education, Philosophy, Religion.
  - — Only the Academic Council may waive credits for the General Education requirements. Individual departments are not authorized to waive these credits. Academic Council petitions are available in the Student Records Office.
- ○ Attend at least two terms, including the last term, and earn at least 24 credits at Lane Community College.
- ○ Earn a cumulative grade point average of at least 2.00.
- ○ No more than 25% of the credits required for this degree or certificate may be taken credit-by-assessment.

*Electronics classes which meet the Science requirement:
Introduction to Electronics (6193)
Intro to Electronics Lab (6194)
Intro to Digital Electronics (6190)
Networks and Passive Circuits (6195)

Active Devices (3472)
Electrical Theory 1 (6229)
Electrical Theory 2 (6230)
Digital Electronics 1 (6206)
Digital Electronics 2 (6207)
Semiconductor Devices 1 (6245)
Semiconductor Devices 2 (6246)
Strength of Materials 1 (6107)
Passive Solar Design (GS 127/6327)

**Computer Science - Programming Language Courses:
Advanced Assembler Language (CS 291)
Assembler Language Programming (CS 290)
Business Data Processing (CS 242)
Concepts of Computing (CS 121, with lab)
Intro to Business Data Processing (CS 241)
Intro to Computer Science 1: Pascal (CS 201)
Intro to Computer Science 2: Advanced Pascal (CS 203)
Intro to Numerical Computation (CS 133)
Programming Information Systems (CS 270)

Certificates and Diplomas

A diploma is awarded to the student who does not meet the requirements for the A.A., A.S., A.G.S., or A.A.S. degrees, but who has completed any 93 hours of credit courses with a cumulative GPA of not less than 2.00, and who has attended LCC at least two terms, and who has earned at least 24 credits at LCC.

Certificates are granted for satisfactory completion of an established certificate program. Such programs require less course work than an associate degree. An additional 12 credits are required for an additional certificate.

Other awards of competency certificates, or other evidence of completion are dependent upon the nature of the programs and the decision of the Administration and Faculty. In some cases for example, a student can earn a certificate from an instructional department on completion of a suggested course of study. However, a suggested course of study is different from a vocational program in which a student earns a degree or certificate issued by the LCC Board of Education.

To Apply

Application for a degree, certificate, or diploma must be completed in the Student Records Office at least two terms prior to the student's anticipated graduation date or when a student is within 24 credits of completing a graduation goal. A $10 fee is assessed for all degrees, certificates and/or diplomas applied for at the same time, whether or not the student plans to participate in the commencement ceremony. A fee is used to defray the expense of the diploma, diploma cover, and commencement program.

A student is required to have an application for degree on file with the Student Records Office no later than the first Friday in May to have his or her name listed in the commencement program. Anyone qualifying to participate who applies after that date may attend the graduation ceremonies but will not be listed in the program.

A student working toward a second degree must complete an additional 24 credit hours of course work, and a student working toward a second certificate must complete an additional 12 credit hours.

Requests for information about variations from stated requirements for degrees, certificates, or diplomas should be directed to Jolene Bowers, Supervisor of Student Records.

Degree and Certificate Programs

LCC offers these degree and certificate programs. Most are described in the section Programs and Suggested Courses of Study.

Two-Year Associate of Applied Science Degree
Agricultural & Industrial Equipment Technology
Apprenticeship Trades (restricted enrollment)
Associate Degree Nursing (7 terms)
Auto Body & Fender Technology
Automotive Technology
Aviation Maintenance Technician
Banking & Finance
Broadcast/Visual Design and Production
Business Management
Computer Operations
Computer Programming
Construction Technology
Criminal Justice
Culinary, Food Service and Hospitality
Culinary, Food Service and Hospitality: Culinary Option
Dental Hygiene
Diesel Technology
Early Childhood Education
Early Childhood Education: Nanny Option
Electronic Engineering Technician
Electronics Technician
Energy Management Technician (not open to new students)
Environmental Technology (not open to new students)
Fire Prevention Technology (restricted enrollment)
Flight Technology
Forest Technology (not open to new students)
Graphic Design
Industrial Maintenance
Insurance Adjusters (inactive)
Manufacturing Technology
Office Administration Degree
  Associate Accountant Option
  Legal Secretary Option
  Professional Secretary Option
Radio Broadcasting
Real Estate
Respiratory Care
Technical Drafting
Welding Technology

Two-Year Certificate
Agricultural & Industrial Equipment Technology
Automotive Technology
Aviation Maintenance Technician
Diesel Technology
Graphic Design
Manufacturing Technology

One-Year Certificate
Auto Body & Fender Technology
Culinary, Food Service, and Hospitality
Dental Assisting
Early Childhood Education
Early Childhood Education: Nanny Option
Landscape Development (inactive)
Medical Office Assistant
Medical Transcription
Microcomputer Information Systems
Office Administration Certificate
  Accounting/Clerk Option
  Clerical Assistant Option
Practical Nursing (4 terms)
Real Estate
Sales & Marketing
Residential Energy Analyst (not open to new students)
Welding Technology

Definitions

Academic Council The Academic Council is appointed by the Lane Community College president to advise the president about academic rules and regulations for LCC. The council gives special attention to the rules and policies concerning registration, admission, graduation, and academic regulations. Part of the responsibility of the council is to insure that a high academic standard is maintained. The council acts on student petitions covering extensions on college deadlines, waivers of college graduation requirements, and changes in students' transcripted grades. Students can request action by the Academic Council by using a form available from the Student Records Office.

Academic Standards and Probation A student who does not achieve satisfactory academic progress according to administrative regulations will be placed on academic probation and urged to seek counseling and other assistance. LCC's academic standards and alert system are described on page 29.

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.

Students will be held accountable for attending each class in which they have officially enrolled. A grade or grade symbol will be assigned to each student unless the student has processed an official drop or withdrawal.

ClassLine As a convenience to students, Lane Community College offers a telephone registration process known as ClassLine. Using a touch-tone telephone, students can register for classes from home, place of work, or at the College. Instructions for the telephone registration process are detailed each term in the LCC class schedule publication.

Course A course is any class or subject (e.g., English Composition WR 121, Biology BI 101, Drafting 1 4.101) for which a student may register.

Course Numbering Vocational courses have four numbers (e.g., 6.010, 3.337) or are numbered 0 through 99. These courses apply toward vocational degrees and certificates from LCC, but are not automatically accepted by four-year colleges. Courses which are automatically accepted by four-year colleges are identified with letters and two or three numbers (e.g., WR121, PSY201, MTH100).

Cooperative Work Experience (Supervised Field Experience) Cooperative Work Experience provides students with the opportunity for on-the-job education while offering college credit for the experience.

Students enrolled in CWE receive help in locating part-time and permanent jobs, guidance about career expectations and demands, opportunity to work in volunteer positions, instructions in resumé preparation and job interviewing skills, and financial aid.

Credits Credits are granted in recognition of work successfully completed in specific courses. For lecture courses, one hour credit is granted for one hour attendance in class per week. A student can expect to spend two or three hours in a laboratory class for one unit of credit. The average load for a full-time student is 12-15 credits. Part-time students carry fewer than 12.

Dropout, LCC Rate Lane Community College defines a dropout as a person who completes none of the courses for which he or she registered in a term. By this definition, LCC's dropout rate is approximately 10 percent.

Full-Time A full-time student is anyone carrying 12 or more credit hours of work. It is important to note that the definition of a full-time student varies with different institutions. The Social Security Administration defines full-time as 12 or more credit hours. Veterans are required to carry 12 credit hours per term to receive full benefits. All students receiving scholarships are required to complete 12 credit hours of work each term.

Honor Lists Lane Community College honors those students who have achieved high academic standards by naming them to the following honors lists:

- The Vice President's List: A student must complete a minimum of 12 graded (A,B,C,D,F) hours with a GPA of 3.55 through 3.99.
- The President's List: A student must complete a minimum of 12 graded (A,B,C,D,F) credit hours with a GPA of 4.00.
- Vice President's Scholar: Awarded to the student that maintains a GPA of 3.55 through 3.99 for a minimum of 12 graded hours for three consecutive regular terms of the academic year.
- President's Scholar: Awarded to the student that maintains a GPA of 4.00 for a minimum of 12 graded hours for three consecutive regular terms of the academic year.

Program A program is a group of courses arranged to provide vocational or professional training leading toward a degree or certificate of completion. The courses required for the various programs are listed under the program name in the Programs and Courses of Study section of the catalog.

Schedule of Classes A schedule of classes is published approximately one month before classes begin each term. It contains the academic calendar for the term, information on registration, a list of classes offered, and the time and location of classes. The schedule is mailed to district residents and is available from Admissions, Counseling, the information desk in the Administration Building, and at the Downtown Center.

Supervised Field Experience Supervised Field Experience is a variable credit course which provides academic credit for on-the-job experience of 1 to 15 credits per term and is assigned a vocational number 1.300 or a college transfer number FE207. Refer to the CWE description above.

Term A term, or quarter, is approximately an eleven week period of study. Fall term begins toward the end of September and lasts until Mid-December. Winter term begins around the first of January and lasts until roughly March 15. Spring term begins at the end of March and lasts until the middle of June. Summer term begins the middle of June and lasts until about the first of September.

Procedures

Lane Community College publishes regulations in addition to those in this catalog. Students are responsible for informing themselves of these regulations.

Schedule Changes

Students may change their schedules at any time after their original registration through ClassLine. If the schedule requires payment of additional tuition and fees, the student will be given a deadline for submitting that payment to the Financial Services Office.

After the first week of the term, some classes will require

the instructor's consent to enroll. If consent is needed, the student will be notified when making the class request.

Students may drop classes through the seventh week of the term with no record appearing on the transcript. After this time, instructor consent is required to drop a class. Each department will authorize the drop by entering the authorization consent into the ClassLine system. Once consent is given to drop a class, a "W" will appear on the transcript. If the instructor chooses not to give consent, the student will receive the grade earned. Refunds for reduction of class loads below 11 credit hours will be based on the official date that the drop is processed.

No schedule changes will be processed after the tenth week of the term; however, beginning the second week of the following term, adds and credit increases for prior terms may be processed through Student Records with a grade change form. A $1 fee will be assessed for all such changes in addition to any tuition and class fees. Changes cannot be made for drops and withdrawals which were not processed by the tenth week schedule change deadline.

Dropping, Withdrawing from Classes

When a student is unable or unwilling to attend any or all classes for which the student has registered, it is the student's responsibility to process an official drop or withdrawal. A withdrawal is discontinuing registration in all classes for the term; a drop is discontinuing registration in one class. Drop and withdrawal procedures are quite simple early in the term, and become more complicated as the term progresses.

Classes dropped through the seventh week of the term will not appear on the student's transcript. After the seventh week, the instructor's signature and a department stamp are required to drop a class.

Any refund of tuition (or remission of indebtedness, if there is a tuition loan) is based on the date the official student drop or withdrawal is processed through ClassLine. The period of actual class attendance is not a factor.

Refund deadlines are published each term in the Schedule of Classes. An extension of the refund deadline is possible when Student Records is promptly notified of exceptional situations beyond the student's control such as severe illness, change of work schedule by employer, or extreme family emergencies. Verification, such as a note from doctor or employer, is required.

If processed before the end of the seventh week of a term, a drop or withdrawal removes the class(es) from the student's records. After the seventh week, an instructor's signature is required for each class dropped, or for all classes in the case of a withdrawal. A mark of W (withdrawal) appears on the student's grade report and transcript record. An instructor has the option to refuse to sign the drop or withdrawal, and instead give the grade earned in class. If a student stops attending class, but does not drop or withdraw, the instructor may assign a mark of Y (no basis for grade), or the grade earned in the class.

Drops and withdrawals may not be processed once registration begins for the following term; such procedures must be completed before Monday of the week before finals. After that deadline, the student will receive whatever mark the instructor feels is appropriate.

Record-Keeping

Student Records maintains basic academic, identification, and loan records for all students. This includes the application for admission, other school transcripts, waiver forms, grade change forms; address, name, student number, evaluation of progress, graduation, current registration, etc.

Except for the transcript record and current registration, most of this material is kept on microfilm for all students and on-line (with immediate access) on the computer for current students. For all practical purposes, these records will be kept forever.

Release of Records In accord with Federal Law (The Federal Education Rights and Privacy Act, Public Law 93-380), 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. Students' access to their own records is guaranteed as early as possible, but no longer than 45 days from the time of the student's official request. Where records are kept, who is responsible for those records, and who has access to records is posted in the Admissions Office.

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 a right to an appeal. Further information is available in Student Records or Admissions or the Student Activities Office.

Student Directory A directory of current students is maintained in Student Records each term. The directory is available to the public, and contains the following information: name, major field, address, telephone number, and zip code. A student who wishes all information withheld from that directory must complete a Student Directory Exemption card ***once each academic school year*** during registration. Filling out this card also exempts the student's name from appearing in public Honor Roll lists. These cards are available in Student Records.

Other Directory Information Also released as directory information are: height and weight of members of athletic teams, school or division of enrollment, period of enrollment, degrees awarded, honors (including the publication each term of names of students with outstanding grades), date of graduation, and the most recent previous school attended. Students who do not wish to have any of this information released by the college must complete a petition for exemption in Student Records. This petition does not affect the student directory, and is effective throughout the student's continuous attendance at Lane Community College.

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 as directory information. 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 Transcripts are available in Student Records. A transcript contains records of all academic work at Lane Community College. Generally, a student may acquire a transcript within a few minutes. The student must complete a transcript request form, and pay $2 for one copy, plus $1 for each additional copy ordered at the same time. A transcript may also be requested by mail; the student should give name, number, period of enrollment, and where the transcript is to be sent, and enclose payment. Phone requests are not adequate, since payment must be received before a transcript may be sent.

A transcript may be mailed to another school or college at anyone's request, but no other person may receive a copy of the student's transcript (or undertake to pick it up for the student) except at the student's written request or if the person has a release signed by the student authorizing access to this record.

The college reserves the right to withhold transcripts from students who owe monies to LCC. If a transcript is requested by a student who owes tuition, that transcript is sent without the school seal or the registrar's signature. A sticker covers the last term's records, indicating the records are incomplete because of a balance owing. The student is not notified of this action. A complete, official transcript is sent at no additional cost when the student has made payment and has notified Student Records.

Records from other schools and colleges never become part of a student's Lane Community College transcript. Such records are not required for admission to the college, but may be required for veterans' reporting or admission to a special program.

Transfer Transcripts If a student has taken course work at another college that applies to his or her program at Lane Community College, the student must see that Student Records receives an official transcript of that work. The work will be evaluated in terms of the LCC program by Student Records, with the assistance if necessary of the department head or coordinator of the program. In cases where the course work is not obviously or directly comparable, it will be necessary for the student to have on file a course substitution form from the department which officially substitutes the other work for courses required in the LCC program. Course work taken elsewhere does not appear on the LCC transcript. However, once received, these transcripts become the property of Student Records and part of the college's records. As with all records, a copy may be acquired, but LCC cannot provide an *official* copy of a transcript from another school.

Transcripting If a student has enrolled in a noncredit class that is taught both as noncredit and college credit the student may submit a grade change form with the number of credits and the grade(s) earned to the Student Records office and that information will be transcripted onto the student's transcript. There is a charge of $12 per credit to transcript credits.

Grades

Grade Reports At the end of each term, grades are recorded and reported to students. The grade report is a complete record of all work completed at LCC, and contains the same information as a transcript, but is not a transcript.

Grade Changes If an error has been made in recording or reporting grades, the instructor may initiate a grade change. The grade change form is a two-part form with the carbon returned to the instructor after the change has been processed in Student Records. Changes may be made in grade, number of credits for variable-credit courses, course number and/or course name. There is a $1 charge to process this form. If a student is aware of an error in grade reporting, or believes that an error may have occurred, the student should contact the instructor.

Grade Notations The following grades and marks are recorded on transcripts and grade records at LCC:

A-Superior	I-Incomplete
B-Above Average	Y-No basis for grade (this mark is given
C-Average	when a student has never or seldom at-
D-Below Average	tended class, or has done little or no work
F-Failure	for the class.)
	W-Official student withdrawal or drop
	U-Audit
	X-Grade not reported (or erroneously reported) by instructor
P-Pass (A,B,C)	May be recorded only when a student has processed a pass/no pass option request, or is taking a P/NP-only class
N-Not Passing (D,F)	

Academic Standards Students registered for seven or more credit hours as of the 8th week of each term must maintain the following academic standards

Student Credit Hours Earned	Cumulative Grade Point Average
7 - 30	1.70
31 - 45	1.80
46 - 65	1.90
66 - 85	1.95
86 - 100+	2.00

Students must meet the above noted cumulative grade point average (CUM GPA CR on the transcript) and complete at least 50 percent of their credit hours of enrollment.

Failure to meet these standards results in the following actions:

- A student who fails to meet the academic standards will receive a warning letter with the grade report. That letter will provide information covering the services of the college that might be helpful.
- A second term will place the student on probation, and a letter will be sent requiring a counselor conference. A registration hold will be implemented but will be removed following the completion of the counselor conference.
- A third term will result in a second required counselor follow-up conference, and again a registration hold will be implemented.
- A fourth sequential term of unacceptable academic progress will result in dismissal from college credit classes and programs for one calendar year.

Removal of Probation A student who is placed on probation can be removed by exceeding the cumulative grade point average standard or, if placed on probation by the non-completion criteria, may be removed by exceeding 50% completion the next term. Once removed from probation, students who do not meet the academic standards start again at the warning step.

Pass/No Pass A student may apply a maximum of 16 pass/no-pass credits toward graduation; pass/no-pass-only classes and credit for nonacademic experience, where the student does not have the option, do not apply toward this total. In each Associate of Applied Science program, the department has identified core classes in the major which may not apply for graduation if taken pass/no-pass. When a P/NP option has been selected, the instructor still grades on the regular ABCDF system. The instructor has no information as to which students have selected the P/NP option. If the instructor records a grade of A for the student, the student will receive the A grade, and this will be calculated in the Grade Point Average (GPA.) If the grade is B or C, the student will receive a grade of P. If the grade is D or F, the student receives a grade of N. P and N grades are not calculated in the student's GPA, though a grade of P is counted in earned credit and indicates successful completion of the course. A P/NP option must be requested by the end of the eighth week of the term.

Audit The only grade or mark an auditor may be granted is U (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. An audit option may be requested during registration and through the eighth week of the term. Audit rates are the same as the in-district tuition rates per credit hour. Out-of-state students who wish to change from audit to credit must pay any difference in tuition due to their residency classification.

Request for Incomplete When a student has completed most of the work in a class and is unable to finish, the student and instructor may fill out a Request for Incomplete form. This is basically 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. General College policy limits the time for finishing an Incomplete to one year, but the instructor may require a shorter time period. When the work has been completed and given to the instructor for evaluation, it is the students' 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. 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.

Repeated Course: Change of Grade A student can have the grade points removed from the cumulative grade point average if the grade was C, D, or F. 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.

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 in the Student Records Office. A standard grade change fee is charged.

The Student Records Office will mark the student's record, noting the repeated course, and remove the grade points of the original course from the cumulative grade point average. The original course and grade will remain on the student's transcript.

Grade Point Average (GPA): Computation Included in GPA computation are grades of A, B, C, D, and F. Grades of P are included in earned credit, but not in GPA credit. I, Y, W, U, and X 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 points	D = 1 point
B = 3 points	F = 0 points
C = 2 points	

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
BA226-Business Law	3	A	12
PE170-Beginning Tennis	1	B	3
ENG115-Accelerated Reading	3*	P	0*
4200-Math 1	2	C	4
TOTAL GPA Cr.	6	TOTAL POINTS	19

19 ÷ 6 = 3.17 GPA

* No points, and not included in calculation, because of P grade. Total credits ***earned*** in this example are 9.

Credit

Credit granted at LCC is in terms of quarter hours, since Lane is on a quarter-system calendar. Three quarter hours are equal to two semester hours. For lecture classes, one hour of credit is granted for one hour of classes per week. A student will spend two or three hours per week for one credit in a laboratory class. The average load for a full-time student is 12 to 15 credits. A minimum of 93 credits is required for graduation with an associate degree.

Miscellaneous Training and Credit Credit is granted to skilled craft workers who have completed a standard Oregon apprenticeship program, and for related training. Credit is also granted for military training, and for work completed at proprietory schools, such as business colleges, art schools, beauty colleges and so on. Such credit generally applies only toward a vocational program, and does not appear on the student's LCC transcript. The student should apply for such credit in Student Records, bringing certificates of completion, school records, or other available documentation. The student is notified of the credit granted, and a record is kept in the student's file.

Application for a Certificate or Degree; Evaluation of Progress

A student may apply for evaluation of transcripts in any LCC program at any time. Application must be made for a certificate or degree in order for completion of a program to be officially recognized.

For either evaluation or application, the student completes the proper form in Student Records and is mailed a list of coursework remaining to be completed. Usually this process takes two weeks or less. Any questions or concerns about the evaluation should be brought to Student Records.

Graduation

There is one graduation ceremony held each year, in June, usually on the Friday evening of spring term final exam week. All graduates and prospective graduates for the year are invited to attend and bring their friends and relatives.

Since grades are not yet recorded, it is not known at that time whether the majority of the students have completed their programs. Students receive empty binders during the graduation ceremony. The actual degrees are mailed in at the end of summer after graduation completion has been checked. Students applying for degrees and completing their programs fall or winter terms may receive their degrees earlier in the year. Students who apply for spring term graduation after the first Friday in May will not be listed in the graduation program.

June graduation eligibility includes completing all degree, certificate or diploma requirements by the end of spring term, or having nine or less credits remaining after the completion of spring term. (All nine credits must be available for completion during the summer term.) Students who have more than nine remaining credits to complete must be approved by the Supervisor of Records and must be scheduled for completion by the end of summer term.

Students who do not attend the graduation ceremony may pick up a binder at the Student Records Office.

Money Matters

College Costs

Tuition*

	Full-Time* (11 or more credits)	Part-Time (less than 11 credits)
Residents of Oregon	$264 per term	$24 per credit hour
Senior Citizens**		$15 per course
Nonresidents of Oregon	$1,012 per term	$92 per credit hour
International Students	$1,012 per term	$92 per credit hour

(See "Determination of Residency" on this page.)

Noncredit Class Tuition is published in each term class schedule.

* For tuition purposes, full-time enrollment is 11 or more credit hours. However, to qualify for financial aid, veterans' benefits, and certain other programs, 12 or more credits are required for full-time status.

** Senior citizens, age 62 and over, pay $15 per class and are exempt from payment of ASLCC fees. However, they are required to pay any class fees, such as for photography, welding, etc.

* *Tuition rates, fees, and refunds are subject to change without prior notice. Current information will appear in each term class schedule.*

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

Tuition	$792
Books	$450
Special & Miscellaneous Fees (varies by program)	$ 45-105
Insurance (individual student, optional)	$181

Fees and Expenses

Fees are subject to change without notice.

Associated Student Body Fees $5
A mandatory student body fee of $5 is required of all students taking classes on LCC's main campus. A photo I.D. card is provided or validated as part of the fee.

Credit by Examination and
Credit by Assessment . . . . . $12 per credit hour, maximum $120 per term.

Class Fees (Curricular Fees) . . . . . See term schedule of classes for these fees.

Grade Change Fees . . . . . $1 for each change or group of changes received at one time.

Telephone Registration Fee . . . . . See term schedule of classes for fee.

Transcripting . . . . . $12 per credit hour, maximum $120 per term.

Transcripts . . . . . $2 for the first copy and $1 for each additional copy ordered at the same time. Transcripts are available from Student Records for credit classes completed at Lane Community College. Payment must be received before transcripts may be picked up or mailed.

Student Health & Accident Insurance . . . . . Fee information and other information is available in the Student Health Services Office.

Computer Fee . . . . . See term schedule of classes for fee.

Determination of Residency

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.

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

In-State (out-of-district) A student at least 18 years of age or a high school graduate 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. Residency requirements must be met prior to the date that a term begins.

Out-of-State and International There are two residency categories in addition to in-district and out-of-district (in-state):

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

Special Circumstances A student may be classified as in-district or out-of-district if extraordinary circumstances can be documented. The following criteria are used to define extraordinary circumstances:

- A veteran who has established permanent residence inside the college district within 90 days of separation or discharge from the service is considered to be in-district.
- 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.
- A senior citizen, age 62 or older, who has established a permanent residence in the college district is considered in-district.

Verification of Residency The residency of each applicant to the lower division collegiate or occupational classes of the college where college credit is earned is determined from the information provided by the applicant to the college. When there appears to be an inconsistency in the information provided, the college staff will require additional documentation. Only applicants who can provide sufficient documentation that the 90-day residence requirement clearly has been met will be classified in-district or in-state.

Retention of Residency Documentation Documents required for the determination of residency are not retained in the applicant's file. Except for applications to programs requiring special admission procedures, all documents are returned to the applicant after the college staff has noted the type of document on the application for admission.

Non-Credit Community Education Classes have no residency requirement.

Payment of Tuition and Fees

The College's policies regarding payment of tuition and fees are described in this section. They apply to all credit and non-credit students.

How to Pay

All monies owed to the College for previous terms must be paid before a student can register for the current term. For ways of paying for amounts from prior terms, see the payments section in the following LCC CreditLine Plan and Account Agreement.

The student's name and number (social security or assigned number) must be clearly identified on all payments. This will assist in properly processing payment in a timely manner.

Payment at time of Registration At the time of registration, assessed tuition and fees may be paid in full by VISA/MasterCard. (Charges to a bank card are subject to receipt of an authorization from the banking institution. If an authorization is not received from the banking institution, the registration will be treated as if it had not been paid with a bank card and will be charged to the student's LCC CreditLine account.)

If tuition and fees are not paid by VISA/MasterCard at the time of registration, an LCC CreditLine account will be established for each student and charged for the amount of the assessed tuition and fees. Some fees, such as flight fees, are not assessed at the time of registration, but are required to be paid before services, such as flying time, are provided.

If payment in full of assessed tuition and fees is not received so it can be posted within five days of the date of the charge that will signify a student's consent and agreement to abide by the terms and conditions of LCC's CreditLine Plan and Account Agreement. A copy is reprinted on this page. A copy can also be obtained by mail by calling 747-4501, ext. 2610, or in person from Financial Services on the main campus, at the Eugene LCC Downtown Center, at the Cottage Grove Center or at the Siuslaw Area Center in Florence.

If registering at the main campus, Downtown Center or Cottage Grove or Siuslaw centers, payment may also be made by cash or check.

Payment by Financial Aid Financial Aid is available to qualified students and is considered a resource from which to pay educational expenses. Thus, a student receiving Financial Aid is subject to LCC's registration, refund and credit terms the same as a student who is not receiving financial aid. If sufficient funds are available from the financial aid award, payment of the student's account balance shall be made from the student's financial aid check. Any remaining financial aid will be disbursed according to the schedule provided by the Financial Aid Office. If financial aid funds are not received as anticipated, the student is still responsible for payment of any monies owed the College.

Payment by a Sponsoring Agency Payment by a sponsoring agency is considered a resource from which to pay educational expenses. Thus, a student receiving assistance from a sponsoring agency is subject to LCC's registration, refund and credit terms the same as a student who is not receiving assistance from a sponsoring agency. It is the student's responsibility to ensure that written agency authorization is received by the Billing and Collections section of Financial Services. A student may use ClassLine to determine if an agency has authorized payment of tuition and fees. If the amount is zero, the charge has been transfered to an agency account. Students with questions may call Billing and Collections at 726-2210.

LCC's CreditLine Plan and Account Agreement

If tuition and fees are not paid by VISA/MasterCard at the time of registration, an LCC CreditLine account is established for each student. The student's account is then charged for the amount of tuition and fees.

If payment in full for the tuition and fees is not received by LCC within five days, it signifies a student's consent and agreement to the terms and conditions of LCC's CreditLine Plan and Account Agreement.

The CreditLine policy is reprinted below. A copy also is available from LCC Financial Services at the main campus, the LCC Downtown Center in Eugene, the Cottage Grove Center, or the Siuslaw Area Center in Florence.

Payments The option of payment in full always exists or partial payments can be made as described below.

1. A student's account balance shall be paid in full if sufficient funds are available from or upon receipt of financial aid funds from any source .
2. An account balance may be paid in full before the College's last business day of the month, saving finance charges.
3. For in-state students the required monthly payment will be one half (1/2) of the current month's account balance (rounded up to the next whole dollar amount) with a minimum monthly payment of $80. For out-of-state and foreign students, the required monthly payment will be the total of the current month's account balance.
4. Payments must be received in sufficient time for posting to the student's account on or before the College's last business day of the month.
   a. **Payment By Mail.** Make checks payable to LCC or Lane Community College and mail to *LCC ClassLine, P.O. Box 5000, Eugene, OR, 97405.* Be sure the student number (social security or assigned number) is on the check. Allow enough time to ensure postal delivery before the College's last business day of the month.
   b. **Payment by VISA/MasterCard.** VISA or MasterCard will be accepted for payment in full of your account. Use ClassLine (see ClassLine instructions) or complete the requested VISA/MasterCard information on the detachable remittance portion of the billing statement and mail to *LCC ClassLine, P.O. Box 5000, Eugene, OR, 97405.* Allow enough time to ensure postal delivery before the College's last business day of the month. Charges to the bank card are subject to receipt of an authorization from the banking institution. If authorization is denied, the amount will be charged to the student's CreditLine account, subject to its terms and conditions.
   c. **Payment By Cash.** Cash payments can be made during business hours: at Financial Services, first floor Administration Building, LCC Main Campus; at the LCC Downtown Center, 1059 Willamette Street; at the Cottage Grove Center, 103 South Fifth Street; and at the Siuslaw Area Center, 3149 Oak Street in Florence.
      (1) Payments and credits made at Financial Services on the main campus or at the Eugene LCC Downtown Center are posted as of the date they are received or issued.
      (2) Payments made and credits issued at the Cottage Grove Center or Siuslaw Area Center must be received/made at that location a minimum of five business days before the College's last business day of the month.

Payments and credits are allocated to the oldest amount owed.

Finance Charges Any account balance greater than zero on the College's last business day of the month as a result of charges made prior to the last seven days in the month, will be assessed a finance charge on the average daily balance of the account (excluding any registration charges made during the last seven days of the month) at a periodic rate of one percent (1%) per month (annual percentage rate of twelve percent (12%). The average daily balance is the sum of the amounts owed on each day of the billing period divided by the number of days in the billing period. The amount owed on each day is the amount owed at the end of the previous day plus any charges; excluding any unpaid finance charges from a previous billing period, returned check or bank card payment fees and late payment charges; less any payments and credits made to the account that day. A minimum monthly finance charge of $1.00 will be assessed.

If the account balance is greater than zero on the College's last business day of the month as a result of only registration charges made during the last seven days in the month, there will be no finance charges assessed for that billing period. If these charges are unpaid at the end of the next billing period, finance charges will be assessed as per the preceding paragraph.

Late Payment Charge If the required payment is not received within the next consecutive billing period, a late payment charge of $ 5.00 will be assessed each month thereafter (to a maximum of $ 25) until the required payment is made.

Failure to Pay If payment is not made on time, the College can require immediate payment of the entire balance, including finance charges and late payment charges. The College will refer the account to an outside collection agency and report the status of the account to a credit reporting service. If the account is placed in the hands of an attorney and/or collection agency, collection and court costs will be added to the student's account.

Returned Check or Bank Card Payment If any check or bank card payment tendered to the College is returned unpaid by the bank, the amount of the check or bank card payment plus a reasonable returned check or bank card payment fee will be assessed and added to the student's account.

Account Termination/Suspension The College has the right without prior notice to stop or suspend the extension of credit and to withhold services and registration for classes and workshops if required minimum monthly payments are not made on time.

Credit Limits The College will establish a credit limit on the account and may raise or lower that limit at any time without prior notice.

Grades and Transcripts The College has the option of withholding grade reports, transcripts and other certificates and certifications if an account is in a delinquent status.

Changes in the Terms The College may change the terms of this agreement at any time. Notice will be made in advance of any such changes, as required by law. Any change will be applied to any existing account balance and to future charges.

Credit Reports The College may obtain information about students from credit reporting agencies and other creditors as permitted by law. Credit information so obtained will be used in the College's own credit operation and for forwarding information about student's accounts to other credit reporting agencies and other creditors.

Refunds

All monies owed to LCC must be paid before any refunds or other monies (except wages) will be paid. Instead these refunds or monies will be applied against any monies owed the College.

Refund of tuition, fees or other items funded with financial aid or by a sponsoring agency will be processed as a credit back to the student's CreditLine account, the financial aid funding source, or the sponsoring agency, as appropriate.

Refund of tuition, fees or other items purchased with a VISA/MasterCard will be processed as a credit back to the VISA/MasterCard account.

All other refunds will be processed as credit to the student's LCC CreditLine account. The credit may be used by the student to pay or partially pay for subsequent class registrations.

If there is a credit balance in the student's LCC CreditLine account of $10 or more, a refund check will be printed payable to the student and ***mailed*** to the student. Refund checks for each term are scheduled for printing during the term. (See term class schedule publication for specific dates.) If payment was made by check within two weeks of the check printing date, the refund check will not be printed until the next scheduled date.

Amounts ***under*** $10 will remain as a credit in the student's LCC CreditLine account. This credit may be used to pay or partially pay for subsequent class registrations by the student, either credit or noncredit, for subsequent terms of the same school year.

A student may ask for a cash or check refund of their LCC CreditLine account credit balance. The cash refund request must be made in person by the student during regular business hours at Financial Services on the main campus, or at the Eugene Downtown Center. Conditions for a cash refund include presentation of an LCC cash receipt showing that the payment resulting in the credit balance was made by cash; or if made by check, verification that the check had been processed for deposit more than two weeks before the request. A request for a check refund can be made by mailing such request to ClassLine, P.O. Box 5000, Eugene, OR 97405.

Tuition and Fee Refunds: Credit Classes

Tuition Refunds The type and combination of classes (regular credit class, self-support credit class or workshop), scheduled duration of the class and the date the drop is entered into ClassLine will determine the amount of a refund.

Refund amounts are computed on the basis of the table below. The percentages in the tables are used to compute the refund "amount due to student," which is automatically posted as a credit to the student's CreditLine account (see preceding "Refunds in General" section). In interpreting the table, the class duration is the number of weeks for which the class is scheduled to meet. "Week 1" means through Friday of the week in which the first meeting of the class is scheduled. "Week 2" means through Friday of the second week, etc. following week 1. A drop of any regular class prior to the day of the first class meeting will receive a 100% refund. For workshop refunds, students will need to contact the sponsoring department after first entering the drop via ClassLine. Any workshop refunds will be computed by that department and then will be posted as a credit to the student's LCC CreditLine account.

Credit Classes Tuition Refund Table

Class Duration	Prior to start of Class	Drop Date Week 1	Week 2	Week 3	Week 4
Longer than 6 weeks	100%	100%	70%	30%	0%
4 to 6 weeks	100%	100%	30%	0%	0%
More than 1 but less than 4 weeks	100%	0%	0%	0%	0%
Workshops — 1 week or less (see preceding paragraph)	0%	0%	0%	0%	0%

Refunds will be calculated by multiplying the tuition amount by the appropriate rate in the refund table.

Example: A student registers and pays $144 for 6 credits ($24 x 6). In the second week the student drops 3 credits. The "amount due to student" that will be credited to the student's LCC CreditLine account is $50.40 ($24 x 3 x 70 %).

Petitions for exceptions to the refund policy are handled by Student Records. Extenuating circumstances (circumstances clearly beyond the student's control) may be cause for setting an effective drop date earlier than the actual drop date. Written verification (a note from a doctor if unable to attend for medical reasons, from an employer if work schedule was changed and conflicted with scheduled classes, etc.) is necessary.

Except for a catastrophic situation, all petitions must be received in the Student Records Office by the end of the ninth week of the term.

Student Body and ClassLine Fees No refund will be granted, unless the only credit class registered for is cancelled by the College or dropped by the student during the time 100% refunds are in effect.

Class Fees (fees for curricular offerings) Refunds may be computed by ClassLine 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.

Credit Class Fees

1. All special fees paid by the student where the College has contracted for outside services are not automatically computed by ClassLine after the first class meeting. Any refund of these fees must be initiated through the department office by the student and processed through Financial Services.
2. Materials Refund: Materials that are reusable may be returned. Refunds are not calculated by ClassLine but may be authorized by the department for usable returned materials. Refund of these fees must be initiated through the department office by the student and processed through Financial Services.
3. Credit class fees other than those described above are automatically calculated by ClassLine when the student enters the drop and are based on the following table:

Credit Classes Fee Refund Table

Class Duration	Prior to start of Class	Drop Date Week 1	Week 2	Week 3	Week 4
Longer than 6 weeks	100%	100%	50%	25%	0%
4 to 6 weeks	100%	50%	25%	0%	0%
More than 1 but less than 4 weeks	100%	0%	0%	0%	0%
Workshops — 1 week or less (see note)	0%	0%	0%	0%	0%

Note: Workshop refunds are not automatically calculated by ClassLine. Students will need to contact the sponsoring department after entering the drop via ClassLine. Any workshop refunds will have to be computed by that department.

Tuition and Fee Refunds: Noncredit Classes

Most refunds are automatically calculated by ClassLine based on the following noncredit tuition and fee refund table and credited to the student's LCC CreditLine account. The refund "amount due to student" depends on the scheduled duration of the class and the date the drop is entered into ClassLine. The exceptions are workshops or as noted in the course descriptions.

Refund requests for workshops and those fees not automatically calculated by ClassLine must be made in writing to the Adult Education office at the Downtown Center.

Noncredit Classes Tuition & Fee Refund Table

Class Duration	Prior to start of Class	Drop Date Week 1	Week 2	Week 3
Longer than 6 weeks	100%	100%	100%	0%
4 to 6 weeks	100%	100%	0%	0%
More than 1 but less than 4 weeks	100%	0%	0%	0%
Workshops — 1 week or less (see note)	0-100%	0%	0%	0%

Note: Workshop refunds are automatically calculated by ClassLine for drops made three days prior to the start of the workshop. You will need to contact the sponsoring department after entering the drop via ClassLine if you enter the drop within three days of the beginning date of the workshop. Any workshop refunds will then have to be computed by that department.

Classline Fee No refund will be granted, unless the only noncredit class registered for is cancelled by the College or dropped by the student during the time 100% refunds are in effect.

Financial Aid

The LCC Financial Aid Office is located on the second floor of the Center Building on the main campus. Counter hours are 10 a.m. to 5 p.m. Monday through Friday. Extended hours are in effect the first week of each term.

The staff provides general information concerning financial aid and assists students in obtaining and correctly completing all the necessary financial aid forms. For questions relating to an individual financial aid award, students should request to see a financial aid adviser. Students receiving financial aid at LCC are assigned a financial aid adviser based on the first letter of their last name.

The Goal of Financial Aid Although the primary responsibility for meeting college costs rests with students and their families, Lane Community College recognizes that many individuals cannot assume the full financial burden of the costs of a college education. For this reason, financial aid is available to bridge the gap between the costs of education and the available student/family resources.

Assistance is available from a variety of federal, state, and private sources. The programs may include grants, loans, employment, and scholarships. Students must repay educational loans. Grants, earnings, and scholarships need not be repaid.

Eligibility The eligibility requirements for financial aid are simple. A student must:

- Be a U.S. citizen or eligible noncitizen.
- Demonstrate the ability to benefit from the education or training offered.
- Be at least 18 years old. Students under 18 will be considered if they have a high school diploma or a GED certificate and are enrolled in college credit classes.
- Have applied for admission to the college.
- Be enrolled in at least six credits in a degree or certificate program.
- Maintain satisfactory academic progress.
- Not be in default or owing a refund to a Title IV financial aid program.
- Have a financial need.

Ability to Benefit Federal and state regulations require that in order to receive financial aid funds, students must demonstrate the ability to succeed in a chosen program. Students automatically meet this criteria if they have:

- Received a high school diploma.
- Received a GED certificate.

If students do not meet one of the above criteria ***this does not disqualify them from receiving financial aid.*** The Financial Aid Office staff will ask students to contact the college Testing Office. The Testing Office will assess their current skill level and may refer them to an academic counselor who will assist them in developing a study plan that will help them succeed in their program.

Applying for Financial Aid The financial aid application process is time-consuming. To receive the maximum amount of aid a student is eligible for, it is important to accurately complete all the necessary forms in a timely manner.

Financial aid application forms are available in January for the following school year. Applications are available from the LCC Financial Aid Office, the LCC Downtown Center, LCC Off-campus Centers, and local high schools. The Financial Aid Office offers workshops in January and February to provide general information on financial aid and assistance in completing the necessary forms.

Receiving Aid

The amount of money a student receives from financial aid depends on several factors:

Financial Need Financial need is the difference between the cost of going to college and the resources a student has. Costs can only be provided for the student, and not for other family members, according to the cost of attendance provisions of the Higher Education Amendments of 1986.

Costs include tuition, books, living expenses, transportation, personal expenses, and special costs such as child care, and tools and fees required for courses.

Resources include money a student is expected to contribute from savings, wages, and other income; and parents' contribution if the student is a dependent.

Calculation of need is determined in this manner:

	$	Costs of going to college
–	$	Financial resources
	$	Financial need

Date of Application The amount of financial aid offered depends on the student's financial need and the availability of funds. The supply of some funds is limited. Supplemental Educational Opportunity Grants, Perkins Loans (formerly National Direct Student Loans), and College Work Study are awarded on a first-come, first-served basis through LCC.

Oregon State Need Grants and Cash Awards are offered as long as state funds are available. Pell Grants and Stafford Student Loans (formerly Guaranteed Student Loans) are available to eligible students all year.

Enrollment Status 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).

Satisfactory Academic Progress

Lane Community College is required by federal and state regulations to define and enforce standards of satisfactory academic progress (SAP) to stay on financial aid. SAP is measured each term using the following criteria:

- Complete the minimum number of credits for which funding was received (full time, 12 credits; three-quarter time, 9 credits; half time, 6 credits).
- Complete credits with at least a 2.0 GPA.
- Make satisfactory progress toward the completion of a degree or certificate. Students are expected to complete a degree objective at LCC by the time they have completed the equivalent of 108 credits. Credits completed at other colleges will be included in credit calculation.

Probation/Disqualification

Students who fail to meet the minimum requirements for SAP will either be placed on probation or disqualified from financial aid.

Probation Students who fail to meet the minimum requirements for SAP standards for the term but complete at least 75% of the credits they were funded for with a GPA of at least 1.75 will be placed on probation. While on probation they will continue to receive financial aid. However, if at any time during the following three terms they again fail to make SAP, they will be automatically disqualified from financial aid.

Disqualification If students fail to complete at least 75% of their credits, fall below a 1.75 GPA, or fail to meet the minimum SAP standards within three terms after they have been placed on probation, they will be disqualified from financial aid and receive no further funding.

Reinstatement Students who were disqualified because they completed less than 75% of their credits will have financial aid eligibility reinstated after they have made up the number of credits they were funded for but did not satisfactorily complete.

Students disqualified because their GPA fell below 1.75 will have eligibility reinstated after they have completed at least six credits with a grade of "C" or better. In both cases students must provide the Financial Aid Office with a copy of their transcript indicating they have fulfilled the necessary requirements to be reinstated.

Appeals

Satisfactory Academic Progress Students may appeal SAP disqualification if they can document why they did not make SAP and why an exception should be made. Appeal forms are available from the Financial Aid Office. Reinstatement may be granted if there were circumstances beyond a student's control which prevented them from attending classes. In general, reinstatement will not be granted because of personal decisions students made (e.g., taking a job) that prevented them from making SAP.

108 Credit Limit Students who cannot complete a degree objective within 108 credits may submit a written appeal to extend eligibility for funding to complete the degree. Appeal forms are available from the Financial Aid Office.

For additional information on financial aid, consult the Lane Community College Guide to Financial Resources, available from the LCC Financial Aid Office.

Employment/Placement Service

The Employment/Placement Office provides a free employment service for students, former students and LCC graduates plus a job placement service for students eligible for the College Work Study Program.

The Employment/Placement Office maintains listings of available jobs and assists with placement of qualified students in these jobs. Employers are local businesses and private individuals in need of both permanent and temporary employees. Students and LCC graduates seeking employment are encouraged to register at the Employment/Placement Office, room 311, Forum Building, on main campus.

Students eligible for the College Work Study Program are placed in jobs through the Employment/Placement Office. Eligibility for the College Work Study Program is determined by the Financial Aid Office as part of the Financial Aid application and funding process. Employers are college departments and off-campus nonprofit agencies.

Counseling and Human Development Department

Counseling

Second Floor, Center Building

The principal goal of the Counseling Department is to provide effective and personal support services which allow students to profit from their Lane Community College experience. The counselors, advisors, specialists, and support staff work together to present a variety of services to a diverse student population.

Counselors offer on-going 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.

Counseling and guidance are available through individual counseling sessions or in classroom settings. Many counseling activities occur in the Counseling/Advising Center. The center is open to the community and students either on a drop-in basis or by appointment. Hours are 9 a.m. to 7 p.m., Monday through Thursday and from 9 a.m. to 5 p.m. on Friday. Summer hours are 9 a.m. to 5 p.m., Monday through Thursday.

Academic Advising

Second Floor, Center Building

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

- Learn about LCC services and programs.
- Identify college procedures.
- Obtain up-to-date written information about requirements for LCC programs and degrees.
- Plan course schedules to meet personal needs and program requirements.
- Identify LCC courses that meet degree requirements at LCC and at four-year colleges throughout the state.
- Solve scheduling difficulties or problems.
- Identify ways to do well in class and feel satisfied about school.

A counselor is assigned to each academic department. These counselors have an in-depth knowledge of the departments' procedures and various resources available. Students can meet with their department counselor during the new student program orientations held before the beginning of each term. These sessions are group meetings to orient students to their department.

Students are encouraged to meet with their counselor on a regular basis throughout their stay at LCC. Counselor office hours are posted on their doors and are available at the Counseling/Advising Center on the second floor of the Center Building.

One- and two-hour academic workshops are held each term for transfer programs. These meetings explain recent program changes, admission requirements to Oregon four-year colleges and universities, and focus on issues about each student's academic program and special needs. To find out about time and location, check the bulletin board in the Counseling/Advising Center, read the LCC *Torch,* or call the Counseling Department at 726-2204.

Peer Assistance

Student service associates are selected from the student body and trained to assist the Counseling Department in helping other students benefit from the resources available to them at LCC.

Associates staff the on-campus phones at registration and assist with new student orientation. They also staff the Career Information Center, work in the Counseling/Advising Center, assist disabled students (serving as mobility aides or note takers), work at the LCC Downtown Center, tutor students in Study Skills classes, and work on special projects. Associates are trained in basic communication and active listening skills, as well as campus resources and procedures. They also learn to work together as a team.

Brochures picturing this year's associates are available at the counseling reception area and the Career Information Center.

Interested students should apply at the Counseling Department in early April to work as associates during the following academic year. For more information, contact Julia Poole in the Counseling Department.

Life Transitions Workshops

Workshops are offered each term for people who want to explore new directions and interests in their lives but who face the dilemma of where to begin. The workshops focus on self-exploration (values, interests and abilities), transitions, and development of life planning skills (decision making, planning, goal setting and implementation).

People who are considering returning to school to update or acquire new skills after many years in the home, who are approaching the job market for the first time, or who are thinking of becoming involved in volunteer activities are appropriate participants in the workshops. Enrollment is limited.

For further information contact the Counseling Department, 726-2204.

Career Information Center

Second Floor, Center Building

LCC's Career Information Center (CIC) offers a variety of materials to assist students and community members in making career decisions. CIC on the main campus is open Monday through Friday from 9 a.m. to 5 p.m., and evenings as announced. The Student Services office at the Downtown Center houses the career resources in that location. Call 747-4501, ext. 2940, for hours. Summer hours in both locations may vary.

The most popular sources of information are the computer programs. Oregon Career Information System (CIS) has a questionnaire (Quest) that sorts occupations and generates a list of careers to explore. Specific information is included about working conditions, hiring practices, wages, outlook in several areas of Oregon, and ways to prepare for employment. Discover for Colleges and Adults assesses values, interests, past experiences, and abilities and generates careers that fit with a person's answers. Micro-Skills compiles a list of 30 occupations, based on skills used in past achievements.

Other CIC career materials include filmstrips, videotapes, magazines, books, career files, college catalogs, and free handouts on career fields. Most programs and materials are free to anyone in the community.

Staff members are always available to assist in using the computer and researching career information.

Assessment and Testing Service

Room 227, Center Building

LCC offers a wide range of tests to students who want some help in understanding themselves better and in making wise career decisions. The college uses tests as one of several counseling tools, not merely as a record of performance. We try to provide all students an opportunity to discuss their test results with a counselor who will assist them in exploring the meaning and implications of their test results.

Anyone who is now an LCC student may use the Assessment and Testing Service, and in many cases people who expect to become LCC students may use it. Students who wish to take vocational interest surveys and personality inventories should 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, FAA tests, screening exams conducted for various departments, or the entrance test for new students in reading, writing and math.

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

Many kinds of tests and assessments are available:

- Vocational interest surveys
- Tests of basic skills in reading, writing and math
- Screening tests required for entry into several programs with limited enrollments
- Personality inventories
- General Education Development (GED) tests for people wanting the high school Certificate of Equivalency
- FAA written tests for airplane pilots and mechanics.

The Testing Office is open Monday through Friday from 8 a.m. to 5 p.m., and Monday and Thursday evenings until 7 during the regular academic year. Summer hours are from 8 a.m. to 5 p.m. Monday through Thursday.

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 that they have mastered the material covered in an LCC 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, LCC will award them college credit. Many courses, though not all, may be challenged through the CBE process. See the Testing Office for information on procedures and fees.

Credit-by-Assessment Students who have experience and knowledge in certain areas may receive college credit for many LCC courses, but not all, through the Credit by Assessment program (CBA). Examples of relevant experiences are work, volunteer work, travel, certain hobbies, non-credit courses, workshops, and so on. If a student can describe and satisfactorily document that such learning satisfies one or more course requirements, faculty members will evaluate these accomplishments and in many cases award course credit. CBA is different from having one's transcript evaluated, a free service of the Student Records Office. It is also different from the Credit-by-Exam procedure. See the Student Records Office for current information on procedures and fees.

CLEP (College-Level Examination Program) and **AP (Advanced Placement)** LCC grants credit to students who achieve satisfactory scores on many CLEP and AP exams in both general areas and various other specific subject areas. The credit we grant is also granted at most four-year colleges and universities. These credits do not appear on the LCC transcript when mailed to another school. Although LCC is not a CLEP testing center (the University of Oregon is the nearest one), the Testing Office has current information regarding how and where a person may take CLEP examinations. It also has a list of the specific examinations approved for LCC credit.

Miscellaneous Training and Credit Credit is granted to skilled craft workers who have completed a standard Oregon apprenticeship program, and for related training. Credit is also granted for military training and for work completed at proprietory schools, such as business colleges, art schools, and beauty colleges. Such credit generally applies only toward a vocational program, and does not appear on the student's LCC transcript. The student should apply for such credit in Student Records, bringing certificates of completion, school records, or other available documentation. The student is notified of the credit granted, and a record is kept in the student's file.

Community Center for Family Counseling

Phone: 686-5501

The Counseling Department and the Community Education and Economic Development Division at Lane Community College sponsor the Community Center for Family Counseling in cooperation with the University of Oregon.

Students and community parents with preschool and elementary school-age children can view family counseling sessions and participate in parent education/discussion groups from 9 a.m. to noon on Saturdays. Additional parent education/discussion groups are offered at various community locations during the week, as are groups for couples and divorced and single adults. Formats for the groups are based on the theory and principles of Alfred Adler and Rudolph Dreikurs.

Human Development Classes

Several classes are offered each term which will help students with college orientation, career and life planning, and many aspects of personal growth. Details about these courses can be found in the Course Description section of this catalog under Human Development.

Study Skills Learning Center

The Study Skills Department and its Learning Center, on the fourth floor of the Center Building, helps students prepare for college by improving their reading, writing, spelling, vocabulary, basic math, and study skills.

The center is used to satisfy a number of learning needs. It is useful to students who have been out of school a long time. It also is helpful to students who did not do well in their former schooling and are coming to college for the first time. And it is a great help to students who just want to improve their learning skills.

A variety of instructional materials and equipment is used in the center. There are several hundred skill texts and paperback books available for checkout by students.

The center staff offers assistance and advice to students about their skills and can test students if they wish. Contact the Study Skills Center for more information: daily from 7:30 a.m. to 4:30 p.m..

Credit Courses

The Study Skills Department offers a number of courses for college credit. For more information, see Study Skills in the course description section of the catalog.

Supportive Services

The department offers these services to students:

- Testing in reading, spelling, vocabulary, English grammar, math, and thinking skills
- Services to blind and hearing impaired students
- Recreational reading area (paperbacks may be checked out by LCC students and staff members)
- Consultation

Learning Resource Center (Library)

Second and third floors, Center Building

The Lane Community College Learning Resource Center, is centrally located on campus and contains a balanced collection covering the college curriculum. The collection includes approximately 59,000 books, 300 magazine and newspaper subscriptions, 18,000 audiovisual items including audio and video cassettes, 16mm films, and many multimedia kits. In addition, the library provides maps, a pamphlet file, telephone books, and government directories.

Services

Librarians provide information assistance, give library lecture/tours, prepare bibliographies and give advice on library assignments.

The Learning Resource Center also participates in OCLC, a nationwide bibliographic computer network, and in DIALOG Information Services. Through OCLC, the college has access to over seventeen million bibliographic records as well as the ability to borrow materials on inter-library loan from more than 5,000 participating libraries.

Through DIALOG, the library can search nearly 200 databases containing in excess of 60 million records of information. These records range from directory-type records to complete bibliographic citations including summaries. Computerized literature searching, a cost-effective method of increasing research performance, is available to both students and non-students. A typical 10-minute search can cost from $5 to $15.

Media Services provides instructional support by securing films or videocassettes to meet the classroom needs of instructors.

Other library services include a three-credit college transfer course, Use of the Library; photocopy facilities; microform reader/printer; and viewers for the visually impaired.

Audiovisual services, another part of the Learning Resource Center, is responsible for the acquisition, scheduling, and distribution of all media equipment on campus.

Loan Policies

Library services and materials are available for use by any person who is a resident of the Lane Community College District. Students must present a current student body card to borrow materials. Community members may apply for a Town Patron Card at the circulation desk.

Hours

The Learning Resource Center is open 7:30 a.m. to 10 p.m. Monday through Thursday, 7:30 a.m. to 5 p.m. Friday, and 9:30 a.m. to 1:30 p.m. on Saturday. It is closed on Sunday and holidays.

Library Class

Use of the Library LIB 127 . . . . . 3 credits
(Fall, Winter, & Spring) . . . . . 3 class hrs/wk
Use of the Library is an open entry/open exit class designed to provide training and practice in using library resources effectively. Students will learn research strategy and bibliographic form. Hands-on activity helps students overcome "library anxiety."

Cooperative Work Experience Department

Cooperative Work Experience is designed to provide students with on-the-job practical field experience while offering college credit for the experience. The program offers students a combination of services and benefits: assistance in locating part-time and permanent jobs; instruction in resume writing and job-interviewing skills; early exploration and confirmation of career choice; financial aid by earning wages; development of job contacts; and expansion of work history. Cooperative Work Experience is available in all LCC departments. The credit course name for CWE is Supervised Field Experience.

Cooperative Work Experience represents a three-way working partnership among LCC, the co-op employer, and the student. It provides a way for a student to combine study at LCC with work experience under the supervision of an employer and, like classroom work, is an integral part of a student's educational preparation.

The requirements of a cooperative education program include successful completion of a specified combination of alternating classroom and work experiences. Work experiences must be preceded by a consultation between the student and a CWE coordinator (see list on next page).

Work experiences are to be appropriately related to the educational and career objectives of the particular student and at a rate of pay comparable to employees who do similar work. In some instances, students may receive credit for volunteer placements.

Lane Community College's Cooperative Work Experience program is the largest among two-year colleges offering cooperative education and is considered a model program in the United States. Over 1,700 LCC students each year enroll in CWE and work in both salaried and volunteer positions. More than 800 employers participate in the program each year. Sixty-five percent of all CWE students are retained by employers as permanent employees after graduation.

The Cooperative Work Experience office is located in the Apprenticeship Building, phone 726-2203. CWE coordinators are located in each of the academic departments on campus.

Advantages to the Student

- Financial advantages through paid employment while earning credit
- Guidance in career expectations and demands
- Help in locating part-time or full-time employment which could lead to permanent employment
- Development of skills and self-confidence
- Development of a working history
- An opportunity to work in volunteer positions
- Increased motivation for academic achievement
- Instruction in resumé preparation and job interviewing skills

Registration Procedures

1. Meet with department coordinator
2. Establish credits and seminar time
3. Complete student agreement form
4. Obtain enrollment form for registration
5. Register for classes

Credits Course credit may be earned for work experience if a job is related to either the student's major or his/her occupational goal. Normally, a maximum of 18 CWE credits can be earned at LCC. Credit is assigned on the basis of one credit for 36 hours of work experience. Students seeking CWE credit must be currently enrolled at LCC. Certain vocational programs require CWE credits.

Supervised Field Experience is the course title of the work experience options found in all departments on campus that are part of the Cooperative Work Experience program.

To learn more about Cooperative Work Experience drop by the CWE office in the Apprenticeship Building or see one of the coordinators in the area of interest or career major.

Supervised Field Experience FE 207/1.300 . . 1-15 credits
(All Terms) . . . . . 3-45 hrs/wk

Supervised Field Experience is an educational partnership with business and industry whereby a college student receives career-related on-the-job training and experience under the supervision of the college and the employer. The student enrolled in SFE receives credit and a grade for work. The objective of SFE is to provide current community and business work experience that provides meaning and direction to the student's total educational experience. Entry into SFE is by petition, if already working, or by placement by a coordinator. Administration of this course is by the Cooperative Work Experience department in the Apprenticeship Building.

The following is a list of the areas that offer Cooperative Work Experience, and the coordinator assigned to each.

DEPARTMENT	COORDINATOR	SECTIONS
Adult Education	Tom D. Holub	Court Reporting
Art & Applied Design	Thomas Rubick	Graphic Design
		Art & Applied Design
Business	Fred Meyer	Business Management
		Real Estate Management
	Sharon L. Moore	Office Administration
	Cathy C. Grant-Churchwell	Legal Secretary
Cottage Grove Center	Linda Myers	Business
		Lower Division
		Trades Industry
Data Processing	Joe Freeman	Data Processing
Downtown Center	Darlene Ogan	Office Administration
Electronics	John Winquist	Electronics
	Joe Freeman	Drafting
English & Foreign Language	Peggy Marston	Language Arts
		International Co-op
Flight Technology	Robert F. Way	Flight Technology
Health Occupations	Glenna M. Clemens	Nursing
	Sheila B. Early	Nursing
	Beth Webb	Dental Assisting
	Norma K. Stevens	Medical Office Assistant
	Douglas White	Respiratory Care
	Jack W. Shadwick	Pre-Health Occupations
	Julianne Nutting	Early Childhood Education
	Linda Riepe	Nanny Option
Health & P.E.	Dave E. Roof	Health & P.E.
Industrial Technology Programs	Robert F. Way	Landscape
	Linda Myers	Construction
	Albert H. Rowe	Welding
	Tricia Hahn	Culinary, Food Service and Hospitality
	Suzanne Curtis	Dietary Managers
Mass Communication	Michael Hopkinson	Radio Broadcasting
		Video Production
	Pete Peterson	Journalism/Newswriting
	Robert L. Prokop	Photography
	Dorothy Wearne	Publication Design & Production
Mathematics	Tricia Hahn	Mathematics
Mechanics	Harvey D. Kelm	Agricultural & Industrial Equipment
	Joe Freeman	Automotive
		Diesel
		Auto Body & Fender
		Machine Tech
		Airframe
		Insurance Adjuster
Performing Arts	Gerald Seifert	Performing Arts

DEPARTMENT	COORDINATOR	SECTIONS
Science	Dixie Maurer-Clemons	Biology Engineering Science
		Chemistry/Physics Energy Management
	Robert F. Way	Environmental Technology
Proficiency Skills Training	Dixie Maurer-Clemons	Encompasses all programs
Siuslaw Area Center	Linda Myers	Business Siuslaw Office Trade Industry Lower Division Siuslaw Technical Sociology Education Siuslaw Community Service

DEPARTMENT	COORDINATOR	SECTIONS
Social Science		Sociology Psychology Political Science
	Jim Cobb Tricia Hahn	Community Service Psychology Sociology
	Peggy Marston Thomas V. Hickey	Education Law Enforcement Criminal Justice
Study Skills Training & Development	Frank Rossini Tamara Pinkas	Office & Accounting Skills Training

Health Services

All students taking credit courses (including Adult Basic Education and High School Completion) at Lane Community College are eligible to use Student Health Services located in the Center Building, Room 126. Most services are free, however, fees are charged for certain special services.

Patient education has high priority at LCC Student Health Services. Each student visit to the clinic is accompanied by some form of health education; a wide range of pamphlets to encourage health consumer responsibility have been formulated; articles on health problems are published in the Torch and the Daily; and various health education materials are distributed on campus via the Apple Booth.

All services are confidential.

Primary Health Care A walk-in service is provided fall, winter, and spring terms on days classes are in session. Nurses and physicans are on duty daily.

The hours are 8 a.m. to 12:30 p.m. and 1:30 to 4 p.m., Monday through Thursday, and 10 a.m. to 12:30 p.m. and 1:30 to 3 p.m. Friday.

- Diagnosis and treatment of most illnesses
- Referral to community agencies and specialists
- Health education/counseling
- Sexually transmitted disease testing and treatment
- Administration of allergy regimens
- First aid
- Lab tests
- Health pamphlets
- Tuberculin tests
- Pregnancy tests
- Tests & treatment for strep throat
- Physical exams if required
- Vision and hearing tests
- Nutrition counseling
- Emergency dental care
- Athletic medicine

Family Planning Services by appointment

- Health education
- Gynecological exam
- Breast exam
- Thyroid exam
- Lab tests
- Pap smears
- Sexuality counseling
- Information on and prescription of birth control methods
- Venereal disease tests

Disabled Student Services

- Assistance with personal care
- Medication assistance
- Loan of wheelchairs and crutches

Student Health Insurance Students may purchase health insurance at registration or during the open enrollment period at the beginning of each term. Informational brochures are available at registration and at Student Health Services. Payment is made at Financial Services. Brochures are also available at the Downtown Center and Adult Education students may purchase insurance there.

***Fees** are charged for the following:

Tuberculin Test	$ 2.00
Pregnancy Test	5.00
Physical Exam	20.00
Family Planning	20.00
Lab Fee	3.00

Family planning supplies at cost.

*Subject to change without notice.

Student Services and Resources

Student Activities and Auxiliary Services

Second Floor, Center Building

Student Activities

The Student Activities and Auxiliary Services Office is open Monday through Friday from 8 a.m. to 5 p.m. Office personnel provide guidance and leadership for students to supplement their educational experiences and encourage them to assume responsibility and self-direction for their own personal and educational growth.

Non-academic activities may be scheduled by contacting the Student Activities Office. Events may include formation of clubs and organizations, political activities, meetings, information tables, films, sales for non-profit groups, etc. The managers of the Bookstore and Foodservices report to the director of Student Activities and Auxiliary Services.

Photo I.D.

A Lane Community College Photo I.D. is required for:

- Use of the Library — books and resource materials.
- Student Legal Services.
- Textbook returns, payment by check and refunds in the Bookstore.
- Purchase of LTD bus passes.
- Identification for LCC campus Security.
- Obtaining financial aid checks.
- For checkout and/or use of special equipment in some departments.
- Use of Physical Education facilities.
- Cash checks in Financial Services.

Generally, a photo I.D. card is made as soon as a student has registered. Photo I.D. cards are made in the Student Activities area on the second floor of the Center Building during registration and from the second week of classes to the end of each term during specified hours.

The cost for the I.D. card is included in the $5 mandatory term fee. For Adult Basic Education students, students enrolled only at off-campus centers, or for community patrons or staff, a library card may be purchased for a $2 fee. This card is good for the LCC and U of O libraries.

ASLCC

Student Government (Associated Students of Lane Community College) offices are located on the fourth floor of the Center Building in room 479. The ASLCC legislative body is the Senate, composed of six executive officers, and nine senators. The purpose of ASLCC is to represent student interests and concerns and to promote student involvement in all phases of college life. Primary financing for ASLCC comes from mandatory student fees which are supervised by the director of student activities.

Contact the ASLCC president or the 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

Student Resource Center

The Student Resource Center (SRC) is a branch of the ASLCC. It is located on the second floor of the Center Building and is a student-operated service organization funded by the Associated Students of Lane Community College. SRC personnel help students to resolve nonacademic problems both on campus and in the community.

Direct services provided by the SRC include assistance and referrals in areas of childcare, housing, transportation, textbook sales, OSPIRG, voter registration, and other special student interests. A student lounge with a microwave oven is available. Free coffee is offered every Wednesday.

Carpool and ride-share information, as well as bus schedules are available in the SRC. A bulletin board at the SRC has maps of Eugene and outlying areas, and cards listing rides and riders wanted, indicating locations and schedules. People who would like to share rides can contact others who live in their area to discuss the details of pick-up times, shared gas expense and other suitable arrangements.

Legal Services

Legal advice is free to all students who pay mandatory student fees. A practicing attorney is available 15 hours per week except during summer term. Appointments may be made during Legal Service office hours. The Legal Services Office is located on the second floor of the Center Building.

Clubs and Organizations

Clubs and organizations range from Chess Club, Disabled Students Program and Black Student Union to Phi Theta Kappa (honor society). 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. Groups or individuals interested in forming clubs and organizations should contact the director of Student Activities.

Bookstore

The college Bookstore is located on the mezzanine of the Center Building with access stairs located near the counseling area and an elevator on the northeast end of the Center Building. Students can purchase the majority of materials needed for class work, including textbooks, art supplies, paperback books, and a variety of school supplies. Also available are specialty items and gift items. The Bookstore is open from 8 a.m. to 5 p.m. Monday through Friday. Summer term hours may vary, but will be posted.

Foodservices

Foodservices has several separate dining areas to provide food and drink for students, faculty, and staff. These areas include a snack bar, a cafeteria, and a restaurant. They are located on the first floor of the Center Building.

Sports Activities

Recreational Sports Program

The recreational sports program includes an array of services and programs for students, staff, and faculty to participate in sports activities, including:

Intramurals
Extramurals (Club Sports)
Drop-in (Open) Recreation
Special Events Recreation

One of the primary purposes of the program is to provide leisure time pursuits where an individual can learn a means of improving and maintaining personal fitness in a sociable and enjoyable setting. Intramurals provide a full schedule of individual and team sports leading to school championships. ***Intramural activities*** include the following:

Badminton	Golf	Table Tennis
Basketball	Ski Adventures	Tennis (Spring & Fall)
Bowling	Softball (Spring)	Volleyball (Winter & Spring)
Flag Football (Fall)	Soccer (Fall & Spring)	Weight Lifting
Fun Runs		

All intramural activities are governed by regulations provided in the Intramural Handbook and supervised by the Intramural Sports office. All regularly enrolled students and staff are eligible for participation. The exception to this eligibility ruling is for varsity athletes or professionals competing in their chosen sport. Specific guidelines on eligibility are outlined in the handbook.

Current leagues in basketball, volleyball, and softball are a part of LCC intramurals. Individual sport competitions are organized in tournaments for novices, intermediate and advanced skilled performers. Badminton, tennis, and ping-pong matches are scheduled before a prearranged deadline and are played at the leisure of both parties involved.

Daily open gyms (free gym time when classes are not held) are offered for student and staff use in badminton, basketball, volleyball, and weight lifting. The noon hour is generally reserved for one or more of these activities in at least one of the gyms. On specific nights the gyms are open for drop-in badminton, volleyball, and basketball. Ping-pong equipment is available for use during intramural office hours.

The ***extramural program*** is provided for men and women students who are highly skilled in a competitive program closely related to the intercollegiate athletic program. These activities may include soccer, men's volleyball, co-ed volleyball, karate, and Lane Dance Theatre.

Intercollegiate - Athletics

The intercollegiate athletic program provides the highest level of competition for those men and women possessing a high skill level. Lane Community College presently competes in eight intercollegiate sports, providing a diversified athletic program to meet student needs.

Men's Sports	**Women's Sports**
Baseball	Basketball
Basketball	Cross Country
Cross Country	Track
Track	Volleyball

Lane Community College is a member of the Northwest Athletic Association of Community Colleges, Southern Region.

Student Media

Denali

Denali is a literary arts magazine presently being published three times a year.

All genres of student writing, as well as photography and graphic arts, are accepted for evaluation. Tutorial assistance is available for help with any necessary revision before possible publication. Through Cooperative Work Experience, students are employed to assist in the elements of editing and production which are necessary to prepare camera-ready copy for the printer.

Denali operates under guidelines of the Media Commission and is sponsored by the English and Foreign Language Department. The publication is distributed, free of charge, to Lane Community College students and staff as an insert to the student newspaper, the ***Torch.***

Students wishing to submit copy or become involved in any aspect of publication may contact the editor, Room 479D, fourth floor, Center Building, or Peter Jensen, Division of English, Foreign Language and Speech.

Torch

The LCC ***Torch*** is an award-winning, student-produced, weekly campus newspaper with a circulation over 4,000. Published by authority of the LCC Board of Education through the 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 LCC students and staff; serves as a learning laboratory for students of journalism, graphic arts, photography, typesetting, and advertising; and provides a communication channel for student commentary and debate. All LCC students may submit essays and letters for publication in the ***Torch***.

Television

The Mass Communication Department has color video facilities for both studio and location production. Students use department facilities and a large inventory of production equipment to complete class assignments. The equipment available includes computerized and non-computerized editing equipment. In completing their class work, students perform video production job functions such as camera operator, lighting technician, audio assistant, writer, producer, and director. Some productions prepared by students in this program are disseminated to the public through the local cable television system. Advanced students may be chosen to do projects for the LCC Media Center.

KLCC-FM Radio

KLCC-FM is an 86,000 watt public broadcasting station located on the second floor of the Forum Building. The station is operated by a professional staff, qualified students of the Mass Communication Department, and volunteers from the community. It is partially funded by the Corporation for Public Broadcasting and is affiliated with National Public Radio, broadcasting at least 20 hours each day of the year.

While the primary function of the station is to serve community needs, it also provides learning opportunities for qualified students. Students who work at KLCC-FM can receive credits toward graduation through the Cooperative Work Experience program.

Music and Theatre

Dance Productions

LCC's Dance Program offers various performance opportunities for dance students of all levels and idioms. There are two informal presentations: Open Show, in which students from all dance classes present a recital of their accomplishments each term; and Choreography Showcase displaying solos and improvisations from the choreography class. Lane Dance Theatre, a student-based dance company presents a dance concert generated from material created in the Dance Performance Class. Students may also audition for the formal Dance Faculty Concert in early spring. For more information about the Dance program, students should contact Mary Seereiter.

Music Ensembles

LCC's Performing Arts Department offers many opportunities for participation in vocal and instrumental ensembles. Students don't have to be a music major to be a member of one of these groups. They may join the LCC Chorus with no audition, for example. Students who wish to try out for the Vocal Jazz or Chamber Choir should contact director Dan Sachs.

The LCC Symphonic Band and the Jazz Ensemble are two groups in which students can use their instrumental skills and find enjoyment in rehearsing and performing. For information about these instrumental groups, see Ed McManus and Jim Greenwood. String players may contact Nathan Cammack.

Theatre Productions

Students who are attracted to "the roar of greasepaint and smell of the crowd" can work on an LCC play production, either as a performer or crew member. To learn more about theatre opportunities, students may contact directors Patrick Torelle or Jerry Seifert, or designer Jim McCarty, all in the Performing Arts Department.

Policies

Board Policies Directly Affecting LCC Students

LCC policies and administrative procedures are subject to change without prior notice.

Collection for Breakage or Damage – 3293

Any individual responsible for the loss, breakage, or damage of College property, or the personal property of others at any College operated facility, may be charged for the replacement or repair of that property.

Cheating and Plagiarism – 5129

Each instructor will take steps to prevent cheating and plagiarism, and may initiate disciplinary action against students who violate this standard.

Smoking – 5142.6

Smoking is permitted only in designated smoking areas.

Use of Intoxicants – 5142.8

It is a violation of College policy to possess or be under the influence of alcohol or any illegal or unauthorized prescription drug upon the premises of any College owned or operated facility.

Gambling – 5142.9

Gambling in any form is prohibited upon any College owned or operated facility.

Conduct of Persons on Campus – 8331

It is a violation of College policy for any person upon any facility owned or operated by the College to commit or threaten to commit any act that is in violation of state law or College regulations. The administration of the College is authorized to appoint security personnel to remove from the premises any person violating these provisions.

Sexual Discrimination – 8332

Sexual discrimination in the form of sexual harassment is prohibited. Sexual harassment is defined as repeated and unwanted sexual advances, requests for sexual favors and other verbal and physical conduct which results in inhibition of unconstrained academic interchange or career advancement, or creates an intimidating, hostile or offensive environment for one of the parties. Incidents of sexual harassment may result in expulsion from the College.

Student Rights

Academic Council Variance Procedure Petitions for exceptions to college-wide policies related to instruction are available in the Student Records Office, second floor, Center Building.

Examples of Academic Council petitions:

1. Extension of pass/no-pass or audit request deadline.
2. Extension of deadline to drop a class (with no record(s) appearing on the student's official transcript).
3. Changes to the student's grade records when grade options are being requested, or administrative grade marks are recorded.
4. Waiver from requirements for Associate of Arts, Associate of Science, Associate of Applied Science or Associate of General Studies degrees.

A student who is requesting a variance from a college academic policy or administrative procedure must complete an Academic Council petition form.

The petitioner must be currently enrolled as a Lane Community College student, though the council may waive this requirement upon request and presentation of rationale by the petitioner.

The petitioner must be able to present exceptional circumstances or other rational basis for an exception.

Disciplinary Action Copies of the LCC Student Code are available in all student service and instructional departments.

A student who feels that disciplinary action may be involved in any situation—action against the student or a request for disciplinary action to be taken against another student—should review student procedural rights by obtaining a copy of the Lane Community College Student Code. This document includes a list of violations, penalties, procedure for requesting disciplinary action, and procedure for appeal from disciplinary action.

Complaint Procedure Any student or group of students with a complaint concerning College policy, procedure, personnel, or action has the right to be heard promptly. Normally, the student or students should first discuss the concern with the staff member or members most directly involved. A student complaint procedure is available for that purpose . Copies of the procedure are available in the Student Activities Office, second floor, Center Building; or in the Office of the Vice President for Student Services, second floor, Administration Building.

Programs and Suggested Courses of Study

Transfer Planning and Procedures

Credit Programs and Suggested Courses of Study

Noncredit Programs

Transfer Programs and Procedures

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 LCC can complete all or most of the general education requirements of the four-year institution and begin work on the requirements for a specific major. The advantages of beginning college studies at LCC include small classes, lower costs, individual help from instructors, and an opportunity to improve writing, reading, math, and study skills.

Planning a Transfer Program It is important to know that general education requirements and requirements for specific majors vary among the different colleges and universities.

The LCC Counseling Center is a good resource for students who plan to transfer credit from LCC. The center has information on colleges and universities and the degree programs they offer. Counselors and academic advisors are available to help students with academic planning at LCC to insure their course work is appropriate for the program at the four-year institution.

Planning is important because it helps students prepare for further studies in a particular program. 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.

It is the responsibility of students to learn the program requirements of the school to which they plan to transfer. Students should periodically contact the LCC Counseling Center for academic advising and to learn of any possible changes in a program.

Transfer Programs A student can begin preparing for many careers at LCC. The following is a list of programs for which LCC courses may transfer to a college or university in the Oregon State System of Higher Education. (Not all programs are offered at every college or university.)

Agricultural Business Management
Agriculture
American Studies
Anthropology
Architecture and Interior Architecture
Art
Art Education
Art History
Atmospheric Studies
Biochemistry and Biophysics
Biology
Botany
Business Administration
Business and Economics
Business Education
Chemistry
Chemistry — Business
Community Service and Public Affairs
Comparative Literature, Humanities
Computer Science
Dance
Dental Hygiene
Dentistry
Diesel Power Technology
Economics
Education (Elementary)
Education (Secondary)
Engineering
Engineering Technologies
English
Entomology
Fire Services Administration
Foreign Languages
Forestry
General Science
General Social Science
General Studies in Arts and Letters
General Studies in Humanities
Geography
Geology
Gerontology
Health and Health Education
Health Care Administration
History
Home Economics
Hotel, Restaurant, and Tourism Management
Industrial Management
Interdisciplinary Studies
International Studies
Journalism
Landscape Architecture
Law
Law Enforcement — Corrections
Liberal Studies
Manufacturing Technology
Mathematics
Medicine
Medical Technology
Microbiology
Music
Nursing
Pest Management for Plant Protection
Pharmacy
Philosophy
Physical Education
Physics
Political Science
Psychology
Recreation — Leisure Studies and Services
Religious Studies
Resource Recreation Management
Russian Studies
Social Work
Sociology
Speech Communication
Technical Journalism
Theater
Veterinary Medicine
Zoology

Transfer Hotline If students have a problem in transferring classes to a college or university, students should first try to resolve it with their advisor. If the problem can't be solved at that point, students may call the Transfer Problem Hotline at the Oregon Department of Education for additional help. The hotline number is (503) 378-8609.

Programs and Suggested Courses of Study

The programs and suggested courses of study described on the following pages appear in alphabetical order (see list on this page). Curriculum requirements are listed for each program and descriptions of required and elective courses can be found in the Course Descriptions section of the catalog. Curriculum information for LCC programs is updated each term. The most current information is available from an LCC counselor or the department offering a particular program.

Depending on the vocational-technical program in which they are enrolled, students can earn a two-year degree or a one- or two-year certificate of completion.

Also described in this section are suggested courses of study in some subject areas. These are different from a vocational program in which a student earns a degree or certificate issued by the LCC Board of Education. A student who follows one of these courses of study may apply all or some of the courses toward an associate degree and/or college transfer. In some cases, a student can earn a departmental certificate on completion of a course of study.

LCC offers noncredit opportunities for career training and continuing education. These are described at the end of this section of the catalog.

Credit Programs and Suggested Courses of Study

LCC credit programs which are not described in this catalog are:
Energy Management Technician (not open to new students)
Environmental Technology (not open to new students)
Fire Prevention Technology (restricted enrollment)
Forest Technology (not open to new students)
Insurance Adjusters (inactive)
Landscape Development (inactive)
Residential Energy Analyst (not open to new students)

Noncredit Programs

Agricultural and Industrial Equipment Technology

Two-Year Associate of Applied Science Degree Program
or
Two-Year Certificate of Completion Program

Offered by LCC's Mechanics Department

Students learn the operation, diagnosis, testing, and repair of agricultural and light industrial equipment. Class instruction in theory is combined with shop practice.

Opportunities for employment are found in agricultural and industrial dealerships, area farms and ranches, rental shops, and small engine repair outlets. Wages begin at approximately $4.50 per hour; journeymen receive $5.40 to $13.00 per hour. A graduate from this program may enter a job in industry at the second-year level of a four-year training program. Since equipment is increasing in size, cost, and complexity, persons skilled in these specialty areas are always in demand.

In addition to tuition, required estimated costs for agriculture classes include:

Books—$45 (per term); tools—$350; lab fee—$2 (per credit)

For costs in other classes (i.e. welding fees, books, etc.) refer to the appropriate department and/or the current class schedule.

Cooperative Work Experience (Supervised Field Experience) Under the supervision of the coordinator and with instructor consent, a maximum of 13 CWE credits may be earned in lieu of required Agricultural and Industrial Equipment Technology course credits.

Curriculum

First Year	**Fall**
Agricultural and Industrial Equipment Technology 8.155	12
Arc Welding 1 3.921[1]	4
Industrial Safety HE 125[2]	3
Total Credits	19

	Winter
Agricultural and Industrial Equipment Technology 8.155	12
Manufacturing Technology 3.399	6
Social Science Elective[3]	3
Total Credits	21
	Spring
Agricultural and Industrial Equipment Technology 8.155	12
Occupational Mathematics 1 Mth 50[4] *or* Equivalent	3
Supervised Field Experience 1.300	5
Total Credits	20

Second Year	**Fall**
Agricultural and Industrial Equipment Technology 8.155	12
Communication Skills 1 1.100[5] *or* Equivalent	3
Selling BA 238[6]+	3
Gas Processes 1 3.931[1]	4
Total Credits	22
	Winter
Agricultural and Industrial Equipment Technology 8.155	12
Science or Math Elective[7]+#	3
Total Credits	15
	Spring
Agricultural and Industrial Equipment Technology 8.155	12
Humanities Elective+	3
Science or Math Elective[7]+	3
Total Credits	18

[1] Refer to Industrial Technology Programs Course Descriptions.
[2] Refer to Health and PE Department Course Descriptions.
[3] Refer to Social Science Department Course Descriptions.
[4] Refer to Mathematics Department Course Descriptions.
[5] Refer to English & Foreign Language Department Course Descriptions.
[6] Refer to Business Department Course Descriptions.
[7] Refer to Science or Mathematics Department Course Descriptions.
• Refer to Mechanics Department Course Descriptions for other courses in this curriculum.
' Not required for the two-year certificate of completion.
* Principles of Technology 1 4.300 recommended.

Auto Body and Fender Technology

Two-Year Associate of Applied Science Degree Program
or
Two-Year Certificate of Completion Program

Offered by LCC's Mechanics Department

Training is given in various phases of auto metal and auto paint repair through class instruction and shop practice.

Employment opportunities are available in new car dealerships, independent body and fender shops, or heavy-duty truck shops. Students should be willing to relocate.

A two-year associate of applied science degree or the two-year certificate of completion may be obtained by completing any combination of Auto Metal Work and Automotive Painting totaling 72 credits, plus general education courses as listed in the curriculum sequence requirements.

In addition to tuition, required estimated costs include:
Auto Metals—books $45; tools $350; lab fee $2 (per credit).
Auto Paint—books $30; tools $280; lab fee $2 (per credit).

For costs in other classes (i.e. welding fees, books, etc.), refer to the appropriate department and/or current class schedule.

Cooperative Work Experience (Supervised Field Experience)
Auto Paint: Under the supervision of the coordinator and with the approval of the instructor (after completing lab assignment 6, 12 credits), a maximum of 17 CWE credits may be earned in lieu of Auto Paint lab assignments 7, 8, 9, and 10. Concurrently with the CWE station, the student must register for 7 credits of Automotive Painting and complete all block exams and instructional packages through reading and conference with the instructor.
Auto Metal Work: Under the supervision of the coordinator and with instructor consent, a maximum of 18 CWE credits may be earned in lieu of required Auto Metal Work course credits.

Curriculum

First Year	**Fall**
Automotive Painting 3.235 *or*	12
Auto Metal Work 3.237	(12)
Gas Processes 1 3.931[1]	4
Industrial Safety HE 125[2]	3
Total Credits	19

	Winter
Automotive Painting 3.235 *or*	12
Auto Metal Work 3.237	(12)
Color Theory for Auto Refinishing 3.986[3] *or*	2
Airbrush Painting ART 287[3]	(3)
Gas Processes 2 3.932[1] +	4
Total Credits	18-19

	Spring
Automotive Painting 3.235 *or*	12
Auto Metal Work 3.237	(12)
Arc Welding 1 3.921[1] +	4
Total Credits	16

Second Year	**Fall**
Auto Metal Work 3.237	12
Communication Skills 1 1.100[4] *or* Equivalent	3
Science or Math Elective[5] + #	3
Total Credits	18

	Winter
Auto Metal Work 3.237	12
Basic Mathematics Review Mth 20[6] *or* Equivalent	3
Humanities Elective +	3
Total Credits	18

	Spring
Auto Metal Work 3.237	12
Social Science Elective[7]	3
Science or Math Elective[5] +	3
Total Credits	18

[1] Refer to Industrial Technology Programs Course Descriptions.
[2] Refer to Health & PE Department Course Descriptions.
[3] Refer to Art and Applied Design Department Course Descriptions.
[4] Refer to English and Foreign Language Department Course Descriptions.
[5] Refer to Science or Mathematics Department Course Descriptions.
[6] Refer to Mathematics Department Course Descriptions.
[7] Refer to Social Science Department Course Descriptions.
• Refer to Mechanics Department Course Descriptions for other courses in this curriculum.
* Principles of Technology 1 4.300 recommended
' Not required for certificate of completion

Automotive Technology

Two-Year Associate of Applied Science Degree Program

Two-Year Certificate of Completion

Offered by LCC's Mechanics Department

An associate of applied science degree may be obtained by satisfactorily completing both the first-year and second-year curriculum of this program. By eliminating classes with the + symbol, a two-year certificate of completion may be obtained by satisfactorily completing both the first-year and second-year curriculum of this program.

This training can lead to employment in entry occupations in the automotive service and repair field. Journeymen earn approximately $20,000 to $30,000 annually. With an ever-expanding number of makes and models of autos, the demand for auto mechanics who have a broad background of course instruction and training is constantly increasing.

In addition to tuition, required estimated costs for auto classes include:

Books – $190
Tools – $500
Lab Fees – $2 (per credit)

For costs in other classes (i.e., welding fees, books, etc.), refer to the appropriate department and/or the current class schedule.

Cooperative Work Experience (Supervised Field Experience): Under the supervision of the coordinator and with instructor consent, a maximum of 18 CWE credits may be earned in lieu of required Automotive Technology course credits.

Curriculum

First Year	**Fall**
Chassis 3.140	12
Manufacturing Technology 3.399	6
Industrial Safety HE 125[1]	3
Total Credits	21

	Winter
Power Trains 3.141	12
Gas Processes 1 3.931[2]	4
Basic Mathematics Review Mth 20[3] *or* Equivalent	3
Total Credits	19

	Spring
Automatic Transmissions 3.142	12
Arc Welding 1 3.921[2]	4
Total Credits	16

Second Year	**Fall**
Electrical Systems 3.143	12
Communication Skills 1 1.100[4] *or* Equivalent	3
Science or Math Elective[5•]+	3
Total Credits	18

	Winter
Tune-Up and Fuels 3.144	12
Social Science Elective[6]	3
Humanities Elective+	3
Total Credits	18

	Spring
Engines 3.145	12
Science or Math Elective[5]+	3
Total Credits	15

[1] Refer to Health & PE Department Course Descriptions.
[2] Refer to Industrial Technology Programs Course Descriptions.
[3] Refer to Mathematics Department Course Descriptions.
[4] Refer to English and Foreign Language Department Course Descriptions.
[5] Refer to Science Department or Mathematics Department Course Descriptions.
[6] Refer to Social Science Department Course Descriptions.
Principles of Technology 1 4.300 recommended.
• Refer to Mechanics Department Course Descriptions for other courses in this curriculum.
' Not required for Certificate of Completion

Aviation Maintenance Technician

Two-Year Associate of Applied Science Degree Program
or
Two-Year Certificate of Completion Program

Offered by LCC's Mechanics Department

This program is designed to prepare a student for Federal Aviation Administration (FAA) certification exams (written, oral and practical) for airframe and powerplant mechanics ratings.

Satisfactory completion of both the first-year and second-year curriculum of this program are required to qualify for the two-year associate of applied science degree. Satisfactory completion of both the first-year and second-year curriculum of this program *less the classes with the + symbol* are required to qualify for the two-year certificate of completion. Satisfactory completion of both the first-year and second-year curriculum of this program *less the classes with the ° symbol* are required to qualify for the FAA airframe and powerplant mechanics rating exams.

Opportunities for employment exist for those who can qualify for the FAA mechanics certificate. The starting hourly rate of a commercial airline mechanic is approximately $10 with increases to $12 and $15 within 15 months. The fixed-base operator's starting hourly rate is approximately $7 with increases within six months to one year.

Procedures for crediting and guidelines for the determination of documented military or field experience are available through application with the lead aviation instructor.

High school completion or the equivalent is recommended for all applicants to this program.

In addition to tuition, required estimated costs for aviation classes include:

Books – $160 (1st term); additional $20 by the 4th term.
Tools – $425
Lab Fee – $2 (per credit)

For costs in other classes (i.e. math fees, books, etc.), refer to the appropriate department and/or current class schedule.

The FAA oral, practical, and written certification fee is $180.

Cooperative Work Experience (Supervised Field Experience) Under the supervision of the coordinator and as authorized by the Return to Service instructor, a maximum of 12 CWE credits may be earned in lieu of the required Return to Service credits.

Federal regulations direct the curriculum to offer a minimum of the following number of hours of instruction for the rating shown:

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

Curriculum

First Year	**Fall**
General Aviation 3.279°	6
General 1 3.284	6
General 2 3.285	6
Occupational Mathematics 1 Mth 50[1] *or* Equivalent	3
Total Credits	21
	Winter
General 3 3.286	6
General 4 3.287	6
General 5 3.288	6
Total Credits	18
	Spring
Powerplant 3.281#	18
Total Credits	18

Second Year	**Fall**
Powerplant 3.281#	6
Powerplant Return to Service 3.283	6
Communication Skills 1 1.100[2]° *or* Equivalent	3
Industrial Safety HE 125[3]°	3
Total Credits	18
	Winter
Airframe 3.280#	18
Science or Math Elective[4]+°	3
Total Credits	21
	Spring
Airframe 3.280#	6
Airframe Return to Service 3.282	6
Humanities Elective°+	3
Social Science Elective[5]°	3
Total Credits	18

[1] Refer to Mathematics Department Course Descriptions.
[2] Refer to English and Foreign Language Department Course Descriptions.
[3] Refer to Health and PE Department Course Descriptions.
[4] Refer to Science or Mathematics Department Course Descriptions.
[5] Refer to Social Science Department Course Descriptions.
• Refer to Mechanics Department Course Descriptions for other courses in this curriculum.
* Airframe and Powerplant are non-sequential. Students wishing to enroll in Airframe during the first year should contact the department for scheduling.
+ Not required for the two-year Certificate of Completion
° Not required for the two-year FAA Airframe and Powerplant mechanics rating exams.

Banking and Finance

Two-Year Associate of Applied Science Degree Program

Offered by LCC's Business Department

Nature of Work This program trains students for entry-level positions in operations management of banks, credit unions, or loan companies.

Employment Trends Job prospects in Eugene, Oregon, and nationwide are fair.

Potential Earnings Starting salary ranges from approximately $750-$800/mo.

Program The Banking and Finance program is practically the same as Business Management except that each quarter there is a course specifically for Banking and Finance students and students working for the American Institute of Banking (AIB) Certificate. Students may begin the program fall, winter, or spring terms. It is recommended that they discuss the program with a counselor. Core courses must be taken in sequence.

Banking and Finance is a two-year, college-level career program leading to an associate of applied science degree. This program gives the student an understanding of the overall functions of banking and the business community which it serves. Other courses that are included provide a broad understanding of the principles of supervision and management, as well as fundamental knowledge of accounting, data processing, communications, math, and the social sciences.

Curriculum

First Year	**Fall**
English Composition Wr 121[1]	3
Principles of Accounting BA 211	3
Business Environment BA 125	3
Business Mathematics BA 103/2.206	3
Elective (Bank Functions)*	3
Physical Education PE 170/180/190[2]	1
Total Credits	16
	Winter
Fundamentals of Speech: Communication Sp 111[1]	3
Principles of Accounting BA 212	3
Microcomputer Accounting Applications BA 209	3
Elective	3
Elective (Bank Functions)*	3
Physical Education PE 170/180/190[2]	1
Total Credits	16
	Spring
Business Communications BA 214	3
Principles of Accounting BA 213	3
Personnel Administration BA 224	3
Elective	3
Elective (Bank Functions)*	3
Physical Education PE 170/180/190[2]	1
Total Credits	16

Second Year	**Fall**
Principles of Economics Ec 201[3]	3
Money and Banking BA 270	3
Personal Health HE 250[2]	3
Intermediate Algebra Mth 100[4]	4
Elective (General Psychology Psy 201)[3]	3
Total Credits	16
	Winter
Principles of Economics Ec 202[3]	3
Finance BA 222	3
Business Law BA 226	3
Elective	3
Elective (Bank Functions)*	3
Total Credits	15
	Spring
Principles of Economics Ec 203[3]	3
Introduction to Business Statistics BA 232	3
Bank Management BA 275	3
Elective (American Government PS 201)[3]	3
Elective (Bank Functions)*	3
Total Credits	15

[1] Refer to English and Foreign Language Department Course Descriptions.
[2] Refer to Health & PE Department Course Descriptions.
[3] Refer to Social Science Department Course Descriptions.
[4] Refer to Mathematics Department Course Descriptions.
• Refer to Business Department Course Descriptions for other courses in this curriculum.
* **Bank Functions Electives:**
Analyzing Financial Statements BA 271
Bank Public Relations & Marketing BA 273
International Banking BA 274

Broadcasting

Application Procedures Class prerequisites, prior training, or experience are not required for entry into either the Radio or the Broadcasting/Visual Design and Production programs. However, basic typing skills of 30 words per minute are essential to successfully complete either program. Students should complete the following steps prior to registration:

- Complete an application for admission at the LCC Admissions Office.
- Attend the new student orientation meeting. The department will inform all students of the date, time, and place of the new student meeting. ***Students who do not attend this first meeting may lose their place on the waiting list. At the time of application, the student's name is placed on a waiting list and prioritized by the date and time of application. Admittance to limited enrollment classes is determined by the prioritized list.***

At the new student orientation meeting, department staff will assist students in planning their term class schedule. Following the orientation, students will be able to register for classes.

Students with questions regarding the application process, should see Timothy L. Blood, counselor for Mass Communication, Rm. 218 Center, or Jim Dunne in Forum 105.

Broadcasting/Visual Design and Production

Two-Year Associate of Applied Science Degree Program
One-Year Certificate of Completion Program

Offered by LCC's Mass Communication Department

The two-year program is designed to provide skills for entry-level positions in mass media, and requires students to complete 93 credit hours for the associate of applied science degree. Students are given the opportunity to take electives in five areas of special interest: corporate media, broadcast television, film, photography, and journalism. Students must take their electives within one area of special interest.

The one-year certificate of completion is designed to meet the special needs of students who want to begin their careers in mass media after only one year of education and training.

Both programs offer students small classes and intensive small group instruction. Hands-on experience is provided in labs. Opportunities to work with or observe media professionals are provided by the Cooperative Work Experience program. Advanced students may be chosen to work on projects for the LCC Media Center.

Prior training and experience are not required for admission. Students are accepted into the program on a first-come, first-served basis.

Students interested in Broadcasting/Visual Design and Production should also read about Media in the Student Information section of the catalog.

Students must achieve a grade of no less than "C" in all courses which are prerequisite(s) for another course.

Curriculum

First Year	**Fall**
Electronic Studio Production 3.430	5
Visualization for Media 3.438	3
Beginning Photography ART 161	3
Fundamentals of Media FA 260	3
Total Credits	14
	Winter
Audio Production 3.401	4
Video Production 1 FA 151	4
English Composition WR 121[1]	3
Fundamentals of Lighting FA 254	3
Total Credits	14
	Spring
Program Electives	3-4
Film Production 1 FA 251	4
Writing for Film/TV/Radio 3.442	3
Media and the Law 3.434	3
Supervised Field Experience: B/VDP 1.300	3
Total Credits	15-17
Second Year	**Fall**
Program Electives	4
Corporate Media 3.451	3
Production Unit 3.437	3
Basic Mathematics Review Mth 20[2] *or* higher	3
Film as Literature Eng 195/196/197[1] *or*	3
Non-Fiction Film & Television FA 259	(3)
Beginning Conditioning PE 170[3]	1
Total Credits	17
	Winter
Program Electives	5
Media Production: Entertainment 3.447	3
Production Unit 3.437	3
Supervised Field Experience: B/VDP 1.300	3
Social Science Elective[4]	3
Beginning Strength Training PE 170[3]	1
Total Credits	17
	Spring
Program Electives	5
Production Unit 3.437	3
Supervised Field Experience: B/VDP 1.300	3
Math/Science Elective[5]	3
Physical Education PE 170[3]	1
Total Credits	15

[1] Refer to English and Foreign Language Department Course Descriptions.
[2] Refer to Mathematics Department Course Descriptions.
[3] Refer to Health and PE Department Course Descriptions.
[4] Refer to Social Science Department Course Descriptions.
[5] Refer to Science Department or Mathematics Department Course Descriptions.
• Refer to Mass Communication Department Course Descriptions for other courses in this curriculum.

Radio Broadcasting

Two-Year Associate of Applied Science Degree Program
One-Year Certificate of Completion

Offered by LCC's Mass Communication Department

The two-year program is designed to provide students with skills for entry-level jobs in small and medium market radio stations, requiring students to complete 93 credit hours for the associate of applied science degree. The one-year certificate of completion is designed to meet the needs of students who want to begin their careers in radio broadcasting after completing only one year of education and training.

Students are required to take courses to expand their knowledge of music, to provide training for the voice, and also to complete vocational training courses within the department. Special emphasis is given in vocational courses to recording and mixing sound, writing for sound, creating and selling advertising for radio, announcing, and a study of the laws and regulations that govern broadcasting today. Practical experience is provided in labs, the LCC Media Center, the College radio station, KLCC-FM, and by Cooperative Work Experience.

Prior training and experience are not necessary for admission to the Radio Broadcasting program. Students interested in Radio Broadcasting should also read about Student Media in the Student Information section of the catalog.

Students must achieve a grade of no less than "C" in all courses which are prerequisite(s) for another course.

Curriculum

First Year	**Fall**
Audio Production 3.401	4
Fundamentals of Media FA 260	3
Media and the Law 3.434	3
English Composition WR 121[1]	3
Music Fundamentals MUS 101[2]	3
Total Credits	16

	Winter
Writing for Film/TV/Radio 3.442	3
Announcing and Narration 3.436	3
History of Rock Music 1 MUS 264[2]	3
Electronic Music 1: Introduction MUS 117[2]	3
Voice and Articulation SP 110[1]	3
Keyboarding OA 120/2.501[3]	1-2
Total Credits	16-17

	Spring
Advanced Audio Production 3.457	4
Creating/Selling Advertising for Broadcasting 3.439	3
Supervised Field Experience: Radio 1.300	3
History of Rock Music 2 MUS 265[2]	3
Introduction to Jazz History MUS 205[2]	3
Total Credits	16

Second Year	**Fall**
Newswriting 1 J 216	2
Newswriting Lab J 215	1
Fundamentals of Speech: Communication SP 111[1]	3
Voice Training for Acting Students TA 127[2]	3
Acting 1 TA 230[2]	3
Advertising BA 239[3]	3
Physical Education PE 170/180/190[4]	1
Total Credits	16

	Winter
Oral Interpretation of Literature TA 229[2]	3
Acting 1 TA 231[2]	3
Selling BA 238[3]	3
Concepts of Computing CS 121[5]	3
Social Science Elective[6]	3
Physical Education PE 170/180/190[4]	1
Total Credits	16

	Spring
Marketing BA 223[3]	3
Supervised Field Experience: Radio 1.300	3
Basic Mathematics Review MTH 20[7] *or* higher	3
Math/Science Elective[8]	3
Physical Education PE 170/180/190[4]	1
Total Credits	13

[1] Refer to English and Foreign Language Department Course Descriptions.
[2] Refer to Performing Arts Department Course Descriptions.
[3] Refer to Business Department Course Descriptions.
[4] Refer to Health and PE Department Course Descriptions.
[5] Refer to Data Processing Department Course Descriptions.
[6] Refer to Social Science Department Course Descriptions.
[7] Refer to Mathematics Department Course Descriptions.
[8] Refer to Science or Mathematics Department Course Descriptions.
• Refer to Mass Communication Department Course Descriptions for other courses in this curriculum.

Program Electives

Students must choose program electives from one of the following groups of courses.

Corporate Media Courses

Advanced Audio Production 3.457	4 credits
Advanced Computerized Video Editing 3.453	3 credits
Video Production 2 FA 152	4 credits
Announcing and Narration 3.436	3 credits
Commercial Photography ART 164	3 credits
Computerized Video Editing 3.449	3 credits
Independent Study: Film Arts FA 298	1-3 credits
Film Production 2 FA 252	4 credits
Photography ART 162	3 credits
Production Unit 3.437	1-3 credits
Slide/Tape Production 3.444	3 credits

Broadcast Television Courses

Advanced Audio Production 3.457	4 credits
Advanced Computerized Video Editing 3.453	3 credits
Advanced Electronic Studio Production 3.452	3 credits
Video Production 2 FA 152	4 credits
Announcing and Narration 3.436	3 credits
Computerized Video Editing 3.449	3 credits
Creating/Selling Advertising for Broadcasting 3.439	3 credits
Electronic News Gathering 3.404	4 credits
Independent Study: Film Arts FA 298	1-3 credits
Nonfiction Film and Television FA 259	3 credits
Film Production 2 FA 252	4 credits
Production Unit 3.437	1-3 credits

Photography Courses

Commercial Photography ART 164	3 credits
Independent Study: Film Arts FA 298	1-3 credits
Photography ART 162	3 credits
Photojournalism J 134	3 credits
Production Unit 3.437	1-3 credits
Slide/Tape Production 3.444	3 credits

Film Production Courses

Advanced Audio Production 3.457	4 credits
Independent Study: Film Arts FA 298	1-3 credits
Introduction to Screenwriting FA 262	3 credits
Nonfiction Film and Television FA 259	3 credits
Film Production 2 FA 252	4 credits
Production Unit 3.437	1-3 credits

Journalism Courses

Newswriting 1 J 216	2 credits
Newswriting 2 J 217	2 credits
Newswriting Lab J 215	1 credit
Photojournalism J 134	3 credits
Production Unit 3.437	1-3 credits
Public Relations J 205	3 credits
Publication Design & Production 1 3.443	3 credits
Publication Design & Production 2 2.211	2 credits
Slide/Tape Production 3.444	3 credits

Business Management

Two-Year Associate of Applied Science Degree Program

Offered by LCC's Business Department

Nature of Work Business Management trains the student for an entry-level management position in marketing, finance, production, or human resource management. Employment is most often in banks, retail stores, wholesale outlets, and as salespersons for manufacturers.

Employment Trends The opportunities for entry-level employment are always good with numerous opportunities for advancement.

Potential Earnings Starting salaries for graduates is generally $1,000 to $1,500 beginning salary per month with commission supplements where sales are involved.

Program The Business Management program is a two-year training program culminating with the associate of applied science degree. The student takes a series of core courses, then chooses from a variety of electives to earn a total of 95 credit hours. This program prepares students for first-level management positions.

Students who wish to function more in a staff management capacity such as accountant, marketing specialist, or personnel manager should consider at least *four years of college* in their area of special interest.

Curriculum

First Year	**Fall**
Business Environment BA 125	3
English Composition Wr 121[1] *or*	3
Business English 1 1.120	(3)
Intermediate Algebra Mth 100[2]	4
Physical Education PE 170/180/190[3]	1
Principles of Accounting BA 211	3
Microcomputer: Business Applications (Word Processing – Word Perfect)	3
Total Credits	17
	Winter
Applied Economics BA 156	3
Fundamentals of Speech: Communication Sp 111[1]	3
Microcomputer: Business Applications BA 110 (Spread Sheet [2]; Database [1])	3
Physical Education PE 170/180/190[3]	1
Principles of Accounting BA 212	3
Social Science Elective*[4]	3
Elective	3
Total Credits	16
	Spring
Business Communications BA 214	3
Marketing BA 223	3
Introduction to Business Statistics BA 232	3
Physical Education PE 170/180/190[3]	1
Principles of Accounting BA 213	3
Science/Math Elective*[5]	3
Total Credits	16

Second Year	**Fall**
Personnel Administration BA 224	3
Management Fundamentals BA 206	3
Supervisory Management BA 255 *or*	3
Office Management BA 251	(3)
Humanities/Math/Science/Social Science Elective[6]	3
Business Elective	3
Total Credits	15
	Winter
Business Law BA 226	3
Finance BA 222	3
Microcomputer: Accounting Applications	3
Small Business Management BA 250	3
Business Elective	3
Elective	3
Total Credits	18
	Spring
Business & Professional Speech Communication Sp 230[1]	3
Production BA 221	3
Supervised Field Experience FE 207	3
Business Elective	3
Elective	3
Total Credits	15

[1] Refer to English and Foreign Language Department Course Descriptions.
[2] Refer to Mathematics Department Course Descriptions.
[3] Refer to Health and PE Department Course Descriptions.
[4] Refer to Social Science Department Course Descriptions.
[5] Refer to Science or Mathematics Department Course Descriptions.
[6] Refer to English and Foreign Language Department, Mathematics Department, Science Department, or Social Science Department Course Descriptions.
' Refer to Business Department Course Descriptions for other courses in this curriculum.
* College Transfer Course Required
** Students that have a touch typing speed of 25 words per minute or more should

Suggested Electives:
Introduction to Purchasing BA 160
Microcomputer: Business Applications BA 110
Speedwriting 1/Briefhand OA 114/2.108

Coaching

▶ Suggested Course of Study

Offered by LCC's Health and Physical Education Department

The Health and Physical Education Department offers a Certificate of Completion in Coaching which represents successful completion of an appropriate sequence of credit courses. This departmental certificate is an endorsement of a coaching specialty: basketball, soccer, track and field, volleyball, etc.

This course of study is designed to meet immediate and continuing community needs in Lane County for qualified staff in local parks and recreation departments, volunteer public school sports programs, and interscholastic sports programs.

Curriculum

	Credits
First Aid HE 252* (American Red Cross Advanced Certification or Equivalent)	3
Advanced Emergency Care HE 254 (CPR)*	1
Introduction to Care and Prevention of Athletic Injuries PE 299*[1]	3
Nutrition FN 225**	4
Pro Act Strength Training and Conditioning PE 194*	2
Sports Officiating PE 207*[2]	2
Pro Act Sport PE 194/PE 294*[3]	2
Supervised Field Experience FE 207/1.300	3
Total Credits	20

[1] First Aid and CPR must be taken before PE 299
[2] Sports Officiating: seasonal, per Pro Act/Sports course
[3] Pro Act/Sport: seasonal, per fall, winter, and spring sports
* Refer to Health and Physical Education Department Course Descriptions.
** Refer to Home Economics Department Course Descriptions.

▶ **This is a suggested course of study for students interested in coaching. 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 LCC Board of Education. However, students completing the coaching curriculum receive a certificate from LCC's Health and Physical Education Department.**

Computer Programming and Operations

Two-Year Associate of Applied Science Degree Program in Programming
or
Two-Year Associate of Applied Science Degree Program in Operations

Offered by LCC's Data Processing Department

Programming Courses in programming are designed to prepare students for an entry-level position as a computer programmer. These courses provide both specific data processing skills as well as a general knowledge of problem solving in a variety of computer applications areas.

Approximately one-third of a student's program of study covers programming languages and techniques, systems analysis and design methods, and computer organization and operating systems. Students study several programming languages, including Assembler Language, BASIC, Pascal, and COBOL. The remainder of a program of study is selected from other departments in the college and includes courses in business, mathematics, language arts, and the social sciences.

Operations Courses in operations are designed to prepare students for an entry-level position as a computer operator, control clerk, or data processing librarian.

The program of study trains students to understand the organization and operation of computer systems and to operate medium and large scale computer equipment. Course work emphasizes the steps required to prepare a computer system for program processing, to operate computer and auxiliary equipment, and quality control methods for effective input, media storage, and output operations.

Supplemental course work in business, mathematics, language arts, and the social sciences is intended to provide students with a background to understand the role of computer operations in various work environments.

Restricted facilities limit the number of students admitted to the second year operations curriculum. Students are selected by lottery from among interested majors who have successfully completed the first two terms of the program.

Curriculum

First Year	**Fall**
Concepts of Computing CS 121	3
Beginning Programming (Basic) CS 133	4
Accounting 1 2.110[1] *or*	3
Principles of Accounting BA 211[1]	(3)
Communication Skills 1 1.100[2] *or*	3
English Composition Wr 121[2]	(3)
Elective	4
Total Credits	17

	Winter
Accounting 2 2.111[1] *or*	3
Principles of Accounting BA 212[1]	(3)
Intermediate Algebra Mth 100[3*+]	4
Introduction to Computer Science 1 CS 201	4
Personal Health HE 250[4]	3
Communication Skills 2 1.102[2] *or*	3
Composition: Style Wr 122[2] *or*	(3)
Technical Reporting Writing Wr 227[2]	(3)
Total Credits	17

	Spring
Accounting 3 2.112[1] *or*	3
Principles of Accounting BA 213[1]	(3)
Assembler Language Programming CS 290	4
Business and Economics Elective[1**]	3
Electives	6
Total Credits	16

Programming Curriculum

Second Year	**Fall**
Introduction to Business Data Processing CS 241	5
Social Science Elective[5***]	3
Introduction to Business Statistics BA 232[1] *or*	3
Introduction to Probability and Statistics Mth 103[3]	(4)
Introduction to Systems Analysis CS 244	3
Total Credits	14-15

	Winter
Advanced Business Data Processing CS 242	5
Social Science Elective[5***]	3
Introduction to Operating Systems CS 245	4
Business and Economics Elective[1**]	3
Total Credits	15

	Spring
Programming Information Systems CS 270	5
Social Science Elective[5***]	3
Business and Economics Elective[1**]	3
Elective	3
Total Credits	14

Operations Curriculum

Second Year	**Fall**
Social Science Elective[5***]	3
Introduction to Business Statistics BA 232[1] *or*	3
Introduction to Probability and Statistics Mth 103[3]	(4)
Introduction to Systems Analysis CS 244	3
Introduction to Business Data Processing CS 241	5
Total Credits	14-15

	Winter
Business and Economics Elective[1**]	3
Introduction to Operating Systems CS 245	4
Social Science Elective[5***]	3
Data Processing Computer Operations 1 2.617	5
Total Credits	15

	Spring
Data Processing Computer Operations 2 2.618	5
Social Science Elective[5]***	3
Business and Economics Elective[1]**	3
Elective	3
Total Credits	14

* See a counselor for an appropriate starting course in mathematics.
[1] Refer to Business Department Course Descriptions.
[2] Refer to English and Foreign Language Department Course Descriptions.
[3] Refer to Mathematics Department Course Descriptions.
[4] Refer to Health and PE Department Course Descriptions.
[5] Refer to Social Science Department Course Descriptions.
• Refer to Data Processing Department Course Descriptions for other courses in this curriculum.

Curriculum Electives

*** Mathematics (4 credits)**

Students must complete Intermediate Algebra Mth 100 or an equivalent course. Students who already satisfy this requirement may choose an alternative mathematics elective in place of the requirement. Data Processing majors are encouraged to take additional courses in mathematics as electives.

**** Business and Economics (9 Credits)**

Business and economics courses which cover an academic business subject are approved as electives in Data Processing programs. Skills courses such as typing, calculator operation, and shorthand are not approved electives.

Business Department courses that are not traditional business classes, such as Business English, Microcomputers, and Introduction to Management of Information Systems, are also not approved electives.

The following courses are examples of approved business elective courses:

Business Environment BA 125	3
Business Law BA 226	3
Finance BA 222	3
Investments BA 242	3
Introduction to Business BA 101	4
Management Fundamentals BA 206	3
Marketing BA 223	3
Production BA 221	3
Principles of Economics Ec 201	3
Applied Economics BA 156	3

***** Social Science (9 credits)**

Any regular course offered by the Social Science Department may be used as a social science elective. The following courses are examples of approved social science elective courses:

General Psychology Psy 201	3
General Psychology Psy 202	3
General Psychology Psy 203	3
General Sociology Soc 204	3
General Sociology Soc 205	3
General Sociology Soc 206	3
Problems of Philosophy Phl 201	3
Problems of Philosophy Phl 202	3
Problems of Philosophy Phl 203	3
Elementary Logic Phl 221	3
Physical Anthropology Anth 101	3
Archaeology Anth 102	3
Cultural Anthropology Anth 103	3

Data Processing

In order to strengthen their preparation for the computer field, Data Processing majors may take the following courses as programming or operations electives in addition to the minimum requirements.

Introduction to Computer Information Processing CS 131	4
Introduction to Microcomputers: Spreadsheet Applications CS 110	3
Microcomputer Database Applications CS 111	3
Microcomputer Integrated Systems Applications CS 112	3
Microcomputer Graphics CS 235	4
Independent Study: Computer Information Processing CS 198	3
Introduction to Computer Science 2 CS 203	4
Microcomputer Assembler Language CS 291	4
Supervised Field Experience FE 207	1-15

Construction Technology

Two-Year Associate of Applied Science Degree Program

Offered by LCC's Industrial Technology Programs

The Construction Technology program trains people in the technical skills and knowledge required by the construction industry. Graduates of the program can expect to work in the residential and small commercial building construction field.

The program will introduce the student to the building construction industry. Its basic concepts of history, terminology, techniques, operating procedures, methods, equipment, and materials will be discussed throughout the course of study. The construction of either a light commercial or residential structure, or remodeling residential structures are the principal vehicles of instruction for first-year students. When appropriate, energy efficient, passive and active solar systems will be incorporated in the projects. Second-year classes incorporate the building projects through the application of surveying, estimating, codes, and scheduling principles. General courses in communication, and mathematics are required. Also, degree candidates must complete 27 credit hours of restricted electives chosen from two of the following areas: business courses, drafting-design courses, science/technical trades courses, and skill development courses. Cooperative Work Experience is an integral part of the Construction Technology program.

The job outlook for graduates in the construction field varies with the local and national economy. Students may expect to find employment in other related areas including estimating, materials handling, sales, and inspection. Salaries vary widely with experience. A student with no construction experience can expect to obtain work experience at labor wages.

The Construction Technology program has been developed with the cooperation of labor leaders, the Homebuilder's Association, and through the college's Construction Technology Advisory Committee. There are no special admission requirements or qualifications.

Important It is the intent of the Construction Technology Advisory Committee and program staff to provide students several different course alternatives. If, for instance, students contemplate transferring to a four-year institution upon completion of this program, they are advised whenever possible to consider college transfer classes. Consequently, appropriate college transfer classes have been indicated after the course of study. It is possible that some of the courses are not challenging enough for some students; in that event, the program staff and counselor will assist them in choosing alternate classes. Some of the courses in this program are available in the evenings.

Curriculum

First Year	**Fall**
Communication Skills 1 1.100[1]	3
Basic Mathematics Review Mth 20[2]	3
Building Construction 3.118 *or*	5
Housing Rehabilitation 3.120	(5)
Construction Orientation and Environment 3.111	2
Blueprint Reading 1 3.910	3
*Restricted Electives	3
Total Credits	19

	Winter
Communication Skills 2 1.102[1]	3
Occupational Mathematics 1 Mth 50[2]	3
Building Construction 3.118 *or*	5
Housing Rehabilitation 3.120	(5)
Blueprint Reading 2 3.911	3
*Restricted Electives	3
Total Credits	17

	Spring
Building Construction 3.118 *or*	5
Housing Rehabilitation 3.120	(5)
Industrial Safety HE 125[3]	3
Science/Math Elective	3
Social Science Elective[4]	3
*Restricted Electives	3
Total Credits	17

Second Year	**Fall**
Supervised Field Experience: Construction 1.300	3
Construction Planning 1 3.113	4
Building Construction Surveying 3.119	3
Basic Housewiring and Minor Repairs 3.170	2
*Restricted Electives	6
Total Credits	18

	Winter
Supervised Field Experience: Construction 1.300	3
Construction Planning 2 3.114	4
Construction Codes 6.122	2
Basic Plumbing and Minor Repairs 3.171	2
*Restricted Electives	6
Total Credits	17

	Spring
Supervised Field Experience: Construction 1.300	4
Construction Planning 3 3.115	4
Introduction to Bricklaying 3.183	1
*Restricted Electives	6
Total Credits	15

[1] Refer to English and Foreign Language Department Course Descriptions.
[2] Refer to Mathematics Department Course Descriptions.
[3] Refer to Health and PE Department Course Descriptions.
[4] Refer to Social Science Department Course Descriptions.
* Refer to Industrial Technology Programs Course Descriptions for all other courses in this curriculum.

Students may elect to substitute other courses for the prescribed curriculum.

If students are interested in transferring to a four-year institution, they should:

1. Substitute the Writing 121, 122, 123 classes for the Communication Skills sequence. A Fundamental Speech course would also be appropriate.
2. Substitute Mathematics 101, 102, and classes for the Math 20 and 50 classes.
3. Register for Supervised Field Experience using the transfer number FE 207, instead of the vocational number 1.300.

Students are urged to challenge any course in which they feel competent. The program staff and counselor will assist them in this process.

Cooperative Work Experience or approved substitution is a part of this program. The student should make arrangements with the department Cooperative Work Experience coordinator.

***Restricted Electives**

Degree canditates must complete 27 credit hours from the restricted electives: 13 credits from one area and 14 credits from a second area chosen from the four areas listed below.

Business Courses

Accounting 1 2.110 . . . . . 3 credits
Applied Economics BA 156 . . . . . 3 credits
Small Business Management BA 250 . . . . . 3 credits
Introduction to Real Estate BA 285 . . . . . 3 credits
Real Estate Investments BA 297 . . . . . 3 credits
Personal Finance BA 218 . . . . . 3 credits
Selling BA 238 . . . . . 3 credits
Marketing BA 223 . . . . . 3 credits
Management Fundamentals BA 206 . . . . . 3 credits
Construction Estimating 3.116 . . . . . 4 credits
IS: Construction Estimating 3.107 . . . . . 3 credits

Drafting/Design Courses

Mechanical Drafting 1 4.121 . . . . . 4 credits
Architectural Drafting—Plans 4.137 . . . . . 4 credits
Architectural Drafting—Details 4.138 . . . . . 4 credits
Architectural Drafting—Development 4.139 . . . . . 4 credits
Introduction to Drafting: Basic Skills 4.152 . . . . . 2 credits
Introduction to Drafting: Orthographic Projections 4.153 . . . . . 2 credits
Introduction to Drafting: Pictorials & Axonometric Projections 4.154 . . . . . 2 credits
Introduction to AutoCad 4.110 . . . . . 4 credits
Architectural Design—Remodeling Arch 100 . . . . 4 credits
Architectural Design—Solar Residence Arch 101 . . 4 credits
Architectural Design—Custom Residence Arch 102 . 4 credits
Passive Solar Design GS 127 . . . . . 3 credits
Structural Drafting - Wood 4.141 . . . . . 4 credits
Strength of Materials 1 6.107 . . . . . 4 credits
Passive Solar Techniques in Local Construction 6.329 . . . . . 3 credits
Construction Estimating 3.116 . . . . . 4 credits
IS: Construction Estimating 3.107 . . . . . 3 credits

Science/Technical Trades Courses

Principles of Technology 1 4.300 . . . . . 4 credits
Principles of Technology 2 4.302 . . . . . 4 credits
Principles of Technology 3 4.303 . . . . . 4 credits
Strength of Materials 1 6.107 . . . . . 4 credits
Solar Energy Systems 6.325 . . . . . 3 credits
Active Solar Systems 6.322 . . . . . 3 credits
Passive Solar Techniques in Local Construction 6.329 . . . . . 3 credits
Construction Estimating 3.116 . . . . . 4 credits
IS: Construction Estimating 3.107 . . . . . 3 credits

Skill Development Courses

Cabinet and Furniture Making 1 3.192 . . . . . 1-5 credits
Cabinet and Furniture Making 2 3.193 . . . . . 1-5 credits
Cabinet and Furniture Making 3 3.194 . . . . . 1-5 credits
Arc Welding 1 3.921 . . . . . 1-4 credits
Arc Welding 2 3.922 . . . . . 1-4 credits
Gas Processes 1 3.931 . . . . . 1-4 credits

***NOTE:** Students should be advised that the Construction Technology Advisory Committee is currently reviewing the possibility of converting this to a Certificate program rather than an Associate Degree. For further information, please call the Industrial Technology Program Office at 747-4501, ext. 2843.

Criminal Justice

Two-Year Associate of Applied Science Degree Program

Offered by LCC's Social Science Department

This course of study offers an occupational preparatory curriculum designed for men and women preparing for career employment in police, corrections, security management, and other criminal justice agencies. This program is fully transferable to four-year colleges and universities. It was developed in cooperation with the State Department of Education, the Oregon State Board of Police Standards and Training, and the curriculum committee of the Oregon Association of Criminal Justice Educators.

Field experience opportunities exist with local police agencies, private police agencies, and commercial security organizations. Students may participate on a full- or part-time basis. Upon satisfactory completion of program requirements, the student is awarded an associate of applied science degree.

Curriculum

First Year	**Fall**
Introduction to Criminal Justice CJ 100	3
Introduction to Criminal Law CJ 220	3
English Composition Wr 121[1]	3
Physical Education PE 170/180/190[2]	1
General Sociology Soc 204	3
Electives (Arts & Letters)	3
Total Credits	16
	Winter
Introduction to Criminology CJ 101	3
Composition: Style Wr 122[1]	3
Personal Health HE 250[2] *or*	3
First Aid HE 252[2] *or*	(3)
Advanced Emergency Care HE 254[2]	(3)
Physical Education PE 170/180/190[2]	1
General Sociology Soc 205	3
Electives (Arts & Letters)	3
Total Credits	16
	Spring
Crisis Intervention CJ 203	3
Technical Report Writing Wr 227[1]	3
Physical Education PE 170/180/190[2]	1
Listening Sp 105[1]	3
General Sociology Soc 206	3
Criminal Law: Procedural Issues CJ 222	3
Total Credits	16

Second Year	**Fall**
Selected Criminal Justice elective from list	3
General Psychology Psy 201*	3
Math**[3]	4
Physical Education PE 170/180/190****[2]	1
Electives (Arts & Letters)	3
Total Credits	14
	Winter
Selected Criminal Justice elective from list	3
Interviewing and Interrogation CJ 213	3
Practicum (CWE or SFE) FE 207	3
General Psychology Psy 202*	3
Math or Science***[4]	4
Physical Education PE 170/180/190****[2]	1
Total Credits	17
	Spring
Selected Criminal Justice elective from list	3
Practicum (CWE or SFE) FE 207	3
General Psychology Psy 203*	3
Math or Science***[4]	4
Physical Education PE 170/180/190****[2]	1
Total Credits	14

* American Government sequence PS 201, 202, 203 may be substituted for General Psychology.
** Must be Math 101 or higher.
*** Must be Math 101 or higher, or a science with a lab.
**** Three credit hours of health courses may be substituted for PE.
[1] Refer to English and Foreign Language Department Course Descriptions.
[2] Refer to Health & PE Department Course Descriptions.
[3] Refer to Math Department Course Descriptions.
[4] Refer to Math or Science Department Course Descriptions.
• Refer to Social Science Course Descriptions for other courses in this curriculum.

Suggested Electives (choose 9 credits)

Concepts of Enforcement Services CJ 111	3 credits
Introduction to Corrections CJ 130	3 credits
Criminal Investigation 1 CJ 210	3 credits
Criminal Justice Management CJ 216	3 credits
Correctional Casework CJ 232	3 credits
Community Based Corrections CJ 233	3 credits
Narcotics and Dangerous Drugs CJ 243	3 credits
Introduction to Security Systems CJ 150	3 credits
Commercial and Industrial Security CJ 152	3 credits
Supervised Field Experience FE 207	2 credits
Deviant Behavior SOC 211	3 credits

Culinary, Food Service, and Hospitality

Two-Year Associate of Applied Science Degree
One-Year Certificate of Completion Program

Offered by LCC's Industrial Technology Programs

The Culinary, Food Service and Hospitality program provides a general background in restaurant operation. A general orientation to all phases of the restaurant is learned through the Renaissance Room and related theory and practical classes during the first year of the program. In the second year of the program, students may focus on management applications in the industry or on culinary applications.

Completion of the program will provide skills and knowledge for entry-level positions in hotels, motels, restaurants, clubs, recreational operations, and other similar organizations in the hospitality and tourism industry.

The curriculum is designed so students must complete the first year of the program for a certificate of completion. The first and second years of the program must be completed to earn an associate of applied science degree.

This is a limited enrollment program. It is essential that students interested in the program apply to the Admissions Office and have their names placed on the priority list of Culinary, Food Service and Hospitality program majors. The list gives the department a way to contact students prior to the Program Orientation scheduled by the Admissions Office.

Students who wish to transfer to a four-year institution to pursue a bachelor's degree program in Hospitality or Food Service Management should discuss options with Willie Kealoha, Culinary, Food Service and Hospitality coordinator.

Curriculum

First Year	**Fall**
Food Preparation 1 7.170	5
Bakery 1 7.193	3
Food Service Fundamentals 7.185	3
Restaurant Lab (Renaissance Room) 7.184	5
Basic Math Review Mth 20[1] *or*	3
Math Renewal Mth 20[1] *or*	(3)
Business Mathematics BA 103/2.206[2]	(3)
Total Credits	19
	Winter
Food Preparation 2 7.171	5
Dining Room Supervision and Service 7.186	3
Bakery 2 7.194	3
Restaurant Lab (Renaissance Room) 7.184	5
Introduction to Nutrition 7.151[3]	3
Total Credits	19
	Spring
Food Preparation 3 7.172	5
Bakery 3 7.195	3
Restaurant Lab (Renaissance Room) 7.184	5
Communications Skills 1 1.00[4] *or*	3
higher level writing course	(3)
Humanities Elective*	3
Total Credits	19

Second Year	**Fall**
Food and Beverage Controls 7.177	5
Menu Planning and Promotion 7.147	3
Supervised Field Experience 1.300	5
Buffets and Banquets 7.179	1
Health Elective[5] *or*	3
Physical Education PE 170/180/190**[5]	(3)
Total Credits	17
	Winter
Purchasing and Records Analysis 7.183	4
Buffets and Banquets 7.179	1
Accounting 1 2.110[4]	3
Program Elective	3
Geography Elective[6]	3
Science and Math Elective***[7]	3
Total Credits	17
	Spring
Financial Operational Analysis in the Food Service Industry 7.192	3
Equipment Layout and Interior Design 7.178	3
Buffets and Banquets 7.179	1
Supervised Field Experience 1.300	5
Humanities, Science and Mathematics, *or* Social Science Elective	3
Total Credits	15

* Humanities Elective Effective Learning EL 111 recommended.
** Students choosing the PE elective must take one credit in each of the three terms.
*** Computer class recommended.
[1] Refer to Mathematics Department Course Descriptions.
[2] Refer to Business Department Course Descriptions.
[3] Refer to Health Occupations Department Course Descriptions.
[4] Refer to English and Foreign Language Department Course Descriptions.
[5] Refer to Health and PE Department Course Descriptions.
[6] Refer to Social Science Department Course Descriptions.
[7] Refer to Science or Mathematics Department Course Descriptions.
• Refer to Industrial Technology Programs Course Descriptions for other courses in this curriculum.

Students should register for SFE credits prescribed in their chosen program. Students must also register for 1 credit of seminar that applies to their program.

Culinary Option

Two-Year Associate of Applied Science Degree Program

Offered by LCC's Industrial Technology Programs

The Culinary Option provides an advanced food preparation and service class each term in addition to the requirements of the Culinary, Food Service and Hospitality program. Students who wish to pursue this option should follow the same curriculum during the first year of the program. During the second year, some of the requirements change to provide the training needed to enter the job markets as sous chef and assistant chefs.

Curriculum

Second Year	**Fall**
Food and Beverage Controls 7.177	5
Menu Planning and Promotion 7.147	3
Buffets and Banquets 7.179	1
Classical Cuisine and Service 1 7.290	3

Health Elective[1] *or*	3
Physical Education PE 170/180/190*[1]	(3)
Supervised Field Experience 1.300	5
Total Credits	20

Winter

Purchasing and Records Analysis 7.183	4
Classical Cuisine and Service 2 7.291	3
Buffets and Banquets 7.179	1
Geography Elective[3]	3
Science or Math Elective**[2]	3
Supervised Field Experience 1.300	5
Total Credits	19

Spring

Classical Cuisine and Service 3 7.292	3
Buffets and Banquets 7.179	1
Equipment Layout and Interior Design 7.178	3
Financial and Operational Analysis in the Food Service Industry 7.192	3
Humanities, Science and Mathematics, or Social Science Elective	3
Total Credits	18

* Students choosing the PE elective must take one credit in each of the three terms.
** Computer class recommended.
[1] Refer to Health and PE Department Course Descriptions.
[2] Refer to Science or Mathematics Department Course Descriptions.
[3] Refer to Social Science Department Course Descriptions.
• Refer to Industrial Technology Programs Course Descriptions for all other courses in this curriculum.

Dance

▶ Suggested Course of Study

Offered by LCC's Health and Physical Education Department

The Health and Physical Education Department offers a Certificate of Completion in Dance which represents successful completion of an appropriate sequence of credit courses. This departmental certificate is an endorsement of a teaching specialty: aerobics, ballet, modern, jazz, etc.

This course of study is designed to prepare and qualify instructors for an array of employment options at specific levels in specific idioms of dance. Successful completion of this course of study offers students the potential of supplementary employment as an instructor of dance aerobics or other dance idioms. It also provides a continuing education course of study for instructors already in the field.

▶ **This is a suggested course of study for students interested 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 LCC Board of Education. However, students completing the dance curriculum receive a certificate from LCC's Health and Physical Education Department.**

Curriculum

	Credits
First Aid HE 252 (American Red Cross Advanced Certification)	3
Advanced Emergency Care HE 254 (CPR)	1
Introduction to Care and Prevention of Athletic Injuries PE 299	3
Dance Aerobics PE 170	1
Ballet D 185 , D 285/Modern Dance D 181, D 281/Jazz Dance D 188, D 288, D 290/Dance Laboratory D 191, D 192, D 193/Dance Performance D 160 (select three)	3
Anatomy/Body Fundamentals D 256	3
Introduction to Teaching Dance/Aerobics 1 D 266	2
Introduction to Teaching Dance/Aerobics 2 D 276	3
Electives	4
Total Credits	23

[1] Refer to Performing Arts Department Course Descriptions.

• Refer to Health & Physical Education Department Course Descriptions for other courses in this curriculum.

Dental Assisting

One-Year Certificate of Completion Program

Offered by LCC's Health Occupations Department

This program prepares its graduates for employment in the dental setting, private practice, with emphasis on modern concepts of chairside assisting.

A dental assistant may serve as a chairside assistant, secretary-bookkeeper, office manager, or laboratory technician.

This program is accredited by the American Dental Association's Commission on Accreditation of Dental and Dental Auxiliary Educational Programs and by the Oregon Board of Dentistry. Graduating students are eligible to take the Dental Assisting National Board Examination, Oregon Radiological Proficiency Examination, and Expanded Function Dental Assistant Examinations.

Oregon requires dental assistants who expose dental x-rays to hold a Certificate of Radio ogical Proficiency. Graduating students are eligible to take the radiological proficiency examination which is administered by the Oregon Board of Dentistry. Students are also eligible to take other required State Board examinations.

Dental Assisting courses include basic health sciences, dental sciences such as oral anatomy and pathology, dental materials, radiographic and chairside assisting techniques, principles of office records management and marketing, laboratory procedures, and psychological considerations in patient treatment.

Dental Assisting is a concentrated program that requires good reading and study skills. Students are on campus most of the day and spend a minimum of 18 hours a week during spring term in professional dental offices.

Application Information Enrollment in this program is limited to 30 students per year. Special application packets with information pertaining to the admission process are available from the Office of Admissions beginning the first week in December. Check with Admissions Office for application deadlines.

An applicant must be a high school graduate or have a GED certificate. Courses in basic sciences, mathematics, and typing are recommended prerequisites but not required.

The admissions process includes a screening examination (Degrees of Reading Power Test) and submission of transcripts. Evidence of a physical examination (within the previous nine months) must be submitted prior to admittance to the program.

Miscellaneous costs in addition to tuition total approximately $650 for the year. Costs are subject to change without notice.

Students who have been accepted into the Dental Assisting program may arrange to complete the program over a two-year period. If you have questions or wish additional information, contact Jack Shadwick, counselor, or Beth Webb, program coordinator.

Continuing Education The employed dental assistant may register for any course offered by contacting the program coordinator, Beth Webb. Expanded functions are taught during Advanced Chairside Procedures in the spring term. This class is open to qualified working chairside assistants.

Employment Trends About 90 percent of the graduates find employment in the Eugene/Springfield area. The remaining 10 percent are able to find employment in other parts of the state. Starting salary in the Eugene/Springfield area ranges from $7-$9/hr.

Curriculum

First Year	**Fall**
Dental Health Education 1 5.407	1
Oral Roentgenology 2 DH 210	3
Introduction to Dentistry 5.403	2
Health Sciences 5.410	4
Dental Anatomy 5.415	2
Chairside Procedures 1 5.395	6
Dental Materials 5.397	2
Interpersonal Communication Sp 214[1]	3
Total Credits	23
	Winter
Dental Health Education 2 5.408	1
Oral Roentgenology 3 DH 211	2
Communication Skills 1 1.100[1]	3
Oral Pathology 5.435	2
Chairside Procedures 2 5.396	7
Dental Materials 2 5.398	2
Total Credits	17
	Spring
Dental Health Education 3 5.409	1
Oral Roentgenology 4 DH 212	1
Dental Office Procedures 5.399	3
Supervised Field Experience 1.300	6-8
Advanced Chairside Procedures 5.400	2
Total Credits	13-15

[1] Refer to English and Foreign Language Department Course Descriptions.

• Refer to Health Occupations Course Descriptions for other courses in this curriculum.

Dental Hygiene

Two-Year Associate of Applied Science Degree Program

Offered by LCC's Health Occupations Department

The dental hygienist is a licensed preventive oral health professional who provides educational, clinical, and therapeutic services supporting total health through the promotion of optimal oral health. She/he is that member of the dental team responsible for providing preventive, therapeutic, and educational methods for the control of oral disease. The philosophy of periodontal co-therapist is emphasized in the LCC curriculum.

Dental hygienists assume positions in settings such as private dental offices and clinics; federal, state, and local health departments or associated institutions; hospitals and nursing homes; school districts or departments of education; private business/industry; correctional facilities; private and public centers for pediatric, geriatric, and other individuals/groups with special needs; and health maintenance organizations.

Upon receipt of the associate of applied science degree, the graduate obtains a license for the state in which he or she wishes to practice by successfully completing a state/regional practical examination. Successful completion of the National Dental Hygiene Board Examination is also required. The dental hygienist practices in accordance with the requirements of individual state practice acts. The state of Oregon requires a specified number of hours of continuing education to maintain licensure.

The Dental Hygiene program consists of six quarters of professional coursework in the basic sciences, including preclinical and clinical dental hygiene; communication skills; patient assessment; periodontology; oral radiology; biomaterials; community dental health; and ethics, jurisprudence, and practice.

Admission The Dental Hygiene program is limited to 22 students. The program accepts one class per year beginning fall term. Applications to the program are evaluated by a point allocation system. Program admission packets are available from the Office of Admissions beginning the first week of December. All necessary admission papers are due in May (refer to Admissions packet for exact date).

Requirements In-district (LCC district), in-state, and out-of-state applications are accepted. An applicant must be a high school graduate by fall or have a GED certificate, complete all applicable admission packet forms, take the SCAT, Verbal Test,[1] Degrees of Reading Power Test (DRP),[1] and attend a Program Exploration Session.[2] In addition, applicants must have successfully completed one year of chemistry at the high school level or one term at the college level within the past five years. Transcripts from high school and college must be included. All required application materials must be presented to the Admissions Office prior to the May deadline (refer to Admissions application packet for the exact deadline date). Only completed packets will be accepted.

Selection Process Students are selected by rank of total points until the desired number of students and alternates have been selected. Applicants completing all nondental hygiene numbered courses in the program curriculum will be given preference over applicants with equal total points. The admission packet gives exact criteria for each point category. Examples of categories are listed below:

- SCAT stanine
  DRP score
- Grade Point Average or GED scores
- High school algebra 2 or higher or
  at least 4 credits of Mth 65 or higher at college level within the last five years
  High school chemistry or 4 credits of Chemistry 101 at college level within the last five years
- Introduction to Dentistry
  Medical Terminology 1 and/or
  Medical Terminology 2
- Elementary Human Anatomy Bi 121, 122, and 123
- General Education courses
- These classes must be graded A, B, C, D or equivalent.
  English Composition Wr 121 or Wr 123 . . . . 3 or 6
  Fundamentals of Speech Sp 111 3
  Nutrition FN 225 4
  General Sociology Soc 204, 205, or 206 *or*
  General Psychology Psy 201, 202, or 203 6
  First Aid HE 252 3
- Dental Assisting Program grade
- High school health occupation exploratory course/health cluster
- Volunteer dental assisting experience
  Paid dental assisting experience
- Minority status
- Persister status
- Residency

Notice of Acceptance The college will mail notification (acceptance, nonacceptance, or placement on the waiting list) to *all qualified applicants* in June.

Academic Planning Academic planning and careful work with the Health Occupation's counselor or program coordinator can assist applicants in preparing applications which will be competitive.

This is a challenging program both academically and in the amount of time involved on campus and at related community field experiences. Taking the required non-dental hygiene courses before acceptance into the program relieves the academic load considerably. Students should generally count on being at school from 8 a.m. to 5 p.m. on a daily basis.

All nondental hygiene numbered courses can be taken prior to entrance to the program and are generally available at Oregon community colleges and universities.

Program Expenses Miscellaneous costs in addition to tuition total approximately $1,900 for first-year students and $1,600 for second-year students. These costs should cover the required purchase of dental instruments and supplies, uniforms, lab fees, and transportation to field experience sites.

Costs are subject to change without notice. Students should begin planning early for financial aid to meet their educational goals.

1 To schedule an appointment to take the test, call or visit the Testing Office. The test is free.
2 Call the Health Occupations Department for a schedule of Program Exploration sessions—offered during winter term and up until the application deadline.

Employment Trends Excellent and varied career opportunities exist for dental hygiene graduates. The demand for licensed dental hygienists continues to increase in Oregon and throughout much of the United States. Dental hygienists can elect to practice full time or on a part-time basis.

Annual entry-level salaries in Oregon for dental hygienists range between $16,000 and $25,000 ($12 to $15 per hour). Earnings of dental hygienists are affected by the type of employ-

er, education and experience of the individual hygienist, as well as on the geographic location.

Curriculum

First Year	**Fall**
Dental Anatomy DH 113*	2
Clinical Dental Hygiene 1 DH 118	5
Elementary Human Anatomy and Physiology 1 Bi 121**[1]	4
Oral Biology 1 DH 228	4
Elementary Chemistry 1 Ch 101[1]	5
English Composition Wr 121**[2]	3
Supervised Field Experience FE 207 (elective)	(1)
Independent Study: Dental Hygiene DH 298 (elective)	(1)
Total Credits	23
	Winter
Clinical Dental Hygiene 2 DH 119	7
Elementary Human Anatomy and Physiology 2 Bi 122**[1]	4
Oral Biology 2 DH 229	4
Nutrition FN 225**	4
Oral Roentgenology 2 DH 210	2
Supervised Field Experience FE 207 (elective)	(1)
Independent Study: Dental Hygiene DH 298 (elective)	(1)
Total Credits	21
	Spring
Clinical Dental Hygiene 3 DH 120	6
Dental Materials and Procedures DH 132*	3
Oral Biology 3 DH 230	4
Pharmacology DH 254	3
Oral Roentgenology 3 DH 211	2
Supervised Field Experience FE 207 (elective)	(1)
Independent Study: Dental Hygiene DH 298 (elective)	(1)
Total Credits	18

Second Year	**Fall**
Oral Roentgenology 4 DH 212	1
Community Dental Health DH 236	2
Clinical Dental Hygiene 4 DH 220	9
Dental Anesthesia and Analgesis DH 233	3
General Sociology Soc 204, 205, or 206[3] *or*	3
General Psychology Psy 201, 202, 203[3]	(3)
Supervised Field Experience FE 207 (elective)	(1)
Independent Study: Dental Hygiene DH 298 (elective)	(1)
Total Credits	18
	Winter
Trends and Issues in Dental Hygiene DH 234	2
Clinical Dental Hygiene 5 DH 221	7
Community Dental Health DH 237	2
Composition: Research Wr 123**[2]	3
General Sociology Soc 204, 205, or 206[3] *or*	3
General Psychology Psy 201, 202, 203[3]	(3)
Supervised Field Experience FE 207 (elective)	(1)
Independent Study: Dental Hygiene DH 298 (elective)	(1)
Total Credits	17
	Spring
Clinical Dental Hygiene 6 DH 222	8
Fundamentals of Speech: Communication Sp 111**[2]	3
Community Dental Health DH 235	1
First Aid HE 252**[4]	3
Basic Mathematics Review Mth 20[5] *or*	3
Math Renewal Mth 20[5] *or*	(3)
Business Mathematics BA 103/2.206[6]	(3)
Supervised Field Experience FE 207 (elective)	(1)
Independent Study: Dental Hygiene DH 298 (elective)	(1)
Total Credits	18

* Or a comparable course from an accredited Dental Assisting Program completed within the last five years with a grade of "C" or better and consent of instructor.

** These courses may be taken prior to admission to the Dental Hygiene program.

[1] Refer to Science Department Course Descriptions.

[2] Refer to English and Foreign Language Department Course Descriptions.

[3] Refer to Social Science Department Course Descriptions.

[4] Refer to Health and PE Department Course Descriptions.

[5] Refer to Mathematics Department Course Descriptions.

[6] Refer to Business Department Course Descriptions.

• Refer to Health Occupations Department Course Descriptions for other courses in this curriculum.

Diesel Technology

Two-Year Associate of Applied Science Degree Program
Two-Year Certificate of Completion Program

Offered by LCC's Mechanics Department

An associate of applied science degree may be obtained by satisfactorily completing both the first-year and second-year curriculum of this program. By eliminating classes with the + symbol, a two-year certificate of completion may be obtained by satisfactorily completing both the first-year and second-year curriculum of this program.

Students are prepared for employment in occupations leading to jobs such as heavy duty mechanic, truck mechanic, tractor mechanic, fuel injection technician, and diesel tune-up technician. Journeymen earn approximately $20,000 to $30,000 annually.

Possible job opportunities are available with truck fleets, logging operations, heavy construction, factory diesel sales outlets, road construction contractors, parts sales and service outlets, general heavy equipment repair shops, and automotive diesel service and repair.

In addition to tuition, required estimated costs for diesel classes include:

Books – $210
Tools – $700
Lab Fee – $2 (per credit)

For costs in other classes (i.e., welding fees, books, etc.), refer to the appropriate department and/or the current class schedule.

Cooperative Work Experience (Supervised Field Experience) Under the supervision of the coordinator and with instructor consent, a maximum of 18 CWE credits may be earned in lieu of required Diesel Technology course credits.

Curriculum

First Year	**Fall**
Diesel Technology 3.302	12
Manufacturing Technology 3.399	6
Industrial Safety HE 125[1]	3
Total Credits	21
	Winter
Diesel Technology 3.302	12
Gas Processes 1 3.931[2]	4
Basic Mathematics Review MTH 20[3] *or* Equivalent	3
Total Credits	19
	Spring
Diesel Technology 3.302	12
Arc Welding 1 3.921[2]	4
Communication Skills 1 1.100[4] *or* Equivalent	3
Total Credits	19
Second Year	**Fall**
Diesel Technology 3.302	12
Arc Welding 2 3.922[2]	4
Science or Math Elective[5°] +	3
Total Credits	19
	Winter
Diesel Technology 3.302	12
Humanities Elective +	3
Social Science Elective[6]	3
Total Credits	18
	Spring
Diesel Technology 3.302	12
Science or Math Elective[5] +	3
Total Credits	15

[1] Refer to Health and Physical Education Department Course Descriptions.
[2] Refer to Industrial Technology Programs Course Descriptions.
[3] Refer to Mathematics Department Course Descriptions.
[4] Refer to English and Foreign Language Department Course Descriptions.
[5] Refer to Science Department or Mathematics Department Course Descriptions.
[6] Refer to Social Science Department Course Descriptions.
• Refer to Mechanics Department Course Descriptions for other courses in this curriculum.
' Not required for Certificate of Completion
° Principles of Technology 1 4.300 recommended.

Early Childhood Education

Two-Year Associate of Applied Science Degree Program
One-Year Certificate of Completion Program

Offered by LCC's Health Occupations Department

Improved job opportunities in the field of Early Childhood Education are due to a greater national understanding of the importance of a child's early years. Graduates of the two-year program may work in nursery schools, Head Start centers, day care centers, as paraprofessional members of teams in public schools, and in other appropriate settings.

First year of the program may be taken for a certificate in Early Childhood Education. This training will prepare one to work as a teacher's aide or day care assistant.

Students interested in this program apply to the Admissions Office and have their names placed on a major list. An Early Childhood Education program preregistration orientation is required for all new students.

Students who wish to transfer to a four-year institution to pursue a bachelor's degree program in Early Childhood Education should discuss options with Linda Riepe, Early Childhood Education coordinator, or the Health Occupations Department head.

Curriculum

First Year	**Fall**
Child Care and Guidance 7.102	3
Child Development HDFS 226	3
Early Childhood Practicum 7.128	5
Communication Skills 1 1.100[1] *or* higher	3
Total Credits	14
	Winter
Creative Activities for Children 7.115	3
Early Childhood Practicum 7.128	5
Child Nutrition FN 230	3
Program Elective**	3
Cultural Anthropology ANTH 103	3
Total Credits	17
	Spring
Early Childhood Curriculum 1 7.117	3
Early Childhood Practicum 7.128	5
Infants and Toddlers 7.101	4
Physical Science (for preschool teachers) GS 106[2] *or*	4
Science Elective	(4)
Total Credits	16

Second Year	**Fall**
Early Childhood Science Methods 7.134	1
Early Childhood Curriculum 2 7.119	3
Outdoor Activities for Children 7.108	2
Parent-School-Community Relations 7.124	3
Early Childhood Practicum 7.128	5
Basic Mathematics Review Mth 20[3] *or*	3
Math Renewal Mth 20[3] *or*	(3)
Business Mathematics BA 103/2.206[4] *or* higher level math	(3)
Total Credits	17
	Winter
Administration of Child Care Centers 7.122	4
Physical Education PE 170/180/190+[5] *or*	3
Health Elective[5]	(3)
Supervised Field Experience 1.300	5
Infant and Toddler Environments 7.127	3
Total Credits	15
	Spring
Children Under Stress HDFS 227/7.123	3
Program Elective**	3
Supervised Field Experience 1.300	5
Humanities Elective	3
Total Credits	14

\+ If a student chooses Physical Education PE 170/180/190, one credit must be taken in three different terms.
** Program Electives may be selected from course or workshop offerings within the Health Occupations Department. They need to be approved by the ECE program coordinator in advance.
[1] Refer to English and Foreign Language Department Course Descriptions.
[2] Refer to Science Department Course Descriptions.
[3] Refer to Mathematics Department Course Descriptions.
[4] Refer to Business Department Course Descriptions.
[5] Refer to Health & PE Department Course Descriptions.
• Refer to Health Occupations Department Course Descriptions for other courses in this curriculum.

Early Childhood Education: Nanny Option

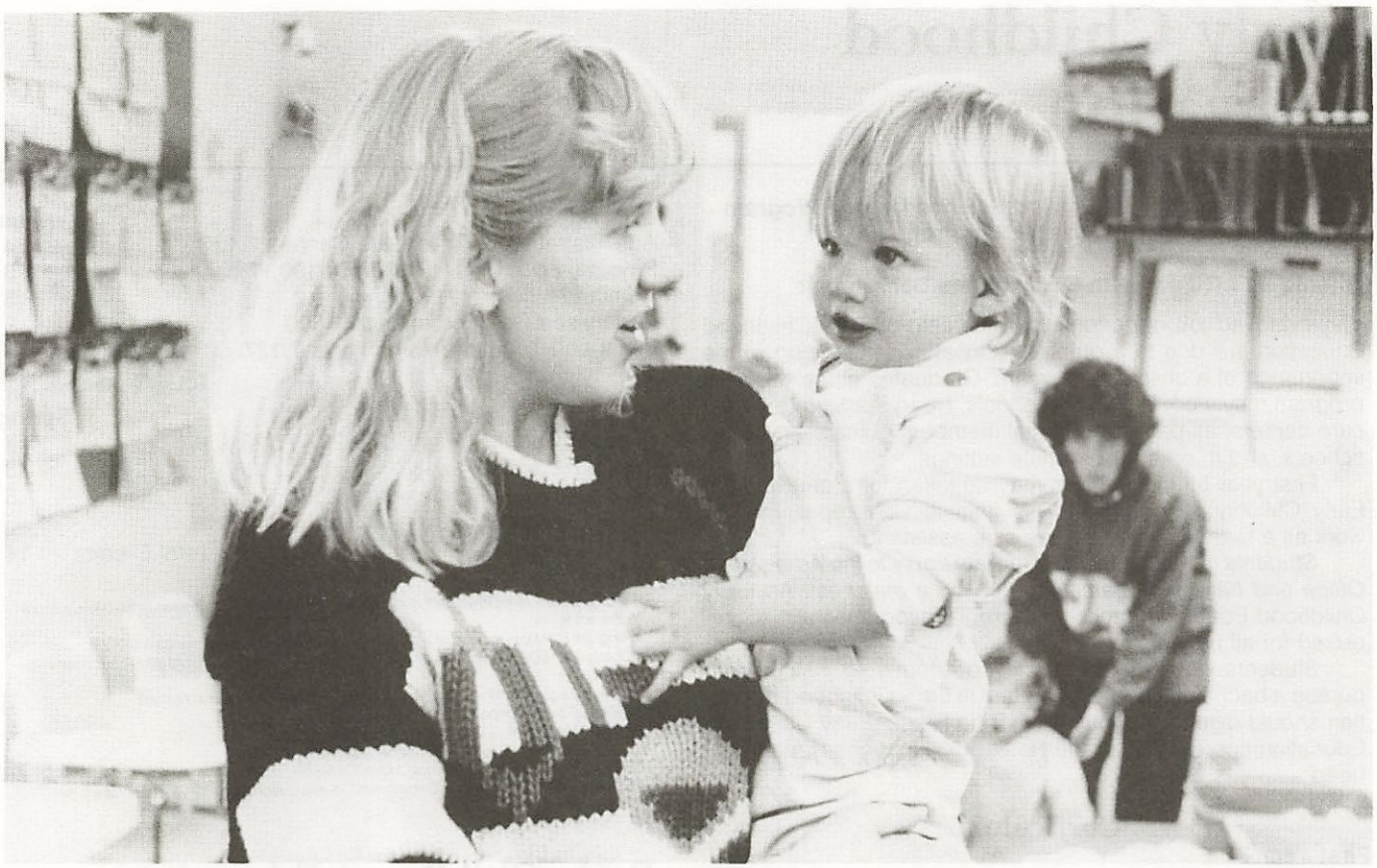
Two-Year Associate of Applied Science Degree Program
One-Year Certificate of Completion Program

Offered by LCC's Health Occupations Department

The program prepares individuals to provide in-home care of children from infancy to adolescence. The program provides specialized learning in child growth and development, guidance techniques, appropriate caregiving methods, and developmentally appropriate activities for children, infancy to adolescence. Special instruction is included on the role of the nanny as a family member in the employer's home.

Curriculum

First Year	**Fall**
Child Care and Guidance 7.102	3
The Nanny: An Overview 7.130	1
Child Development HDFS 226	3
Infants and Toddlers 7.101	4
Early Childhood Practicum 7.128	5
Total Credits	16
	Winter
Professional Nanny 1 7.131	2
Creative Activities for Children 7.115	3
Early Childhood Practicum 7.128	5
Caring for the Ill Child 7.133	2
Cultural Anthropology Anth 103[1]	3
Communication Skills 1 1.100[2] *or* higher level writing course	3 (3)
Total Credits	18



	Spring
Professional Nanny 2 7.132	3
Clothing Management: Nanny & Child 7.136	4
Early Childhood Education Curriculum 1 7.117	3
Early Childhood Practicum 7.128	5
Total Credits	15

Second Year	**Fall**
Food for Children 7.135 *or*	3
Cooking for Health and Fitness FN 110	(3)
First Year French FR 101[2] *or*	4
First Year Spanish SPAN 101[2]	(4)
Physical Education PE 170/180/190[3] *or*	3
Health Elective[3]	(3)
Introduction to Assertive Behavior HD 205[4]	3
Early Childhood Practicum 7.128	5
Total Credits	18

	Winter
Child Nutrition FN 230	3
First Year French FR 102[2] *or*	4
First Year Spanish SPAN 102[2]	(4)
Supervised Field Experience	5
Middle Childhood – Ages 6-12 HDFS 229	3
Total Credits	15

	Spring
Basic Math Review Mth 20[5] *or*	3
Math Renewal Mth 20[5] *or*	(3)
Business Mathematics BA 103/2.206[6] *or*	(3)
higher level math	(3)
Physical Science (for Preschool Teachers) GS 106[7]	4
or Science Elective	(4)
First Year French FR 103[2] *or*	4
First Year Spanish SPAN 103[2]	(4)
Early Childhood Education Program Elective	3
Supervised Field Experience 1.300	5
Total Credits	16

1. Refer to Social Science Department Course Descriptions.
2. Refer to English and Foreign Language Department Course Descriptions.
3. Refer to Health & PE Department Course Descriptions.
4. Refer to Human Development Course Descriptions.
5. Refer to Mathematics Department Course Descriptions.
6. Refer to Business Department Course Descriptions.
7. Refer to Science Department Course Descriptions.

• Refer to Health Occupations Department Course Descriptions for other courses in this curriculum.

Electronic Engineering Technician

Two-Year Associate of Applied Science Degree Program

Offered by LCC's Electronics Department

This program provides the basic principles of electronic theory and the associated lab skills needed for successful work in electronics. The curriculum includes microprocessor application, robotics, advanced systems, plus advanced instrumentation.

Satisfactory completion of the two-year program qualifies one for entry-level employment as an electronic engineering technician, electronic production technician, electronic instrument technician, industrial electronic technician, and military or transfer to a technical college.

Successful completion of the program also qualifies a student for transfer to a four-year institution.**

Employment Trends, Salary, and Student Costs Job prospects in Oregon and statewide are fair to good. On a national basis, job prospects are good to excellent.

Entry-level salary for private industry is approximately $15,000 to $20,000 per year.

A basic algebra test is required for admittance to the program. Contact the Testing Office. Required tools and equipment for the program will cost the student approximately $150 over the two-year period.

** *Engineering Technician students who plan to transfer to Oregon Institute of Technology should check the latest OIT requirements.*

Curriculum

First Year	**Fall**
Digital Electronics 1 6.206	4
Electrical Theory 1 6.229	4
Engineering Problems 1 6.135[1]	2
Beginning Algebra Mth 60[1] or higher	4
Communication Skills 1 1.100[2]	3
Shop Practices for Electronics 4.921	1
Total Credits	18
	Winter
Digital Electronics 2 6.207	4
Electrical Theory 2 6.230	4
Semiconductor Devices 1 6.245	4
Engineering Problems 2 6.136[1]	2
Elementary Algebra Mth 65[1] or higher	4
Communication Skills 2 1.102[2]	3
Total Credits	21
	Spring
Digital Electronics 3 6.208	4
Electrical Theory 3 6.231	4
Semiconductor Devices 2 6.246	4
Electrical Drafting 4.103	2
Intermediate Algebra Mth 100[1]	4
Total Credits	18

Second Year	**Fall**
Microprocessor Applications 1 6.237	4
Linear Circuits 1 6.247	5
Industrial Instrumentation 6.201	3
Switching & Wave Generation Circuits 6.219	4
Technical Mathematics 1 6.261[1] *or*	4
College Algebra Mth 101[1]	(4)
Total Credits	20
	Winter
Microprocessor Applications 2 6.238	4
Linear Circuits 2 6.248	5
Visual Displays 1 6.249	3
Logic Analyzer Techniques 6.241	2
First Aid HE 252[3]	3
Technical Mathematics 2 6.262[1] *or*	4
Trigonometry Mth 102[1]	(4)
Microcomputer Systems EE 213/6.233 *or*	(1-6)
Supervised Field Experience FE 207/1.300 *or*	(1-6)
IS: Electronic Engineering Technician 6.243	(1-6)
Total Credits	21
	Spring
Microprocessor Applications 3 6.239	5
Linear Systems 6.217	4
Advanced Circuit Analysis 6.203	3
Robotics 6.232	3
Social Science Elective[4]	3
Technical Mathematics 3 6.266[1] *or*	4
Calculus with Analytic Geometry Mth 200[1]	(4)
Microcomputer Systems EE 213/6.233 *or*	(1-6)
Supervised Field Experience FE 207/1.300 *or*	(1-6)
IS: Electronic Engineering Technician 6.243	(1-6)
Total Credits	22

[1] Refer to Mathematics Department Course Descriptions.
[2] Refer to English and Foreign Language Department Course Descriptions.
[3] Refer to Health and PE Department Course Descriptions.
[4] Refer to Social Science Department Course Descriptions.
• Refer to Electronics Department Course Descriptions for other courses in this curriculum.

Electronics Technician

Two-Year Associate of Applied Science Degree Program

Offered by LCC's Electronics Department

This program leads to the associate of applied science degree and combines classroom study of electronics theory and lab skills. There are three major areas of emphasis:

1) Computer repair and troubleshooting.
2) Radio and telephone and theory operation and troubleshooting.
3) Consumer electronics troubleshooting.

This three-phase program will give the student the opportunity to work in the consumer service, computer service, or the communication field, such as two-way radios and telephone communications.

Employment Trends, Salary, and Student Costs Electronics technicians maintain and repair all types of electronic equipment including consumer broadcast and industrial communication equipment. Electronic technicians are employed by manufacturers, service centers, independent service dealers, radio and television stations, as well as firms which have in-house electronic maintenance capability.

Employment in both the local area and statewide is good for well-qualified technicians. Pay rates start at $1,400 per month, with higher rates for specialized applications.

Required tools and equipment for the program will cost the student approximately $100 over the two-year period.

Curriculum

First Year	**Fall**
Electrical Theory 1 6.229	4
Shop Practices for Electronics 4.921	1
Digital Electronics 1 6.206	4
Beginning Algebra Mth 60[1]	4
or	
higher level math course	(4)
Communication Skills 1 1.100[2]	3
Opportunities in Electronic Technology 3.473	1
Total Credits	17
	Winter
Electrical Theory 2 6.230	4
Digital Electronics 2 6.207	4
Active Circuits 1 3.474	4
Elementary Algebra Mth 65[1]	4
or	
higher level math course	(4)
Principles of Technology 1 4.300[3]	4
Total Credits	20
	Spring
Active Circuits 2 3.475	4
Customer Relations for Technicians 3.485	2
Intermediate Algebra Mth 100[1]	4
or	
higher level math course	(4)
Beginning Programming CS 133[4]	4
Principles of Technology 2 4.302[3]	4
Total Credits	18
Second Year	**Fall**
Understanding Microprocessors 3.476	3
Electronics Troubleshooting 1 3.477	4
Hardware Computer Systems: (Interfacing and Input/Output) 3.480	4
Industrial Safety HE 125[5]	3
Social Science Elective[6]	3
Total Credits	17
	Winter
Radiotelephone & Communications Equipment 3.481	4
Electronics Troubleshooting 2 3.478	4
Radiotelephone Operator Preparation 3.482	3
Communication Skills 3 6.126[2]	3
Total Credits	14
	Spring
Consumer Electronics System 3.483	3
Electronics Troubleshooting 3 3.479	5
Senior Seminar - Electronics Technician 3.484	2
or	
Supervised Field Experience: Electronics 1.300	(2)
Electives	6
Total Credits	16

[1] Refer to Mathematics Department Course Descriptions.
[2] Refer to English and Foreign Language Department Course Descriptions.
[3] Refer to Science Department Course Descriptions.
[4] Refer to Data Processing Department Course Descriptions.
[5] Refer to Health and Physical Education Department Course Descriptions.
[6] Refer to Social Science Department Course Descriptions.
• Refer to Electronics Department Course Descriptions for other courses in this curriculum.

Flight Technology

Two-Year Associate of Applied Science Degree Program

Offered by LCC's Flight Technology Department

This is a two-year associate of applied science degree program designed to prepare the student for federal certification as a flight instructor, ground instructor, or business pilot. Students completing the pertinent courses become eligible to take the various flight and/or written tests required by the Federal Aviation Administration (FAA) for employment as light airplane and helicopter pilots or instructors.

To graduate with a degree in flight technology, all degree candidates must complete the required curricula with a GPA of at least 2.00.

Although most rated graduates in recent years have found aviation jobs, neither the college nor the department can guarantee placement. Hourly wages paid to beginning flight instructors vary, but are approximately $8 to $12 per flight hour. Certified ground instructors are paid about the same wages per classroom hour. Graduates should expect to spend between two and five years working for hourly wages before acquiring enough experience to qualify for a salaried position paying roughly $1,500 to $3,000 per month.

This program is accredited by the FAA, the Oregon State Board of Higher Education, and the Veterans' Administration. Some of the credits earned may be applied toward a baccalaureate degree. As a general rule, however, colleges that do not have aviation departments themselves will not accept credits earned in aviation programs. Consequently, students who plan to attend a four-year institution should be familiar with the policies and requirements of the institution to which they plan to transfer.

Contact the department for the informational packet which contains detailed occupational information.

Flight Technology Fees

Flight Lab	$1,170-$2,380 per term*
FAA Physical	$45 per year
Books	$75 approx.
Supplies	$100 approx.

*No student may be placed on the flight schedule until flight lab fees for the term have been paid.

Commuting Students are responsible for their own transportation to and from the airport. Students on the flight schedule must be at the airport at least three times per week. The round-trip distance from campus is approximately 33 miles. City bus service to the airport is not presently available.

Selection Procedure The Flight Technology program has a maximum capacity of 85 students in flight training at one time. Applications will be accepted at any time ***but will be retained for only one year.***

The courses offered by the Flight Technology program are designed to be taken in sequence. This sequence begins each fall term with the enrollment of 40 to 45 new students. It is recommended that new students begin in the fall.

Students will be selected from the application files for enrollment at the beginning of winter and spring terms on a space-available basis only.

All of the following program requirements must be presented to the Flight Technology program, Flight Operations Building, 28715 Airport Road, Eugene, Oregon 97402. ***In addition,*** the applicant must complete a general application to Lane Community College.

1. Completed Flight Technology program application form.
2. Additional sheet (if necessary) containing career goals and any aviation-related jobs that the applicant has held.

Students will be selected for the program based on the following:

1. Date of applications
2. Physical qualifications
3. Career objectives
4. Aviation and educational background

Openings for enrollment in flight training are limited. ***Aviation ground courses*** can normally accommodate all applicants without prior application.

Contact the department for complete information.

Applicants who are not U.S. citizens should contact the LCC Admissions Office for information about admission to the college. International students must be accepted to the college before applying to the Flight Technology program.

Curriculum

First Year	**Fall**
Flight 1 6.431*	1-6
Private Pilot Ground School FT 250	5
Aircraft Development FT 103	4
General Aviation Careers FT 102	1
Primary Flight Briefing 6.430	3
Total Credits	14-19
	Winter
Flight 2 6.433*	1-6
Meteorology GS 107[1]	4
English Composition Wr 121[2]	3
Intermediate Algebra Mth 100[3]	3-4
Elective	(3)
Total Credits	11-20
	Spring
Flight 3 6.435*	1-6
Commercial Pilot Ground School FT 251	5
Introduction to Computer Information Processing CS 131[4]	4
Keyboarding OA 120[5]	3
Aircraft Structures and Systems 6.415	3
Total Credits	16-21

Second Year	**Fall**
Flight 4 6.439*	1-6
Instrument Ground School FT 252	4
Fundamentals of Speech: Communication Sp 111[2]	3
Business Law BA 226[5]	3
Business Environment BA 125[5] *or*	3
Business Communications BA 214[5]	(3)
Total Credits	14-19
	Winter
Flight 5 6.441*	1-6
Fundamentals and Flight Instructor—Instrument Ground School FT 255	3
Aerodynamics FT 254	3
Selling BA 238[5]	3
Health Elective[6] *or*	3
Physical Education PE 170/180/190[6]**	(3)
Total Credits	13-18

	Spring
Flight 6 6.443*	1-6
General Aviation Management BA 254[5]	3
Multiengine Ground School 6.428	1
Social Science Elective[7]	3
Flight Instructor—Airplane Ground School FT 256	3
Elective	(3)
Total Credits	11-19

Additional Ratings

Flight 7 (Multiengine) 6.445	1-3 credits
Flight 8 (C.F.I.A.) 6.447	1-5 credits
Flight 9 (C.F.I.I.) 6.449	1-5 credits
Flight 10 (Simulator Lab) 9.610	1-3 credits
Flight 12 (Tailwheel Airplane) 6.451	1-2 credits
Flight 20 (Helicopter Primary) 6.453	1-6 credits
Flight 21 (Helicopter Advanced) 6.454	1-4 credits

* Six credits each required for Flight 1 through Flight 6.

** If the student chooses PE 170/180/190, one credit must be taken in each of three terms to satisfy degree requirements.

[1] Refer to Science Department Course Descriptions.

[2] Refer to English and Foreign Language Department Course Descriptions.

[3] Refer to Mathematics Department Course Descriptions.

[4] Refer to Data Processing Department Course Descriptions.

[5] Refer to Business Department Course Descriptions.

[6] Refer to Health and Physical Education Department Course Descriptions.

[7] Refer to Social Science Department Course Descriptions.

• Refer to Flight Technology Course Descriptions for other courses in this program.

Graphic Design

Two-Year Associate of Applied Science Degree Program
or
Two-Year Certificate of Completion Program

Offered by LCC's Art & Applied Design Department

The Graphic Design program is a vocationally oriented two-year associate of applied science degree and a two-year certificate of completion program. The program prepares individuals for entry-level positions in the graphic design field which include art production, design, advertising and commercial art, and printing. Basic courses in studio art, graphic art production, photography, and lettering are a part of the curriculum. Students are selected to enter the second year of the program based on their portfolio of work submitted at the end of spring term and completion of the first year program requirements. During the final term of the program, students assemble a professional portfolio of art samples and a typeset, printed resume required for employment in the graphic design field. At this time, Lane County professionals review students' portfolios. At least two terms (6 credits, 216 hours) of internship, Cooperative Work Experience, in a design-oriented business is required for graduation.

Vocational Curriculum

First Year	**Fall**
Beginning Drawing ART 131* *or* higher	3
Beginning Photography ART 161*	3
Survey of Visual Arts: Modern Art ART 211+ *or*	3
Introduction to Visual Arts ART 101*	(3)
Communication Skills 1 1.100 *or* higher	3
Listening Sp 105 *or*	3
Interpersonal Communication Sp 214	(3)
Total Credits	15
	Winter
Drawing ART 132 *or* higher	3
Basic Design: Fundamentals ART 115*	3
Publication Design and Production 1 3.433*	3
Survey of Visual Arts: Modern Art ART 212+	3
Keyboarding OA 120/2.501 *or* higher	3
Total Credits	15
	Spring
Figure Drawing ART 234*	3
Basic Design: Color ART 116*	3
Lettering and Layout ART 119*	3
Social Science Elective	3
Program Elective*	3
Total Credits	15

Second Year	**Fall**
Graphic Design ART 221*	4
Production for the Graphic Designer ART 228*	3
Supervised Field Experience 1.300*	3
Health Elective *or*	3
Physical Education PE 170/180/190	(3)
Program Elective	3
Total Credits	16
	Winter
Graphic Design ART 222*	4
Production for the Graphic Designer ART 229*	3
Supervised Field Experience 1.300*	3
Basic Math Review Mth 20 *or*	3
Math Renewal Mth 20 *or*	(3)
Business Mathematics BA 103/2.206	(3)
Program Elective	3
Total Credits	16
	Spring
Graphic Design ART 223*	4
Production for the Graphic Designer ART 230*	3
Supervised Field Experience 1.300*	3
Science or Math Elective	4
Program Elective	3
Total Credits	17

* Minimum courses required for Certificate of Completion.
\+ AAS Degree students take ART 211 and 212. Certificate students may take ART 101 instead.
[1] Refer to English and Foreign Language Department Course Descriptions.
[2] Refer to Business Department Course Descriptions.
[3] Refer to Social Science Department Course Descriptions.
[4] Refer to Health and Physical Education Department Course Descriptions.
[5] Refer to Mathematics Department Course IDescriptions.
[6] Refer to Science Department or Mathematics Department Course Descriptions.
** Refer to Art and Applied Design Department Course Descriptions for other courses in this curriculum.

Health Records Technology

One-Year Certificate of Completion Program

Offered by LCC's Health Occupations Department

Health Records Technology is a one-year certificate of completion program which will prepare students to function in a private physician office or in the Medical Record Department of a hospital as a medical records clerk and/or Medical Transcriptionist; OR to enter the second year of the Health Records Program at either Portland Community College or Central Oregon Community College; OR to satisfy college course requirements for the American Medical Record association Independent Study Program qualifying for the National Accredited Record Technician examination.

Curriculum

First Year	**Fall**
Elementary Human Anatomy & Physiology 1 BI 121	4
English Composition WR 121	3
Concepts of Computing CS 121	3
Medical Terminology 1 5.483	2
Medical Filing & Records Management 2.507	3
Medical Transcription 1 5.495	2
Total Credits	17

	Winter
Elementary Human Anatomy & Physiology 2 BI 122	4
Interpersonal Communication SP 214	3
Formatting 1 OA 121	3
Medical Terminology 2 5.493	3
Medical Office Procedures 1 2.512	3
Medical Transcription 2 5.496	2
Total Credits	18

	Spring
Applied Psychology PSY 205	3
Introduction to Computer Information Processing CS 131	4
Clinical Terminology 5.498	2
Introduction to Medical Records Technology 5.499	3
Introduction to Medical Science 5.603	3
Total Credits	18

[1] Refer to Science Department Course Descriptions.
[2] Refer to English and Foreign Language Department Course Descriptions.
[3] Refer to Data Processing Department Course Descriptions.
[4] Refer to Business Department Course Descriptions.

Industrial Maintenance

Two-Year Associate of Applied Science Degree Program

Offered by LCC's Electronics Department

This two-year program for the associate of applied science degree combines classroom study of industrial, commercial, and consumer refrigeration, and ice machines, plus the emerging technology of cryogenics. In addition, it includes motor controls (mechanical and programmable), electrical motors (fractional to HP), electrical or natural gas appliances (washers and dryers), and heat-cooling units (furnaces and heatpumps).

Qualified graduates will work in a variety of settings including food processing and industrial plants, appliance and/or retail stores, and physical plants and research laboratories requiring super low temperatures. In addition, they may work in auto-conditioning repair shops, building maintenance, mobile home, or service companies.

Employment Trends, Salary, and Student Costs Employment prospects are good, with placement out of state. Pay ranges from $8 to $10 per hour in independent shops. Required tools for the program will cost the student approximately $300 for two years.

Curriculum

First Year	**Fall**
Electrical Theory 1 6.229	4
Shop Practices for Electronics 4.921	1
Refrigeration 1/Air Conditioning 3.626	6
Silver Brazing/Metal Joining 3.628	2
Occupational Mathematics 1 Mth 50[1]	3
Industrial Safety HE 125[2]	3
Total Credits	19
	Winter
Motors 1 3.629	3
Refrigeration 2/Air Conditioning 3.627	5
Control Devices 3.631	4
Occupational Mathematics 2 Mth 55[1]	3
Principles of Technology 1 4.300[3]	4
Total Credits	19
	Spring
Ice Machines 3.632	4
Furnaces/Ducting 3.633	4
Customer Relations for Technicians 3.485	2
Concepts of Computing CS 121[4]	3
Principles of Technology 2 4.302[3]	4
Occupational Mathematics 2 Mth 55[1]	3
Total Credits	20
Second Year	**Fall**
Communication Skills 1 1.100[5]	3
Motors 2 3.630	4
Programmable Controllers 3.634	4
Digital Electronics 1 6.206	4
Elective	3
Total Credits	18
	Winter
Heat Pumps (Reverse Cycle Refrigeration) 3.621	2
Heat Pumps Lab (Reverse Cycle Refrigeration) 3.622	1
Electric/Gas Appliances 3.635	5
Basic Hydraulics 3.137[6]	2
Communication Skills 3 6.126[5]	3
Social Science Elective[7]	3
Total Credits	16
	Spring
Industrial Preventative Maintenance 3.636	4
Cryogenics 3.637	5
Electrical Drafting 4.103	2
Manufacturing Technology 3.399[6]	3
Senior Seminar-Service Technician 3.638	2
or	
Supervised Field Experience: Electronics 1.300	(2)
Total Credits	16

[1] Refer to Mathematics Department Course Descriptions.
[2] Refer to Health & P.E. Department Course Descriptions.
[3] Refer to Science Department Course Descriptions.
[4] Refer to Data Processing Department Course Descriptions.
[5] Refer to English and Foreign Language Department Course Descriptions.
[6] Refer to Mechanics Department Course Descriptions.
[7] Refer to Social Science Department Course Descriptions.
• Refer to Electronics Department Course Descriptions for other courses in this curriculum.

Manufacturing Technology

Two-Year Associate of Applied Science Degree Program
or
Two-Year Certificate of Completion Program

Offered by LCC's Mechanics Department

Basic principles and fundamentals in manufacturing and related work are taught in Manufacturing Technology. Class instruction in theory is combined with shop practice. Students prepare for entrance occupations in manufacturing shop or related industries.

In addition to tuition, required estimated costs for manufacturing technology classes include:

Books – $55
Tools – $250
Lab Fee – $2 (per credit)

For costs in other classes (i.e. welding fees, books, etc.), refer to the appropriate department and/or the current class schedule.

Opportunities for employment are found in the machine repair and maintenance shops, manufacturing industries, metalworking plants, repair and maintenance shops for mill and construction contractors, and specialty machine shops. Local beginning pay is $6 to $8 an hour; journeymen earn $9 to $12 an hour.

Cooperative Work Experience (Supervised Field Experience) Under the supervision of the coordinator and with instructor consent, a maximum of 18 CWE credits may be earned in lieu of required Manufacturing Technology course credits.

Curriculum

First Year	**Fall**
Manufacturing Technology 3.399	12
Introduction to Drafting: Basic Skills 4.152[1] +	2
Introduction to Drafting: Special Projects 4.155[1] +	2
Industrial Safety HE 125[2]	3
Total Credits	19

	Winter
Manufacturing Technology 3.399	12
Occupational Mathematics 1 Mth 50[3] *or* Equivalent	3
Arc Welding 1 3.921[4] +	4
Total Credits	19

	Spring
Manufacturing Technology 3.399	12
Humanities Elective[5] +	3
Occupational Mathematics 2 Mth 55[3] + *or* Equivalent	3
Total Credits	18

Second Year	**Fall**
Manufacturing Technology 3.399	12
Applied Metallurgy 3.951[4] +	3
Mechanical Design 1 4.132[1] + *or*	4
Introduction to AutoCad 4.110[1] +	(4)
Total Credits	19

	Winter
Manufacturing Technology 3.399	12
Science or Math Elective[5] +	4
Communication Skills 1 1.100[6] *or* Equivalent	3
Total Credits	19

	Spring
Manufacturing Technology 3.399	12
Social Science Elective[7]	3
Science or Math Elective[5] +	4
Total Credits	19

[1] Refer to Electronics Department Course Descriptions.
[2] Refer to Health & PE Department Course Descriptions.
[3] Refer to Mathematics Department Course Descriptions.
[4] Refer to Industrial Technology Programs Course Descriptions.
[5] Refer to Science or Mathematics Department Course Descriptions.
[6] Refer to English and Foreign Language Department Course Descriptions.
[7] Refer to Social Science Department Course Descriptions.
• Refer to Mechanics Department Course Descriptions for other courses in this curriculum.
\+ Not required for Certificate of Completion

Medical Office Assistant

One-Year Certificate of Completion Program

Offered by LCC's Health Occupations Department

The medical office assistant is a member of the health care team. As an administrative office assistant, the graduate acts as a secretary, receptionist, transcriptionist, and bookkeeper. As a clinical assistant, the graduate prepares patients for examination or treatment, takes temperatures, measures height and weight, sterilizes instruments, stands by to assist the physician as the physician examines or treats patients. Certain laboratory tests may be performed and other medical assistance given to patients under the physician's supervision. This is a concentrated program which requires a high level of sustained energy output during the year. Winter term, particularly, is a heavy load.

Application Information Enrollment in this program is limited. Special application packets with information pertaining to the admission process are available from the Office of Admissions beginning the first week in December. All necessary admission papers are ***due by the deadline date in the packet.***

An applicant must be a high school graduate or have a GED certificate.

The admissions process includes a screening examination (Degrees of Reading Power Test), typing proficiency examination, and submission of transcripts. Evidence of a physical examination (within the previous nine months) must be submitted prior to admittance to the program. Early application is important. Successful completion of all fall and winter term requirements is necessary prior to Supervised Field Experience in medical facilities during each spring term.

Employment Trends Job prospects state-wide are good. Approximately 90 percent of the LCC graduates in this program are placed in the Eugene/Springfield area. Beginning pay is from $1,050 to $1,200 per month, usually with fringe benefits.

Curriculum

First Year	**Fall**
Medical Formatting 2.124	3
Medical Filing and Records Management 2.507	3
Medical Office Accounting 1 2.119[1]	3
Physical Science 1 5.510	3
Medical Terminology 1 5.483	2
Medical Law and Ethics 5.484	2
Total Credits	16
	Winter
Medical Office Procedures 1 2.512	3
Medical Office Accounting 2 2.120[1]	3
Physical Science 2 5.512	3
Clinical Assistant 1 5.482	4
Medical Transcription 1 5.495	2
Formatting 1 OA 121/2.101[1]	3
Total Credits	18
	Spring
Medical Office Procedures 2 2.514	3
Clinical Assistant 2 5.492	2
Laboratory Orientation 5.485	3
Supervised Field Experience FE 207/1.300	6
Interpersonal Communication Sp 214/1.104[2]	3
Total Credits	17

[1] Refer to Business Department Course Descriptions.
[2] Refer to English and Foreign Language Department Course Descriptions.
• Refer to Health Occupations Course Descriptions for other courses in this curriculum.

Medical Transcription

▶ Suggested Course of Study

Offered by LCC's Health Occupations Department

A medical transcriptionist records medical records 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 insure high quality of health care, for documentation of cases, for research, and other purposes.

Keyboard Skillbuilding OA 124/2.109, or 50 words per minute, or consent of the instructor is a prerequisite of this suggested course of study.

The employment outlook for medical transcriptionists is excellent. Beginning pay is $7 to $8 per hour.

Curriculum

First Year	Fall
Medical Terminology 1 5.483	2
Medical Filing and Records Management 2.507	3
Medical Transcription 1 5.495	2
Physical Science 1 5.510	3
Medical Formatting 2.124[1]	3
Total Credits	13

	Winter
Formatting 1 OA 121[1]	3
Medical Office Procedures 1 2.512	3
Medical Transcription 2 5.496	2
Physical Science 2 5.512	3
Word Processing/Microcomputer Elective	3
Total Credits	14

	Spring
Clinical Terminology 5.498	2
Medical Office Procedures 2 2.514	3
Medical Transcription Laboratory 5.497	3
Introduction to Medical Records Technology 5.499	3
Introduction to Medical Science 5.603	3
Total Credits	14

[1] Refer to Business Department Course Descriptions.

▶ **This is a suggested course of study for students interested in medical transcription. 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 LCC Board of Education. However, students completing the medical transcription curriculum receive a certificate from LCC's Health Ocupations Department.**

Microcomputer Information Systems

One-Year Certificate of Completion

Offered by LCC's Data Processing Department

The Microcomputer Information Systems program is a one-year certificate program designed to prepare specialists in the design, implementation, and use of information systems on microcomputers. This program will increase capabilities for positions which require knowledge of microcomputer hardware and software, and it will help those already employed in offices which use microcomputers to more effectively utilize the microcomputer's capabilities.

The goal of the Microcomputer Information Systems program is to provide a broad range of skills necessary to be an effective information systems employee. The program includes introductory courses in computer information processing with special emphasis on the effective use of microcomputer software systems. Also included are courses from related skill areas: business, mathematics, English, and social sciences.

Curriculum

First Year	**Fall**
Concepts of Computing CS 121	3
Accounting 1 2.110[2] *or*	3
Principles of Accounting BA 211[2]	(3)
English Composition Wr 121[3] *or*	3
Communication Skills 1 1.101[3] *or*	(3)
Fundamentals of Speech: Communication Sp 111[3]	(3)
Introduction to Microcomputers: Spreadsheet Applications CS 110	3
Elective	4
Total Credits	16

	Winter
Microcomputer Database Applications CS 111	3
Accounting 2 2.111[2] *or*	3
Principles of Accounting BA 212[2] *or*	(3)
Specialized Elective*	(3)
Intermediate Algebra Mth 100[1]+	4
Elementary Logic Phl 221[4] *or*	3
Problem Solving 0.5271[5]	(3)
Electives	3
Total Credits	16

	Spring
Microcomputer Integrated Systems Applications CS 112	3
Accounting 3 2.112[2] *or*	3
Principles of Accounting BA 213[2] *or*	(3)
Specialized Elective*	(3)
Technical Report Writing Wr 227[3] *or*	3
Communication Skills 2 1.102[3]	(3)
Beginning Programming (Basic) CS 133 *or*	4
Introduction to Computer Science 1 CS 201	(4)
Total Credits	13

* See a counselor to select an appropriate starting course in mathematics.
* Requires department head approval
[1] Refer to Mathematics Department Course Descriptions.
[2] Refer to Business Department Course Descriptions.
[3] Refer to English and Foreign Language Department Course Descriptions.
[4] Refer to Social Science Department Course Descriptions.
[5] Refer to Study Skills Department Course Descriptions.
• Refer to Data Processing Department Course Descriptions for other courses in this curriculum.

Music

▶ **Two-Year Suggested Course of Study**

Offered by LCC's Performing Arts Department

Careers in Music Students with a strong interest in music can make a life and a living in this field though opportunities for music *performance* are limited. The fact is that many people in Oregon make their livings in music or music-related occupations. There is a great variety of career possibilities, and these may be pursued either as main or extra sources of income.

From apprenticeships to doctoral degrees, the educations of Oregonians employed in music vary greatly. And their skills range accordingly—from those of the technician/repairperson to those of the concert artist. Generally, formal college education is required only for careers in music ***education***. But of course it's helpful in other areas, too, such as sales.

The future of music-related work appears bright. Occupations that have grown especially fast in recent years are private teacher, special teacher (e.g., recreation), music therapist, conductor, booking agent, piano technician, music salesperson, and disc jockey. The demand for instrumental music and school teachers has leveled off in large cities but has remained strong in small towns.

Curriculum

First Year	**Fall**
Music Theory 1 Mus 111	4
Sight Reading and Ear Training Mus 114**	2
Group Piano Mus 131*	2
Individual Lessons[1]	2
Large Perf. Ensemble[2]	2
Small Perf. Ensemble[3]	2
Dance or Physical Education Activity Course[4]	1
Social Science[5]	3
English Composition Wr 121[6]	3
Total Credits	21
	Winter
Music Theory 1 Mus 112	4
Sight Reading and Ear Training Mus 115**	2
Group Piano Mus 131*	2
Individual Lessons[1]	2
Large Perf. Ensemble[2]	2
Small Perf. Ensemble[3]	2
Dance or Physical Education Activity Course[4]	1
Social Science[5]	3
Composition: Style Wr 122[6]	3
Total Credits	21
	Spring
Music Theory 1 Mus 113	4
Sight Reading and Ear Training Mus 116**	2
Group Piano 131*	2
Group Voice Mus 134	2
Individual Lessons[1]	2
Large Perf. Ensemble[2]	2
Small Perf. Ensemble[3]	2
Personal Health HE 250[4]	3
Social Science[5]	3
Total Credits	22

Second Year	**Fall**
Music Theory 2 Mus 211	4
Music History Mus 261	3
Individual Lessons[1]	2
Large Perf. Ensemble[2]	2
Small Perf. Ensemble[3]	2
Music Elective***	2
Math 100	4
Composition: Research Wr 123[6]	3
Total Credits	22
	Winter
Music Theory 2 Mus 212	4
Music History Mus 262	3
Individual Lessons[1]	2
Large Perf. Ensemble[2]	2
Small Perf. Ensemble[3]	2
Music Elective***	2
Math or Science[7]	4
Dance or Physical Education Activity Course[4]	1
Total Credits	20
	Spring
Music Theory 2 Mus 213	4
Music History Mus 263	3
Individual Lessons[1]	2
Large Perf. Ensemble[2]	2
Small Perf. Ensemble[3]	2
Music Elective***	2
Math or Science[7]	4
Total Credits	19

[1] Select the appropriate MuP number from Individual Lesson listings in the Performing Arts Department Course Descriptions.
[2] Choose from Symphonic Band Mus 295A, Chamber Orchestra Mus 296B, Chorus Mus 297A.
[3] Choose from String Ensemble Mus 294A, Woodwind Ensemble Mus 294B, Percussion Ensemble Mus 294D, Jazz Ensemble Mus 295E, Chamber Choir Mus 297B, Vocal Jazz Ensemble Mus 297C, Guitar Ensemble Mus 294E.
[4] Refer to Performing Arts or Health & P.E. Departments Course Descriptions.
[5] Refer to Social Science Department Course Descriptions.
[6] Refer to English and Foreign Language Department Course Descriptions.
[7] Refer to Mathematics or Science Department Course Descriptions.
• Refer to Performing Arts Department Course Descriptions for other courses in this suggested curriculum.
* Equivalent proficiency required. Students with piano proficiency take Music elective.
** Corequisite with Music Theory 1, unless equivalent proficiency is demonstrated.
*** If your goal is a BA take a foreign language.

Note: Transfer students should check Bachelor of Arts or Bachelor of Music options at the schools to which they plan to transfer.

▶ **This is a suggested course of study for students interested in music. 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 LCC Board of Education. However, courses in the music curriculum may be applied toward an associate of arts degree and/or college transfer.**

Nursing

Two-Year Associate of Applied Science Degree Program in Associate Degree Nursing

One-Year Certificate of Completion in Practical Nursing

Lane Community College offers a two-level curriculum in nursing:

- Level One is composed of the first four terms and begins with the summer session. Completion of these four terms qualifies the student to take the National Council Licensure Examination (NCLEX-PN) for licensure as a licensed practical nurse.
- Level Two is composed of three additional terms which upon completion qualifies the graduate to take the licensing exam (NCLEX-RN) to become a registered nurse.

Each level of the program provides for an appropriate balance between general education and nursing education content. During the program, students acquire nursing skills under the supervision of qualified instructors in classroom and laboratory settings. These skills serve as the foundation for client care in various community facilities—hospitals, nursing homes, clinics, doctors' offices, and home health agencies.

In addition to the Associate Degree and Practical Nursing ladder program, the following courses and programs are available in cooperation with the Community Education Division:

- A one-quarter nurse refresher course designed for inactive registered or licensed practical nurses who are planning to reactivate their licenses.
- A one-quarter nursing assistant course designed to prepare the student for employment in hospitals, nursing homes, and home health agencies.
- Individual courses are offered as requested by an institution(s) or by groups of individuals. These courses are designed to provide opportunities for both professional growth and advancement.

Interested applicants should check with the counseling center for information about the nursing programs and/or application requirements and procedures.

Applicants who wish to enroll in non-nursing courses, regardless of whether they are accepted into nursing, may do so at any time. The Counseling Center is available to assist applicants in the selection of courses. Applicants are encouraged to complete as many non-nursing requirements as possible before entering the program.

All students admitted to the nursing program are expected to carry their own personal health insurance.

Admission The nursing programs accept one class per year beginning summer term. The class is selected by a point allocation system from a pool of qualified applicants. Application packets for summer term 1990 admission may be picked up at the Admissions Office after December 1, 1989.

Requirements An applicant must be a high school graduate by fall 1990 or have a GED certificate, complete a Department of Health Occupations application form, , a reading comprehension test, a basic arithmetic test, and attend a Program Exploration Session.[2]Transcripts of high school and college must be included. All required application materials must be presented to the Admissions Office by the deadline date indicated in the packet. *Only completed packets will be accepted.*

Point Allocation System Selection for admission to the Associate Degree Nursing and Practical Nursing programs will be by a point allocation system. The maximum number of points possible is 30. Five points exclusive of points for residency, minority status, and experience are necessary to meet minimal requirements. Applicants who meet the minimal five-point requirement will be accepted into the program by rank of total points until the desired number of students and alternates have been selected. Information on the point allocation system is available in the Counseling Department.

Number of Applicants Accepted The number of applicants accepted will be based on college budgetary and clinical facility considerations.

Notification of Acceptance The college will mail notification of acceptance, non-acceptance, or placement on the waiting list to *all qualified applicants* as soon as possible following the application deadline.

[1] To get an appointment to take the test, call or visit the Testing Office. Your test is free.
[2] Call the Health Occupations Department for a schedule of Program Exploration sessions—offered during winter term and up until the application deadline.

Associate Degree Nursing

Two-Year Associate of Applied Science Degree Program

Offered by LCC's Health Occupations Department

Purpose The purpose of the associate degree program is to prepare a graduate who is eligible to write the National Council Licensure Examination and thereby be qualified to practice as an associate degree registered nurse.

The program is accredited by the National League for Nursing and the Oregon State Board of Nursing. This is a difficult program both academically and in terms of the amount of time involved on campus and at related community facilities. Taking the non-nursing courses before being admitted to the program relieves the pressures of the program considerably. Students generally should count on being in school from 8 a.m. to 4 p.m. daily. Clinic hours (class time in hospitals, nursing homes or the college lab) range from 15 hours per week the first term to 18 hours the last term. All students must be prepared for evening shifts for clinical purposes. The first term of the program is an 8-week summer session. Personal health insurance is required by the clinical facilities.

Admission The Associate Degree Nursing program accepts one class per year, beginning summer term. Selection to the program is by a point system from a pool of qualified applicants. See admission information above.

Advanced Placement Licensed practical nurses may apply for advanced placement in the Associate Degree Nursing program during the application period. The application procedure is similar to admission information above, and selection is made based on points allocated.

The previous curriculum of each licensed practical nurse is evaluated on an individual basis. Requirements for advanced placement include completion of courses equivalent to Elementary Human Anatomy and Physiology 1 and 2 (Bi 121, 122), Microbiology (Bi 123), Child Development (HDFS 226), and Dosage Computation Math (5.606). The science courses must have been completed within the last five years with a grade of "C" or better.

LPN's who graduated from PN programs not carrying college credits, or who completed their PN education more than 5 years ago (prior to 1984), must take the NLN Mobility Exams offered by the Health Occupations Department.

Transfer Procedures Students who desire to transfer into the associate degree program from another school of nursing must apply to the program two quarters prior to the quarter in which the student desires enrollment. The previous nursing curriculum of each student is evaluated on an individual basis in order to determine program placement. Students may be asked to take teacher-constructed tests, including demonstration of specified skills in the college nursing laboratory. Once placement has been decided, admission is determined on a space available basis.

Fees and Expenses

Tuition (resident of Oregon)	$231 per term
Miscellaneous Fees (approximate)	
Lab fees	$270
NLN achievement exams	20
Uniform (minimum of one)	50
Books	450
Shoes (white)	40
Watch (second hand)	30
Bandage scissors	7
Personal Health Insurance—recommended	
Stethoscope (optional)	15

Expenses are subject to change without notice.

ADN and practical nursing students assume responsibility for their own uniforms, books, room and board, and transportation to and from clinical facilities.

First year ADN and practical nursing students enrolled in the nursing programs are required to have tuberculin tests that are current through August of 1990. Second year ADN students must have tuberculin tests current through June of 1990. All students enrolled in the nursing program must have a CPR card current through August 1990.

Employment Trends Job prospects locally, statewide, and nationally are excellent.

Curriculum

Curriculum for Associate Degree Nursing

First Year	Summer
Elementary Human Anatomy and Physiology 1 Bi 121[1]	4
English Composition Wr 121[2]	3
Introduction to Nursing NUR 100	2
Dosage Computation Math 5.606[3]	1
Total Credits	10
	Fall
Nursing Fundamentals NUR 106A	5
Nursing Fundamentals Lab NUR 106B	5
Elementary Human Anatomy and Physiology 2 Bi 122[1]	4
Child Development HDFS 226 *or*	3
Human Development 1 Psy 235[4]	(3)
Total Credits	17
	Winter
Elementary Microbiology Bi 123[1]	4
Basic Nursing 1 NUR 107A	5
Basic Nursing 1 Lab NUR 107B	5
Social Science Elective**[4]	3
Total Credits	17
	Spring
Basic Nursing 2 NUR 109A	5
Basic Nursing 2 Lab NUR 109B	6
Nursing Trends and Issues NUR 204C	1
Supervised Field Experience 1.300*	(3)
Total Credits	12-15

Second Year	Fall
Advanced Nursing 1 NUR 206A	5
Advanced Nursing 1 Lab NUR 206B	5
Nutrition FN 225	4
Small Group Communication: Process and Theory Sp 215[2] *or*	3
Interpersonal Communication Sp 214[2] *or*	(3)
Fundamentals of Speech: Communication Sp 111[2]	(3)
Supervised Field Experience 1.300*	(3)
Total Credits	17-20
	Winter
Advanced Nursing 2 NUR 207A	4
Advanced Nursing 2 Lab NUR 207B	5
Social Science Elective**[4]	3
Supervised Field Experience 1.300*	(3)
Elective	3
Total Credits	15-18
	Spring
Advanced Nursing 3 NUR 209A	4
Advanced Nursing 3 Lab NUR 209B	6
Social Science Elective[4]	3
Basic Mathematics Review Mth 20[3] *or*	3
Math Renewal Mth 20[3] *or*	(3)
Business Mathematics BA 103/2.206[5] *or* higher level math	(3)
Nursing Trends and Issues NUR 204C	(1)
Supervised Field Experience 1.300	(3)
Total Credits	16-20

* Optional

** Select from the following: Psychology, Sociology, Anthropology, Consumer Education, or other approved Social Science courses.

1 Refer to Science Department Course Descriptions.

2 Refer to English and Foreign Language Department Course Descriptions.

3 Refer to Mathematics Department Course Descriptions.

4 Refer to Social Science Department Course Descriptions.

5 Refer to Business Department Course Descriptions.

• Refer to Health Occupations Course Descriptions for other courses in this curriculum.

Practical Nursing

One-Year Certificate of Completion Program

Offered by LCC's Health Occupations Department

A certificate of completion of the Practical Nursing curriculum is available to students who choose to write the National Council Licensure Examination (NCLEX-PN) and practice as a licensed practical nurse. The curriculum is the same as the first year of the Associate Degree Nursing program.

This is a difficult program both academically and in terms of the amount of time involved on campus and at related community facilities. Taking the non-nursing courses before acceptance into the program relieves the pressures considerably. Students, generally, should count on being in school from 8 a.m. to 4 p.m. daily. Clinic hours (time in hospitals, nursing homes or the college lab) range from 15 hours per week the first term to 18 hours per week the last term. All students must be prepared for evening shifts for training purposes.

Admission See nursing admissions information on the previous page.

Fees and Expenses

Tuition (resident of Oregon) . . . . . $231 per term

Miscellaneous Fees (approximate)

Lab fees*	$ 155
NLN achievement exams	12
Uniforms	50
Books	350
Shoes (white)	40
Watch (second hand)	30
Bandage scissors	7

Personal Health Insurance — recommended

Fees subject to change without notice.

Students assume responsibility for their own uniforms, books, room and board, and transportation to and from clinical facilities.

All students enrolled in the Practical Nursing program are required to have tuberculin tests current through August 1990 and a CPR card current through August 1990.

Transfer Procedures Students who desire to transfer into the Practical Nursing program from another school of nursing must apply to the program two quarters prior to the quarter in which the student desires enrollment. The previous nursing curriculum of each student is evaluated on an individual basis in order to determine program placement. Students may be asked to take teacher-constructed tests, including demonstration of specified skills in the college nursing laboratory. Once placement has been decided, admission is determined on a space available basis.

Employment Trends Job prospects in both Eugene and Portland are fair. Prospects are variable nationwide since some hospitals are no longer hiring LPNs.

Curriculum

Curriculum for Practical Nursing

First Year	**Summer**
Introduction to Nursing NUR 100	2
Elementary Human Anatomy & Physiology 1 Bi 121[1]	4
Dosage Computation Math 5.506[2]	1
English Composition Wr 121[3]	3
Total Credits	10
	Fall
Nursing Fundamentals NUR 106A	5
Nursing Fundamentals Lab NUR 106B	5
Elementary Human Anatomy & Physiology 2 Bi 122[1]	4
Child Development HDFS 226[4] *or*	3
Human Development 1 Psy 235[5]	(3)
Total Credits	17
	Winter
Basic Nursing 1 NUR 107A	5
Basic Nursing 1 Lab NUR 107B	5
Elementary Microbiology Bi 123[1]	4
Social Science Elective[5]	3
Total Credits	17
	Spring
Basic Nursing 2 NUR 109A	5
Basic Nursing 2 Lab NUR 109B	6
Nursing Trends and Issues NUR 204C	1
Supervised Field Experience 1.300*	(3)
Total Credits	12-15

* Optional

[1] Refer to Science Department Course Descriptions.

[2] Refer to Mathematics Department Course Descriptions.

[3] Refer to English and Foreign Language Department Course Descriptions.

[4] Refer to Home Economics Department Course Descriptions.

[5] Refer to Social Science Department Course Descriptions.

• Refer to Health Occupations Course Descriptions for other courses in this curriculum.

Office Administration

One-Year Certificate Program
Options: Clerical Assistant
Accounting Clerk

Two-Year Associate of Applied Science Degree Program
Options: Associate Accountant
Legal Secretary
Professional Secretary

The Office Administration certificate and degree programs consist of a core curriculum of classes for each program and a series of options allowing students to specialize in specific areas. One-year Office Administration certificates are available in the following specialty areas: Clerical Assistant, and Accounting Clerk. Two-Year associate of applied science Office Administration degree programs are available in the following areas: Associate Accountant, Legal Secretary, and Professional Secretary.

Office Administration Certificate Core

The core curriculum common to all Office Administration Certificate programs is as follows:

Business Communications BA 214	3 credits
Business English 1 1.120	3 credits
Business English 2 1.122	3 credits
Business Machines: Calculators OA 220/2.522	3 credits
Business Mathematics BA 103/2.206	3 credits
Formatting 1 OA 121/2.101	3 credits
Formatting 2 OA 122/2.102	3 credits
Keyboard Skillbuilding OA 124/2.109	3 credits
Introduction to Office Technology 2.116	3 credits
Microcomputer: Business Applications BA 110	3 credits
Office Procedures 2 2.515	3 credits
Professional Development OA 101	3 credits
Records Management OA 240/2.508	3 credits
Total Core	39 credits

Office Administration Degree Core

The core curriculum common to the first year of all Office Administration degree programs is basically the same as the Office Administration certificate core listed above. Core courses for the degree programs are listed below.

Accounting 1 2.110	3 credits
Accounting 2 2.111	3 credits
Applied Economics BA 156/1.506	3 credits
Business Communications BA 214	3 credits
Business English 1 1.120	3 credits
Business English 2 1.122	3 credits
Business Law BA 226	3 credits
Business Machines: Calculators OA 220/2.522	3 credits
Business Mathematics BA 103/2.206	3 credits
Formatting 1 OA 121/2.101	3 credits
Formatting 2 OA 122/2.102	3 credits
Fundamentals of Speech: Communication Sp 111	3 credits
Keyboard Skillbuilding OA 124/2.109	3 credits
Math/Science Elective	3 credits
Microcomputer: Business Applications BA 110	3 credits
Introduction to Office Technology 2.116	3 credits
Physical Education PE 170/180/190	3 credits
Professional Development OA 101	3 credits
Records Management OA 240/2.508	3 credits
Supervised Field Experience FE 207/1.300	3 credits
Total Core	60 credits

Accounting Clerk Option

One-Year Certificate of Completion Program

Offered by LCC's Business Department

Associate Accountant Option

Two-Year Associate of Applied Science Degree Program

Offered by LCC's Business Department

Nature of Work The accounting/clerical curriculum prepares students to enter the field of accounting as bookkeepers, accounting clerks, payroll clerks, and accounting associates. Tasks performed could include calculating, recording day-to-day entries in journals and posting to ledgers, invoicing, making account statements, preparing payrolls, and dealing with financial statements.

Employment Trends Job prospects in the Eugene, Springfield, and Lane County areas, as well as the remainder of the state, are good. Promotion and advancement in the accounting field depend upon additional education and experience.

Potential Earnings Salaries continue to rise regularly with salaries ranging from $750 to $1,200 per month.

Program This curriculum prepares the student to record day-to-day financial business transactions and to prepare summary statements of business conditions. Students will understand and be able to accomplish the full-cycle accounting requirements of a small business. The forecasted supply of newly trained accountants will be less than the demand. A certificate of completion may be obtained by completing the first year of the program, or an associate of applied science degree can be obtained after two years by completing the three terms required for the Accounting Clerk option, as well as the additional three terms identified as Associate Accountant.

Curriculum

Accounting Clerk Option

First Year	**Fall**
Keyboard Skillbuilding OA 124/2.109	3
Microcomputer: Business Applications BA 110***	1
Accounting 1 2.110	3
Business English 1 1.120	3
Records Management OA 240/2.508	3
Professional Development OA 101	3
Total Credits	16
	Winter
Formatting 1 OA 121/2.101**	3
Accounting 2 2.111	3
Microcomputer: Business Applications BA 110***	1
Business English 2 1.122	3
Business Mathematics BA 103/2.206	3
Introduction to Office Technology 2.116	3
Total Credits	16

	Spring
Business Machines: Calculators OA 220/2.522	3
Formatting 2 OA 122/2.102	3
Business Communications BA 214	3
Microcomputer: Business Applications BA 110***	1
Accounting 3 2.112	3
Office Procedures 2 2.515	3
Total Credits	16

Associate Accountant

Second Year	**Fall**
Microcomputer: Accounting Applications BA 209	3
Fundamentals of Speech: Communication Sp 111[1]	3
Applied Economics BA 156/1.506	3
Office Management BA 251	3
Payroll Records and Accounting BA 177	3
Physical Education PE 170/180/190[2]	1
Total Credits	16
	Winter
Business Law BA 226	3
Math/Science Elective*[3]	3
Personal Finance BA 218	3
Tax Accounting BA 220	3
Physical Education PE 170/180/190[2]	1
Elective	3
Total Credits	16
	Spring
Small Business Management BA 250	3
Basic Cost Accounting BA 215	3
Supervised Field Experience FE 207/1.300	3
Electives	6
Physical Education PE 170/180/190[2]	1
Total Credits	16

[1] Refer to English and Foreign Language Department Course Descriptions.
[2] Refer to Health & PE Department Course Descriptions.
[3] Refer to Mathematics or Science Department Course Descriptions.
• Refer to Business Department Course Descriptions for other courses in this curriculum.
* College Transfer Course Required
** Students without knowledge of the typewriter keyboard must take Keyboarding OA 120/2.501 before starting Keyboard Skillbuilding OA 124/2.109 or Formatting 1 OA 121/2.101.
*** Offered as one credit courses. To meet the program requirements for Microcomputer: Business Applications, students must complete at least one credit of both a spreadsheet and a database software package. Students without previous experience on the microcomputer should take MBA: Introduction to Microcomputer before registering for spreadsheet, database, or other specialty software.

Suggested Electives
Selling BA 238
Advertising BA 239
Personnel Administration BA 224
Financial Institutions BA 240
Investments BA 242
Business Environment BA 125
Human Relations 2 1.609
Management Fundamentals BA 206
Keyboarding OA 120/2.501

Clerical Assistant Option

One-Year Certificate of Completion Program

Offered by LCC's Business Department

Nature of Work Clerical Assistants are employed in offices where records are kept, correspondence is handled, and routine tasks are performed. Office duties may include typing, automated word processing, filing, receptionist duties, sorting mail, and other general office tasks.

Employment Trends Job prospects in our community are good.

Potential Earnings Starting salary ranges from approximately $600 to $800 per month. Promotions may occur to positions of greater responsibility and/or income by acquiring experience and additional training.

Program The Clerical Assistant option is designed to prepare the student for employment of a general nature in manual or automated offices. The courses provided may also serve to prepare the student for civil service examinations in various clerical fields. A certificate of completion is obtained by completing the Clerical Assistant option.

Curriculum

Clerical Assistant

	Fall
Formatting 1 OA 121/2.101*	3
Business English 1 1.120	3
Professional Development OA 101	3
Keyboard Skillbuilding OA 124/2.109*	3
Records Management OA 240/2.508	3
Total Credits	15
	Winter
Business English 2 1.122	3
Business Math BA 103/2.206	3
Introduction to Office Technology 2.116	3
Formatting 2 OA 122/2.102	3
Microcomputer: Business Applications BA 110**	3
Total Credits	15
	Spring
Office Procedures 2 2.515	3
Business Machines: Calculators OA 220/2.522	3
Machine Transcription OA 225/2.532	3
Word Processing Applications 2.545	3
Business Communications BA 214	3
Elective	3
Total Credits	16

• Refer to Business Department Course Descriptions for courses in this curriculum.
* Students without knowledge of the typewriter keyboard must take Keyboarding OA 120/2.501 before starting Keyboard Skillbuilding or Formatting 1.
** Offered as one credit courses. To meet the program requirements for Microcomputer: Business Applications, students must complete at least one credit of both a spreadsheet and a database software package. Students without previous experience on the microcomputer should take MBA: Introduction to Microcomputer before registering for spreadsheet, database, or other specialty software.

Suggested Electives
SFE: Office Administration FE 207/1.300
Keyboarding OA 120/2.501
Microcomputer: Business Applications BA 110
Accounting 1 2.110
Accounting 2 2.111
Concepts of Computing CS 121
Human Relations 1 1.608

Legal Secretary Option

Two-Year Associate of Applied Science Degree Program

Offered by LCC's Business Department

Nature of Work Legal secretaries perform a variety of clerical tasks and assume minor executive responsibilities in order to keep the legal office functioning smoothly. In addition to performing secretarial duties, legal secretaries must have a basic knowledge of the preparation and practical application of documents related to the various aspects of the law office.

Employment Trends Job prospects in Lane County are good. The Oregon State Employment Service projects a 7.5 percent increase in the number of legal secretaries. This does not include the normal replacement rate.

Potential Earnings Starting salaries for graduates is around $700 to $900 per month.

Program The two-year Office Administration—Legal Secretary option is designed to prepare specialized office employees for the legal profession. Students will prepare for employment through a core of required classes from the Office Administration curriculum as well as specialized legal secretarial classes and additional business administration courses. A student completing the requirements for this option will receive an Associate of Applied Science degree in Office Administration—Legal Secretary option.

Curriculum

Legal Secretary Option

First Year	**Fall**
Business English 1 1.120	3
Records Management OA 240/2.508	3
Keyboard Skillbuilding OA 124/2.109**	3
Formatting 1 OA 121/2.101**	3
Professional Development OA 101	3
Total Credits	15
	Winter
Business English 2 1.122	3
Business Math BA 103/2.206	3
Formatting 2 OA 122/2.102	3
Accounting 1 2.110	3
Microcomputer: Business Applications BA 110	3
Total Credits	15
	Spring
Business Communications BA 214	3
Machine Transcription OA 225/2.532	3
Business Machines: Calculators OA 220/2.552	3
Introduction to Office Technology 2.116	3
Accounting 2 2.111	3
Total Credits	15
Second Year	**Fall**
Applied Economics BA 156/1.506	3
Fundamentals of Speech: Communication Sp 111[1]	3
Physical Education PE 170/180/190[2]	1
Social Science Elective*[3]	3
Electives	6
Total Credits	16
	Winter
Speedwriting 1/Briefhand OA 114/2.108**	3
Legal Secretarial Procedures 1 OA 131***	4
Business Law BA 226	3
Legal Secretary Leadership Practicum BA 106	1
Physical Education PE 170/180/190[2]	1
Math/Science Elective[4]	3
Elective	2
Total Credits	17
	Spring
Legal Secretarial Procedures 2 OA 132***	4
Legal Secretarial Procedures 3 OA 133/2.133***	3
Legal Secretary Leadership Practicum BA 106	1
Law of Business Transactions BA 227	3
Physical Education PE 170/180/190[2]	1
Supervised Field Experience Legal Secretary FE 207/1.300	3
Total Credits	15

[1] Refer to English and Foreign Language Department Course Descriptions.
[2] Refer to Health and PE Department Course Descriptions.
[3] Refer to Social Science Department Course Descriptions.
[4] Refer to Mathematics or Science Department Course Descriptions.
• Refer to Business Department Course Descriptions for other courses in this curriculum.
* College Transfer Course Required
** Students without knowledge of the typewriter keyboard must take Keyboarding OA 120 before starting Keyboard Skillbuilding or Formatting 1.
*** The legal procedures courses have been approved by the National Association of Legal Secretaries (NALS) and the certificate of completion-basic course will be issued upon successful completion of both courses.

Electives for Specialization
Office Management BA 251
Payroll Records and Accounting BA 177
Shorthand Skill Building OA 214/2.115
Gregg Shorthand 1 OA 111/2.105
Gregg Shorthand 2 OA 112/2.106
Gregg Shorthand 3 OA 113/2.107
Business and Professional Speech Communication Sp 230
Keyboarding OA 120/2.501

Professional Secretary Option

Two-Year Associate of Applied Science Degree Program

Offered by LCC's Business Department

Nature of Work Students completing the two-year program are prepared for duties including electronic keyboarding, revision, and document production; equipment selection and maintenance; comparison of office technologies; determination of the most economical and efficient procedures for office production; and application of entry-level office management theories.

Employment Trends The amount of computerized equipment rises constantly, opening employment opportunities for many entry-level careers. The projected sales of equipment, supplies, and technologies guarantee a dependable, profitable future in the field of office systems.

Potential Earnings Entry-level salaries in Eugene range from $750 to $1,000; $850 to $1,250 with previous office experience.

Program The Professional Secretary option curriculum leads to a two-year associate of applied science degree. Students completing the two-year curriculum will have a broad knowledge in electronic word and information processing as well as in traditional clerical procedures and applications. Most of the courses offered in this option curriculum are offered every term, and students may begin the program option any term.

The two-year curriculum provides students with the knowledge and background to enter into a diverse group of employment opportunities. Students will have the ability to be employed in high-employment growth careers such as word processing specialists, video display operators, secretaries, administrative assistants, and various types of clerical positions. Exposure in the program will provide students with the upward mobility to move into positions such as automated equipment sales, customer service representative, information processing center management, office management, etc.

The Professional Secretary option provides the necessary course work for students to prepare for the Certified Professional Secretary Examination.

Certified Professional Secretary Examination Candidates
The following classes as electives or additional classes:
Law of Business Transactions
Finance
The following non-credit exam preparation classes:
Business Economics and Current Management Trends
Intensive Preparation for CPS Exam
Substitute Principles of Acct BA 211 and 212 for Acct 1 and 2

Curriculum

Professional Secretary Option

First Year	Fall
Business English 1 1.120	3
Records Management OA 240/2.508	3
Keyboard Skillbuilding OA 124/2.109*	3
Formatting 1 OA 121/2101*	3
Professional Development OA 101	3
Total Credits	15
	Winter
Business English 2 1.122	3
Business Math BA 103/2.206	3
Introduction to Office Technology 2.116	3
Formatting 2 OA 122/2.102	3
Microcomputer: Business Applications BA 110**	3
Total Credits	15
	Spring
Office Procedures 2 2.515	3
Business Communications BA 214	3
Business Machines: Calculators OA 220/2.522	3
Speedwriting 1/Briefhand OA 114/2.108**	3
Machine Transcription OA 225/2.532	3
Word Processing Applications 2.545	1
Total Credits	16

Second Year	Fall
Accounting 1 2.110	3
Applied Economics BA 156/1.506	3
Word Processing Applications 2.545	2
Office Management BA 251	3
Physical Education PE 170/180/190[2]	1
Elective	3
Total Credits	15
	Winter
Accounting 2 2.111	3
Fundamentals of Speech: Communication Sp 111[1]	3
Physical Education PE 170/180/190[2]	1
Social Science Elective***[3]	3
Electives	6
Total Credits	16
	Spring
Business Law BA 226	3
Supervised Field Experience FE 207/1.300	3
Math/Science Elective*[4]	3
Payroll Records and Accounting BA 177	3
Physical Education PE 170/180/190[2]	1
Elective	3
Total Credits	16

[1] Refer to English and Foreign Language Department Course Descriptions.
[2] Refer to Health and PE Department Course Descriptions.
[3] Refer to Social Science Department Course Descriptions.
[4] Refer to Science or Mathematics Department Course Descriptions.
• Refer to Business Department Course Descriptions for other courses in this curriculum.
* Students without knowledge of the typewriter keyboard must take Keyboarding OA 120 before starting Keyboard Skillbuilding or Formatting 1.
** Offered as one credit courses. To meet the program requirements for Microcomputer: Business Applications, students must complete at least one credit of both a spreadsheet and a database software package. Students without previous experience on the microcomputer should take MBA: Introduction to Microcomputer before registering for spreadsheet, database, or other specialty software.
*** College Transfer Course Required

Physical Education

▶ Two-Year Suggested Course of Study

Offered by LCC's Health and Physical Education Department

This suggested course of study is designed primarily for the student who plans on transferring to a four-year institution with a major in physical education.

Physical education majors must contact the department for assignment to an advisor. The advisor will assist the student in planning a schedule to meet the requirement of the institution to which the student plans to transfer.

Professional Activity courses are designed for physical education majors as well as for students who wish vocational training for coaching-related jobs at schools and community agencies. Courses numbered PE 194 and PE 294 are Professional Activity courses, and enrollment is by consent of an advisor.

Related fields may include, but are not limited to, the following: Physical education in grades K-12, college; community recreation leader; coach in school and recreational programs; sports administration; athletic training; correctives and specialized physical education; health clubs as fitness instructor or director; administrator; sports management; and corporate fitness.

Curriculum

First Year	**Fall**
General Biology[1]	4
Pro Act Fundamentals of Movement & Games PE 194	2
PE Activity	1
English Composition Wr 121	3
Intro to PE*	3
Total Credits	13
	Winter
General Biology[1]	4
Pro Act Badminton PE 194	2
PE Activity	1
English Composition Wr 122	3
Social Science (Elect.)[3]	3
First Aid HE 252	3
Total Credits	16
	Spring
General Biology[1]	4
Pro Act Strength Training & Conditioning PE 194	2
PE Activity	1
English Composition Wr 123*[4]	3
Social Science (Elect.)[3]	3
Nutrition*	4
Total Credits	17

Second Year	**Fall**
Science/Social Science (Elect.)[2]	3-4
Pro Act Volleyball PE 294	2
Humanities (Elect.)	4
Health*	3
PE Activity	1
Elective	3
Total Credits	16-17
	Winter
Science/Social Science (Elect.)[2]	3-4
Pro Act Basketball PE 294	2
Humanities (Elect.)	3
Speech*	3
PE Activity	1
Elective	3
Total Credits	15-16
	Spring
Science/Social Science (Elect.)[2]	3-4
Pro Act Track and Field PE 294	2
Humanities (Elect.)	3
Elective	3
PE Activity	1
Elective	3
Total Credits	15-16

* Recommended courses which may or may not be required depending on the institution to which the student intends to transfer.

[1] U of O requires a specific Biology Sequence – (Life, Cells, & Animal).

[2] U of O students need to complete 36 hours in Science or Social Science to graduate.

[3] OSU requires General Psychology 201, 202, and Speech 111.

[4] English Composition 123 (Strongly recommended to teach the student research methods).

[5] Field Experience credits for paid or non-paid work in areas relating to Health, Physical Education, and Recreation are optimal. SFE credits are accepted by four-year colleges as electives.

▶ This is a suggested course of study for students interested in physical 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 LCC Board of Education. However, courses in this physical education curriculum may be applied toward an associate of arts degree and/or college transfer.

Pre-Engineering

▶ **Two-Year Suggested Course of Study**
▶ **One-Year Suggested Course of Study**

Offered by LCC's Science Department

The curriculum outlined below is recommended for students interested in pursuing a baccalaureate degree in engineering (OSU). These courses meet the requirements for an associate of science degree.

Students able to begin calculus may complete the requirements for an associate of science degree in two years. Students needing math preparation for calculus may want to spend a year in preparatory work before entering the program.

Academic advising is available to help students plan transfers to professional engineering schools such as OSU.

Two-Year Curriculum

First Year	**Fall**
Calculus with Analytic Geometry Mth 200[1]	4
General Chemistry Ch 104	5
Fundamentals of Speech: Communication Sp 111[2]	3
Social Science Elective[3]	3
Physical Education PE 170/180/190[4]	1
Engineering Orientation GE 101	3
Total Credits	19

	Winter
Calculus with Analytic Geometry Mth 201[1]	4
General Chemistry Ch 105	5
General Physics w/Calculus PH 211	4
Engineering Graphics GE 115	(3)
English Composition Wr 121[2]	3
Physical Education PE 170/180/190[4]	1
Total Credits	20

	Spring
Calculus with Analytic Geometry Mth 202[1]	4
General Chemistry Ch 106	5
General Physics w/Calculus PH 212	4
Engineering Graphics GE 115	3
Composition: Style Wr 122[2]	3
Physical Education PE 170/180/190[4]	1
Total Credits	20

Second Year	**Fall**
Calculus with Analytic Geometry Mth 203[1]	4
Statics Engr 211	4
General Physics w/Calculus PH 213	4
Composition: Research Wr 123[2]	3
Physical Education PE 170/180/190[4]	1
Total Credits	16

	Winter
Strength of Materials Engr 213	4
Applied Differential Equations Mth 221	4
Physical Education PE 170/180/190[4]	1
Social Science Elective[3]	3
Art, Music, or Literature Elective	3
Introduction to Numerical Computation CS 133[5]	4
Total Credits	19

	Spring
Dynamics Engr 212	4
Engineering Graphics GE 116	3
Electrical Fundamentals Engr 221	3
Social Science Elective[3]	3
Health Elective[4]	3
Beginning Programming (Pascal) CS 133	4
Total Credits	20

One-Year Curriculum

The following curriculum may be used as a guide by the student not prepared to begin calculus. This one year of study would enable the student to begin the formal first-year pre-engineering.

	Fall
College Algebra Mth 101[1]	4
Social Science Elective[3]	3
Physical Education PE 170/180/190[4]	1
Fundamentals of Speech: Communication Sp 111[2]	3
Total Credits	11

	Winter
Trigonometry Mth 102[1]	4
General Chemistry 1 Ch 104	5
English Composition Wr 121[5]	3
Physical Education PE 170/180/190[4]	1
Total Credits	13

	Spring
Elementary Calculus 1 Mth 106[1]	4
Social Science Elective[3]	3
General Chemistry 2 Ch 105	5
Engineering Graphics GE 115	3
Composition: Style Wr 122[5]	3
Physical Education PE 170/180/190[4]	1
Total Credits	19

[1] Refer to Mathematics Department Course Descriptions.
[2] Refer to English and Foreign Language Department Course Descriptions.
[3] Refer to Social Science Department Course Descriptions.
[4] Refer to Health and PE Department Course Descriptions.
[5] Refer to Data Processing Department Course Descriptions.

Note: All science courses in this curriculum are in the Science Department Course Descriptions.

▶ **These suggested courses of study are for students interested in pre-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 LCC Board of Education. However, courses in these pre-engineering curricula may be applied toward an associate of science degree and/or college transfer.**

Real Estate

Two-Year Associate of Applied Science Degree Program
One-Year Certificate of Completion Program

Offered by LCC's Business Department

Nature of Work Real estate, as an occupation or vocation, includes such distinct areas as appraisal, brokerage, construction, development, escrow, finance, investment, property management, taxation, and title insurance.

Employment Trends The majority of those employed within the real estate industry are involved with the purchase, sale, lease, or exchange of residential property (residential brokerage).

Potential Earnings Most persons employed in the field of residential brokerage are paid on a commission basis. The total commission, which ranges from 6 to 10 percent of the eventual sales price, is normally divided equally between the employee and the employer.

Program The Real Estate program at Lane Community College is designed to provide professional education, pre-licensing education, and continuing education.

Professional Education Professional education is intended to prepare an individual for successful entry into the real estate industry.

Real Estate Certificate of Completion The Real Estate Certificate of Completion program prepares an individual for initial entry into the real estate industry.

Associate of Applied Science Degree The Associate of Applied Science Degree (Real Estate) program prepares an individual for transfer into a bachelor of science degree program at a four-year institution.

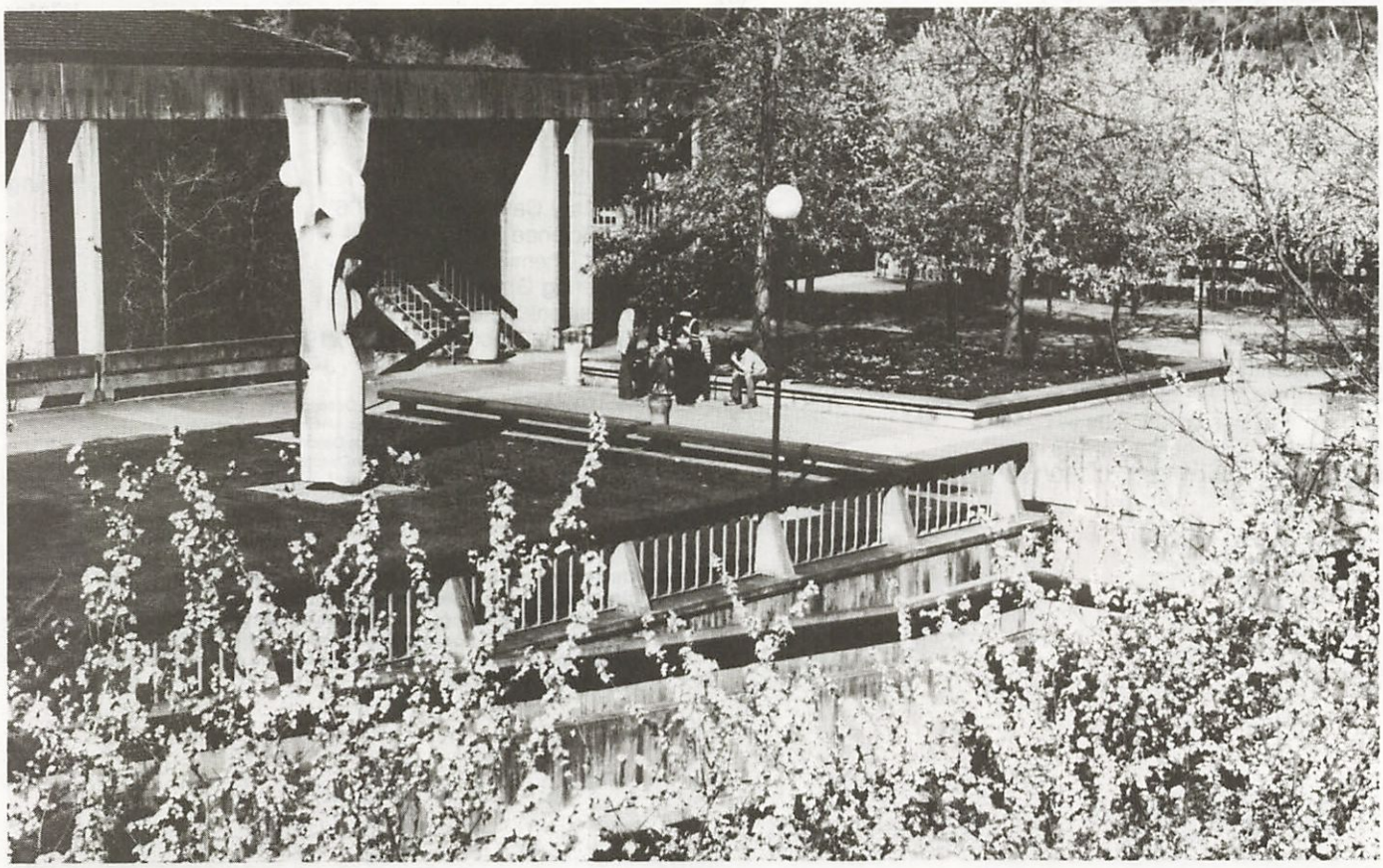
Pre-Licensing Education Pre-licensing education is intended to satisfy the prerequisite education requirements for a real estate license in the state of Oregon.

Salesperson's License Three of the courses (Real Estate Law 1, Real Estate Finance 1, and Real Estate Practice 1) have been approved by the Real Estate Division as satisfying the prerequisite education requirements for the real estate salesperson's license.

Broker's License Two of the courses, (Real Estate Appraisal 1, and Real Estate Office Management and Supervision of Sales Personnel) have been approved by the Real Estate Division as satisfying the prerequisite education requirement for the real estate broker's license.

Continuing Education Continuing education is intended to provide an individual with the opportunity to improve his or her understanding of real estate.

License Renewal Most of the courses in the Real Estate program have been approved by the Real Estate Division, State of Oregon, for 30 clock hours of credit toward the continuing education required for real estate license renewal.



Curriculum

Real Estate Certificate of Completion Program

Fall	
Introduction to Real Estate BA 285	3
Real Estate Law 1 BA 287	3
Elective (Real Estate)	3
Total Credits	9
Winter	
Real Estate Finance 1 BA 288	3
Elective (Real Estate)	3
Total Credits	6
Spring	
Real Estate Appraisal BA 290	3
Real Estate Practice 1 BA 289	3
Electives (Real Estate)	3
Total Credits	9

Curriculum

Two-Year Associate of Applied Science Degree Program

First Year	**Fall**
Real Estate Law 1 BA 287	3
Principles of Accounting BA 211	3
Intermediate Algebra Mth 100[1]	4
English Composition Wr 121[2]	3
Physical Education PE 170/180/190[3]	1
Total Credits	14
Winter	
Real Estate Finance 1 BA 288	3
Business Environment BA 125	3
Principles of Accounting BA 212	3
College Algebra Mth 101[1]	4
Fundamentals of Speech: Communication Sp 111[2]	3
Physical Education PE 170/180/190[3]	1
Total Credits	17
Spring	
Real Estate Appraisal BA 290	3
Real Estate Practice 1 BA 289	3
Principles of Accounting BA 213	3
Introduction to Business Statistics BA 232	3
Business Communications BA 214	3
Physical Education PE 170/180/190[3]	1
Total Credits	16
Second Year	**Fall**
Principles of Economics Ec 201[4]	3
Marketing BA 223	3
Real Estate Investments BA 297	3
Elective (Social Science)*[4]	3
Elective (Real Estate)	3
Elective	1
Total Credits	16
Winter	
Principles of Economics Ec 202[4]	3
Finance BA 222	3
Microcomputer: Accounting Applications BA 209	3
Elective (Social Science)*[4]	3
Real Estate Office Management and Supervision of Sales Personnel BA 265	3
Total Credits	15
Spring	
Principles of Economics Ec 203[4]	3
Business Law BA 226	3
Personal Health HE 250[3]	3
Elective (Social Science)*[4]	3
Elective (Real Estate)	3
Total Credits	15

[1] Refer to Mathematics Department Course Descriptions.
[2] Refer to English and Foreign Language Department Course Descriptions.
[3] Refer to Health and PE Department Course Descriptions.
[4] Refer to Social Science Department Course Descriptions.
• Refer to Business Department Course Descriptions for other courses in this curriculum.
* College Transfer Course Required

Electives (Real Estate)
Real Estate Exchange & Taxation BA 298
Real Estate Escrow 1 BA 260
Cooperative Work Experience FE 207

Respiratory Care

Two-Year Associate of Applied Science Degree Program

Offered by LCC's Health Occupations Department

Respiratory care is an allied health specialty concerned with the treatment, management, control, and care of patients with deficiencies and abnormalities associated with respiration. It involves the therapeutic use of medical gases, air and oxygen administering apparatus, environmental control systems, humidification and aerosols, drugs and medications, ventilatory control, postural drainage, chest physiotherapy and breathing exercises, cardiopulmonary resuscitation, measures and maintenance of natural, artificial, and mechanical airways.

Application Information Enrollment in this program is for a limited number of students each year. Special application packets with information pertaining to the admission process are available from the Office of Admissions beginning the first week in December. All necessary admission papers are *due by the application deadline date in the admissions packet.*

An applicant must be a high school graduate or have a GED certificate, and also have completed a year of algebra, chemistry, or physics at the high school level or one course of at least three credits at the college level.

The admissions process includes a screening examination, the Degrees of Reading Power Test, and submission of transcripts from all high school and college work. Evidence of a physical examination (within the previous nine months) must be submitted prior to admittance to the program.

Hospital affiliation is Sacred Heart General Hospital, Eugene, Oregon; McKenzie-Willamette Hospital, Springfield, Oregon; Mercy Medical Center, Roseburg, Oregon; Good Samaritan Hospital, Corvallis, Oregon.

Employment Trends Job prospects in Eugene/Lane County are good; in Oregon and nationwide they are good. Beginning pay is usually from $1,500 to $1,600/mo for a full-time position.

Curriculum

First Year	**Fall**
Fundamentals of Respiratory Care RT 114	2
Fundamentals of Respiratory Care Lab RT 111	1
Elementary Chemistry 1 CH 101[1]	4
Elementary Human Anatomy and Physiology 1 Bi 121[1]	4
Medical Terminology 1 5.483	2
Advanced Placement Clinical Practice RT 148	(1-8)
Supervised Field Experience FE 207/1.300	(1-3)
Total Credits	13
	Winter
Cardiopulmonary Physiology RT 123	3
Respiratory Care Nursing RT 133	1
Respiratory Care Nursing Lab RT 131	1
Elementary Chemistry 2 CH 102[1]	4
Elementary Human Anatomy and Physiology 2 Bi 122[1]	4
First Aid HE 252[2] *or*	3
Health Elective HE 199[2] *or*	(3)
Physical Education PE 170/180/190[2]*	(3)
Advanced Placement Clinical Practice RT 148	(1-8)
Supervised Field Experience FE 207/1.300	(1-3)
Total Credits	16
	Spring
Principles of Respiratory Care RT 144	4
Principles of Respiratory Care Lab RT 141	1
Pulmonary Pathology RT 223	3
Elementary Microbiology Bi 123[1]	4
General Psychology Psy 201[3]	3
Introduction to Clinical Respiratory Care RT 146	2
Advanced Placement Clinical Practice RT 148	(1-8)
Supervised Field Experience FE 207/1.300	(1-3)
Total Credits	17
	Summer
Clinical Practice 1 RT 236	8
Total Credits	8
Second Year	**Fall**
Pharmacology RT 233	3
Principles of Mechanical Ventilation RT 244	4
Principles of Mechanical Ventilation Lab RT 241	1
Clinical Practice 2 RT 248	6
English Composition Wr 121[4]	3
Advanced Placement Clinical Practice RT 148	(1-8)
Supervised Field Experience FE 207/1.300 (Elective)	(1-3)
Total Credits	17
	Winter
Pulmonary Diagnostics and Monitoring RT 254	2
Pulmonary Diagnostics and Monitoring Lab RT 251	1
Neonatal/Pediatric Respiratory Care RT 262	2
Clinical Practice 3 RT 258	6
Composition: Style Wr 122[4] *or*	3
Composition: Research Wr 123[4]	(3)
Advanced Placement Clinical Practice RT 148	(1-8)
Supervised Field Experience FE 207/1.300 (Elective)	(1-3)
Total Credits	14
	Spring
Rehabilitation and Organizational Development RT 264	2
Respiratory Care Trends and Issues RT 271	1
Clinical Practice 4 RT 268	6
Elective	3
Advanced Placement Clinical Practice RT 148	(1-8)
Supervised Field Experience FE 207/1.300 (Elective)	(1-3)
Total Credits	12

* If a student chooses the PE elective, one PE course must be completed each term for three terms.

[1] Refer to Science Department Course Descriptions.

[2] Refer to Health and PE Department Course Descriptions.

[3] Refer to Social Science Department Course Descriptions.

[4] Refer to English and Foreign Language Department Course Descriptions.

• Refer to Health Occupations Course Descriptions for other courses in this curriculum.

Sales and Marketing

One-Year Certificate of Completion Program

Offered by LCC's Business Department

Nature of Work Sales and Marketing provides a general and semi-professional background for individuals planning to enter business sales positions in retail, service, or specialty selling.

Employment Trends Job prospects in local and state areas are excellent with good opportunities for upward mobility.

Potential Earnings Salary varies with skill and employment setting. Payment may be based on various combinations of salary, commission, and bonus. Beginning salaries are $1,500 plus per month. There is a predicted shortage in the local area for business sales positions. The starting salary is not high.

Program This curriculum provides a general and semi-professional background for individuals to enter business sales positions. The program is adaptable to the needs of individuals who want a fundamental knowledge of the techniques of merchandising. Such knowledge may be applied to a number of merchandising pursuits in retail, service, or specialty selling.

Curriculum

Fall	
Business English 1 1.120	3
Accounting 1 2.110	3
Business Mathematics BA 103/2.206	3
Keyboarding OA 120/2.501*	3
Retailing BA 249	3
Total Credits	15
Winter	
Business English 2 1.122	3
Accounting 2 2.111	3
Electives	6
Advertising BA 239	3
Total Credits	15
Spring	
Business Communications BA 214	3
Elective	3
Fundamentals of Speech: Communication Sp 111[1]	3
Selling BA 238	3
Marketing BA 223	3
Total Credits	15

[1] Refer to English and Foreign Language Department Course Descriptions.
* Refer to Business Department Course Descriptions for other courses in this curriculum.
* Students that have a touch typing speed of 25 words per minute or more should challenge Keyboarding OA 120/2.501.

Technical Drafting

Two-Year Associate of Applied Science Degree Program
Mechanical Emphasis
Architectural Emphasis

Offered by LCC's Electronics Department

The Technical Drafting program offers both an Architectural and Mechanical Design curriculum. Each emphasis has a strong component in Computer-Aided Drafting (CAD), with coursework available in structural and electronic drafting. The department has 25 CAD stations for student use. AUTOCAD is the primary CAD program used, with several other CAD programs available.

Technical drafters work in a variety of settings converting design concepts to working drawings and updating existing drawings as changes are made to the design and planning of residential housing and mechanical engineering drawings. Students who complete the Associate of Applied Science degree program will also have design skills which will permit them to be employed as drafters/designers in the building and manufacturing fields.

Employment Trends, Salary, and Student Costs The local and statewide employment outlook for mechanical drafters is good. For architectural drafters, local employment is poor while statewide employment is good. Entry-level pay for drafters is $1,400 to $1,800 per month.

Required drafting equipment and supplies cost approximately $150 for the two-year period.

Curriculum

First Year	**Fall**
Introduction to Drafting: Basic Skills 4.152	2
Introduction to Drafting: Orthographic Projections 4.153	2
Introduction to Drafting: Pictorials and Axonometric Projections 4.154	2
Introduction to Fabrication Practices 4.136	2
Concepts of Computing CS 121[1]*** *and*	3
Special Studies in Computering CS 199[1]*** *or*	1
Introduction to Microcomputers: Spreadsheet Applications CS 110[1]	(3)
Beginning Algebra Mth 60[2] *or*	4
Occupational Mathematics 1 Mth 50[2]	(3)
Total Credits	14-16

	Winter
Mechanical Drafting 1 4.121* *or*	4
Architectural Drafting - Plans 4.137**	(4)
Introduction to AutoCad 4.110	4
Communication Skills 1 1.100[3] *or*	3
Preparatory English Composition Wr 120[3]	(3)
Elementary Algebra Mth 65[2] or higher	4
Industrial Safety HE 125[4] *or*	3
First Aid HE 252[4] *or*	(3)
Personal Health HE 250[4]	(3)
Total Credits	18

	Spring
Customizing AutoCad 4.143* *or*	4
Architectural Drafting - Details 4.138**	(4)
Strength of Materials 1 6.107	4
Communication Skills 2 1.102[3] *or*	3
English Composition Wr 121[3]	(3)
Geometry Mth 75[2] *or*	4
Occupational Mathematics 2 Mth 55[2]	(3)
Social Science Elective[5]	3
Total Credits	17-18

Second Year	**Fall**
Introduction to Drafting: Special Projects 4.155	2
Mechanical Design 4.132* *or*	4
Blueprint Reading for Drafters/Architects 4.144**	(2)
CAD – Architectural 4.142** *or*	4
Elective*	(2)
Structural Drafting: Steel 4.140	4
Principles of Technology 1 4.300[6] *or*	4
Fundamentals of Physics Ph 101[6]	(4)
Elective**	1
Total Credits	16-17

	Winter
Technical Illustration 4.127**	3
Geometric Tolerancing 4.133* *or*	4
Architectural Measurement 4.114**	(2)
Architectural Design - Remodeling Arch 100** *or*	4
Elective*	(3)
Structural Drafting: Wood 4.141	4
Principles of Technology 2 4.302[6] *or*	4
Fundamentals of Physics Ph 102[6]	(4)
Total Credits	15-17

	Spring
Power Trains and Accessories Design 4.134* *or*	4
Construction Literature 4.145**	(2)
Architectural Design - Solar Residence Arch 101** *or*	4
Electrical Drafting 4.103*	(2)
Structural Drafting: Concrete 4.146	4
Manufacturing Technology 3.399[7]	3
Communication Skills 3 6.126[3] *or*	3
Composition: Research Wr 123[3]	(3)
Total Credits	13-16

* Mechanical Emphasis
** Architectural Emphasis
*** Telecourse or Mobile Classroom
[1] Refer to Data Processing Department Course Descriptions.
[2] Refer to Mathematics Department Course Descriptions.
[3] Refer to English and Foreign Language Department Course Descriptions.
[4] Refer to Health & PE Department Course Descriptions.
[5] Refer to Social Science Department Course Descriptions.
[6] Refer to Science Department Course Descriptions.
[7] Refer to Mechanics Department Course Descriptions.
• Refer to Electronics Department Course Descriptions for other courses in this curriculum.

Theatre

▶ **Two-Year Suggested Course of Study for Performance Majors**
▶ **Two-Year Suggested Course of Study for Technical Majors**

Offered by LCC's Performing Arts Department

Careers in Theatre In the state of Oregon qualified people find work that pays in such theatre-related occupations as acting (professional, semiprofessional, and commercial) as well as in parks-and-recreation programs, the military, psychotherapy, public relations, and radio/TV announcing and performing.

The theatre industry requires the services of such professionals, as well as business owners, and such skilled workers as stage and lighting designers, sound technicians, scenic carpenters, electricians, scenic painters, directors, producers, business managers, house managers, box office staff, ushers, stage managers, property persons, choreographers, dancers, musical directors and musicians, publicists, graphic designers, stage hands, costume designers and sewers, makeup artists, wigmakers, mechanics, teachers, secretaries, and of course, playwrights and composers.

Career opportunities in theatre are not scarce. They are there for people with the requisite ability, training, experience, and persistence.

Curriculum for Performance Majors

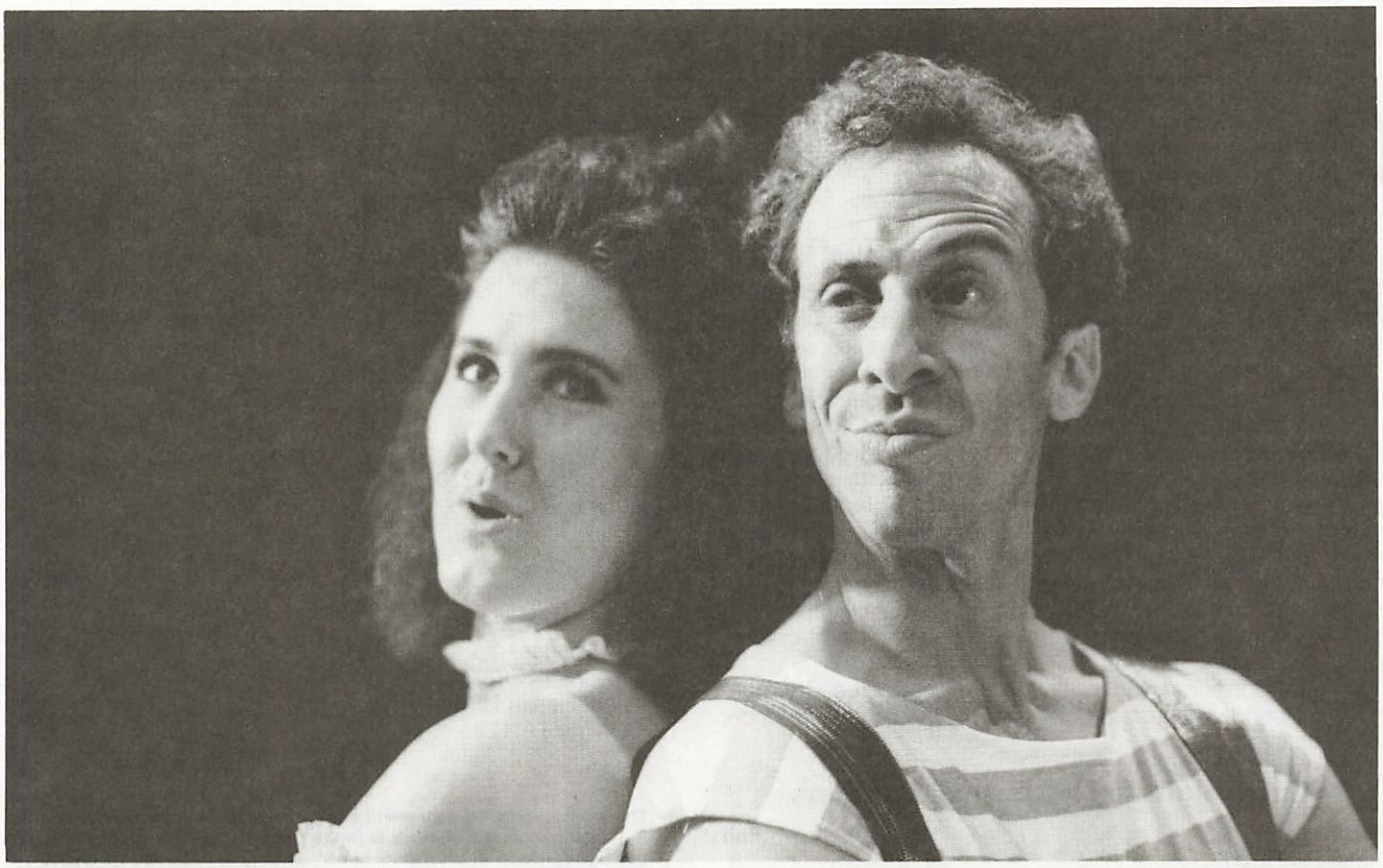
First Year	**Fall**
Acting 1 TA 230	3
Math or Science[1]	4
Social Science[2]	3
Fundamentals of Technical Theatre 1: Stagecraft TA 161	3
Survey of Theatre Arts TA 111	3
English Composition Wr 121[4]	3
Movement for the Acting Student TA 126**	1
Total Credits	20
	Winter
Acting 1 TA 231	3
Math or Science[1]	4
Social Science[2]	3
Fundamentals of Technical Theatre 2: Stage Lighting TA 162	3
Survey of Theatre Arts TA 112	3
Composition: Style Wr 122	3
Composition: Research Wr 123[4]	3
Total Credits	22
	Spring
Acting 1 TA 232	3
Math or Science[1]	4
Social Science[2]	3
Fundamentals of Technical Theatre 3: Scenic Artistry TA 163	3
Survey of Theatre Arts TA 113	3
Oral Interpretation of Literature TA 229	3
Total Credits	19

Second Year	**Fall**
Acting 2 TA 244	3
Math or Science[1]	4
Social Science[2]	3
Studies in Theatre TA 205	3
Individual Lessons: Voice MuP 100	1-2
Technical Theatre Workshop TA 265	3
Total Credits	17-18
	Winter
Acting 2 TA 245	3
Math or Science[1]	4
Social Science[2]	3
Studies in Theatre TA 206	3
Stage Makeup TA 270	3
Voice Training for Acting Students TA 127	3
Total Credits	19
	Spring
Acting 2 TA 246	3
Math or Science[1]	4
Social Science[2]	3
Studies in Theatre TA 207	3
Personal Health HE 250[3]	3
Pantomime TA 128	2
Total Credits	18

▶ **These are suggested courses of study for students interested in theatre. 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 LCC Board of Education. However, courses in these theatre curricula may be applied toward an associate of arts degree and/or college transfer.**

Curriculum for Technical Majors

First Year	**Fall**
Fundamentals of Technical Theatre 1: Stagecraft TA 161	3
Survey of Theatre Arts TA 111	3
Math or Science[1]	4
Social Science[2]	3
English Composition Wr 121[4]	3
Studies in Theatre TA 205	3
Total Credits	19
	Winter
Fundamentals of Technical Theatre 2: Stage Lighting TA 162	3
Survey of Theatre Arts TA 112	3
Math or Science[1]	4
Social Science[2]	3
Composition: Style Wr 122[4]	3
Composition: Research Wr 123[4]	3
Total Credits	19
	Spring
Fundamentals of Technical Theatre 3: Scenic Artistry TA 163	3
Survey of Theatre Arts TA 113	3
Math or Science[1]	4
Social Science[2]	3
Personal Health HE 250[3]	3
Studies in Theatre TA 207	3
Total Credits	19



Second Year	**Fall**
Technical Theatre Workshop TA 265	3
Acting 1 TA 230	3
Math or Science[1]	4
Social Science[2]	3
Studies in Theatre TA 205	3
Beginning Drawing ART 131[5]	3
Total Credits	19
	Winter
Technical Theatre Workshop TA 265	3
Acting 1 TA 231	3
Math or Science[1]	4
Social Science[2]	3
Stage Makeup TA 270	3
Costume Workshop TA 261	3
Total Credits	19
	Spring
Technical Theatre Workshop TA 265	3
Acting 1 TA 232	3
Math or Science[1]	4
Social Science[2]	3
Studies in Theatre TA 207	3
Total Credits	16

[1] Refer to Mathematics or Science Department Course Descriptions.
[2] Refer to Social Science Department Course Descriptions.
[3] Refer to Health and PE Department Course Descriptions.
[4] Refer to English and Foreign Language Department Course Descriptions.
[5] Refer to Art & Applied Design Department Course Descriptions.
• Refer to Performing Arts Department Course Descriptions for other courses in this suggested curriculum.
** Performance students must take one term of Movement for the Acting Student TA 126 during their first year, one term of Pantomime TA 128 during their second year, and at least one term of Technical Theatre Workshop TA 265 some time during their program.

Note: Students cast in plays or members of technical crews may receive Theatre Rehearsal & Performance credit, not to exceed 6 credits in first year (TA 180) and 6 credits during second year (TA 280).

Note: Students planning to transfer to a four-year college should check bachelor's degree requirements for their intended major at that college.

Welding Technology

Two-Year Associate of Applied Science Degree Program
or
One-Year Certificate Program

Offered by LCC's Industrial Technology Programs

This program provides the training for entry-level employment and offers the technical knowledge necessary for advancement in the welding field. Coupled with experience, the program could prepare a student for potential employment opportunities in industry, private enterprise, supervision, and/or advanced welding. These opportunities include: welding, fabrication, inspection, fitting in heavy machinery or structural steel, light industrial fabrication, welding and/or fabrication estimating, and technical sales.

The first year is devoted to developing skills in the use of manual arc, GMAW and GTAW processes, manual and semi-automatic cutting, oxyacetylene welding and brazing, layout and fitting of standard structural shapes and pipe, blueprint reading and drafting. Upon completion of the first year, a student should have developed skills sufficient for employment as an entry-level welder in Lane County.

Many of the first-year laboratory classes will be offered on an open-entry/open-exit basis. See LCC's Class Schedule for details.

The second year offers further training in welding procedures and processes while providing technical-level information on the testing of welds and making in-depth studies of metals and their associated welding problems. Upon completion of the second year, a student should have sufficient knowledge and skills to become an advanced welder capable of doing supervisory work and of being certified* by the state in any of five areas: (1) pipe welding, mild steel; (2) pipe welding, low hydrogen quality; (3) gas metal arc (GMAW), wire drive; (4) gas tungsten arc (GTAW); and (5) estimating.

Qualified welders may earn from $5 per hour to $18 per hour, depending on training, experience, and locale. Higher wages generally require a high mobility.

* *State certification is not required for any course or for graduation. However, the examinations are available to any qualified student at additional cost.*

[1] Refer to Mathematics Department Course Descriptions.
[2] Refer to Mechanics Department Course Descriptions.
[3] Refer to English and Foreign Language Department Course Descriptions.
[4] Refer to Health and PE Department Course Descriptions.
[5] Refer to Social Science Department Course Descriptions.
• Refer to Industrial Technology Programs Course Descriptions for all other courses in this curriculum.
* **Welding Technology Electives**
Welding Lab 3.939
CWE 1.300
Mechanical Drafting 1 4.121
Principles of Technology 1 4.300
Principles of Technology 2 4.302
Others as approved by department head or counselor

Curriculum

First Year	**Fall**
Arc Welding 1 3.921	4
Gas Processes 1 3.931	4
Occupational Mathematics 1 Mth 50[1]	3
Manufacturing Technology 3.399[2]	3
Blueprint Reading 1 3.910	3
Total Credits	17
	Winter
Arc Welding 2 3.922	4
Gas Processes 2 3.932	4
Blueprint Reading 2 3.911	3
Communication Skills 1 1.100[3]	3
Industrial Safety HE 125[4]	3
Total Credits	17
	Spring
Shop Fabrication Practices 3.938	10
Estimating for Welders 3.928	3
Communication Skills 2 1.102[3]	3
Total Credits	16
Second Year	**Fall**
Advanced Shielded Meal Arc Welding 1 3.946	4
Shielded Meal Arc Welding Theory 1 3.947	3
Applied Metallurgy 3.951	4
Welding Lab 3.939	1
Science/Social Science/Humanities Elective	3
Elective* (Welding Technology Electives)	3
Total Credits	18
	Winter
Advanced Gas Tungsten Arc Welding 3.942	3
Advanced Wire Drive Welding 3.943	3
Gas Tungsten Arc Welding Theory 3.952	1
Wire Drive Welding Theory 3.953	2
Senior Welding Projects 1 3.908	4
Total Credits	16
	Spring
Advanced Shielded Metal Arc Welding 2	4
Shielded Metal Arc Welding 2 3.949	3
Senior Welding Projects 2 3.909	4
Science/Math Elective	3
Social Science Elective[5]	3
Welding Lab	1
Total Credits	18

Noncredit Programs

LCC's Community Education and Economic Development Division offers opportunities for those who want training in a particular field but don't require a college degree to achieve their goals. These noncredit programs are described below. In some cases, students can earn continuing education units, certification, and other evidence of class completion to meet professional requirements.

Course descriptions, times, and locations for the classes that make up these programs are printed in the Class Schedule publication before the start of each term.

Business Basics Certificate Program

This noncredit program offers a curriculum of 10 classes designed to provide the participant with the management skills to operate a successful small business. Classes may be taken in any order. A certificate is awarded at the completion of six of the workshops. Consult the LCC Class Schedule or contact the Small Business Development Center, 726-2255, for class titles, dates, and suggested sequences.

Court Reporting

This is a two-year vocational open-entry/open-exit program. The average day student can expect to complete the academic court reporting classes within two years; students progress at their own rate in speed-building classes. The program prepares reporters to record and preserve official legal testimony using a stenotype machine that prints letters as shorthand symbols and to prepare legal transcripts. Training includes computer-compatible machine shorthand, computer-aided transcription, and the professional and academic competencies necessary to become a professional reporter. For more information, call Adult Education, 726-2252.

Emergency Medical Technology (EMT)

The EMT program is designed to prepare students to function in a prehospital care setting under the supervision of a physician. It is organized as a sequential structure, including the following courses: First Responder (optional), EMT I, EMT II, EMT III, EMT IV (Paramedic). Upon successful completion of each course, the student is eligible to sit for state, national and Paramedic Certification exams. The EMT program uses the Department of Transportation curriculum as a basis for course content, which includes both theory and clinical practice. The Paramedic program is accredited by the Oregon Board of Medical Examiners. Applications for each course are available at the Downtown Center. For further information, call 726-2252, ext. 2904.

Farm Business Management

This three-year, noncredit program is designed to assist farm owners and managers in developing successful farm operations through increased business management skills.

The program is based on a design developed by the University of Minnesota and is used at community colleges and universities throughout the nation. The program combines classroom training, on-site visits, and individual counseling.

Participants are provided an annual computer analysis of their farm operations. All records are confidential.

For information, contact the Small Business Development Center, 726-2255.

Health Care Unit Clerk (Ward Clerk)

This program prepares students to function as a ward clerk in health care facilities. Courses include Terminology of the Human Body or Medical Terminology II, and Health Care Unit Clerk. For further information, please call 726-2252, ext. 2904.

Nursing Assistant Home Health Aide Medication Aide

These state-approved programs prepare students to be Certified Nursing Assistants and Home Health Aides. All classes are by application only.

Nursing Assistant/Home Health Aide (166 Hours) Includes class, laboratory, and practicum.

Basic Nursing Assistant (100 Hours) Recommend previous experience. Includes theory, laboratory, and limited practicum.

Nursing Assistant By Exemption Prerequisites include previous training program comparable to Oregon requirements and out-of-state certification. Must pass competency and theory exam.

Home Health Aide (60 Hours) Prerequisites include current Oregon Nursing Assistant Certificate; offered once a year.

For more information, call Adult Education, 726-2252, ext. 2904.

Small Business Management

This is a three-year, noncredit program designed to help participants realize their business and personal goals through improved management and organization. The program combines classroom training, intensive business counseling, and monthly on-site visits. All records and information on participating businesses are confidential.

For information, contact the Small Business Development Center, 726-2255.

Supervisory Management Series

This six-term program for current and future supervisors offers a practical approach to management and leadership skills. Classes combine lecture, discussion and practice to teach both theory and active strategies that work. The series is for men and women who want effective management and leadership skills, and is especially useful for those who have less than two years' experience, for those who have been promoted from the ranks, or those who want to become supervisors. Continuing Education Units are granted for successful completion of each class, and a certificate is offered to those completing Series classes #1 - #6 (students not required to take classes in sequence). For more information, call Adult Education, 726-2252.

Swedish Massage

The Swedish Massage program is designed to prepare students to sit for the Oregon State Board of Massage Technicians Certification Exam. The program has been approved by the Oregon Board of Massage Technicians. Students must successfully complete the following courses: Swedish Massage Anatomy I and II (30 hrs each), Physiology I and II (30 hrs each), Kinesiology (30 hrs), Pathology (30 hrs), Hydrotherapy (20 hrs), Beginning Massage I, II, and III (30 hrs each). The student must also be certified in CPR and First Aid. For further information, call 726-2252, ext. 2904.

Course Descriptions

Course Descriptions

LCC's credit courses described in this section are listed under the name of the instructional department which offers them. Each entry includes the course name, course number, and the number of credits a student can earn. Course numbers vary; if the course number has letters and numbers, the course is a transfer course. Vocational courses have numbers only.

Specific information about times and locations of classes is printed in the Class Schedule publication before the start of each term.

All Departments

Supervised Field Experience is the course title of the work experience options found in all departments on campus that are part of the Cooperative Work Experience (CWE) program. Course credit may be earned for work experience if a job is related to either the student's education major or vocational goal.

Registration for work experiences must be preceded by a consultation between the student and the department's coordinator for the CWE program.

Following is the general description of the Supervised Field Experience course offered by LCC departments. In the quarterly Class Schedule publication, the course is listed as SFE.

Supervised Field Experience FE 207/1.300 . . 1-15 credits
All Terms) . . . . . 3-45 hrs/wk
Supervised Field Experience is an educational partnership with business and industry whereby a college student receives career-related on-the-job training and experience under the supervision of the college and the employer. The student enrolled in SFE receives credit and a grade for work. The objective of SFE is to provide current community and business work experience that provides meaning and direction to the student's total educational experience. Entry into SFE is by petition, if already working, or by placement by a coordinator. Administration of this course is by the Cooperative Work Experience Program in the Apprenticeship Building.

Art and Applied Design

The Art and Applied Design Department provides a broad range of studio art courses for persons interested in developing the basic skills needed to succeed in any art career or for personal growth. All are lower division college courses and will transfer to Oregon's colleges and universities as elective credits. At Oregon State University they will also apply toward Humanities or general education graduation requirements. At the University of Oregon only the art history (lecture) classes apply toward the Arts and Letters Group requirement. See an academic advisor for details for the college to which you plan to transfer.

Persons interested in training for an art career in any design or commercial art field should make an appointment to see Tim Blood, the department counselor, or the department coordinator to plan their schedule and program.

Studio Classes

Some studio courses are available for variable credit when indicated on the class schedule published prior to each term.

Design

ART 115 Basic Design: Fundamentals . . . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 6 lecture/lab hrs/wk
Studio problems and exercises in the basic principles of two-dimensional design. Emphasis on design in relationship to painting, graphic design and other 2-D media. Strongly recommended for prospective art majors in their first year. Registration permitted any term. Recommend art majors take concurrently with Introduction to Visual Arts ART 101 and Beginning Drawing ART 131.

ART 116 Basic Design: Color . . . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 6 lecture/lab hrs/wk
Studio problems in basic principles of two-dimensional design. Emphasis on color and composition in relationship to painting, graphic design and other 2-D media. Strongly recommended for prospective art majors in their first year.

ART 119 Lettering and Layout . . . . . 3 credits
(Winter or Spring Term) . . . . . 6 lecture/lab hrs/wk
Fundamentals of lettering and layout design with emphasis on essential techniques and use of tools. This course is a prerequisite for entry into the technical year of the Graphic Design curriculum.

ART 221 Graphic Design . . . . . 4 credits
(Fall Term) . . . . . 8 lecture/lab hrs/wk
Prerequisites: Basic Design: Fundamentals ART 115 and Basic Design: Color Art 116. Drawing through Figure Drawing ART 234 and Lettering and Layout ART 119. Practical design experience in the fundamentals of graphic design. Theory of the principles and processes of graphic design communication, and experience in graphic production from concept to camera-ready art. Course is a prerequisite for Graphic Design ART 222 and 223.

ART 222 Graphic Design . . . . . 4 credits
(Winter Term) . . . . . 8 lecture/lab hrs/wk
Prerequisite: Graphic Design ART 221. Practical design experience in the fundamentals of graphic design. Theory of the principles and practices of graphic design communication. Experience in designing from concept to camera-ready art.

ART 223 Graphic Design . . . . . 4 credits
(Spring Term) . . . . . 8 lecture/lab hrs/wk
Prerequisite: Graphic Design ART 221 and Graphic Design ART 222. Practical design experience in the fundamentals of graphic design. Theory of the principles and practices of graphic design communication. Experience in designing from concept to camera-ready art.

ART 228, 229, 230 Production for the Graphic Designer . . . . . 3 credits
(ART 228, Fall: ART 229, Winter;
ART 230, Spring) . . . . . 6 lecture/lab hrs/wk.
Prerequisites; Lettering and Layout ART 119 and Publication Design and Production 1 3.443 for ART 228; ART 228 for ART 229; ART 229 for ART 230. Corequisites: The appropriate sequential term of Graphic Design ART 221-223. This course will provide students enrolled in Graphic Design ART 221-223 with an advanced, intensive production class that will apply learned knowledge of pasteup, layout, process camera, illustration, photography, and type to specific problems and areas of the graphic design field. Focus will be on training the student to be time and cost effective to his/her future employer. The student will be provided an opportunity to explore each area of applied production so as to help in career direction and planning.

Drawing

***ART 131 Beginning Drawing** . . . . . 3 credits
(All Terms) . . . . . 6 lecture/lab hrs/wk
A beginning course in drawing and sketching especially for the non-art major student with no previous training. Emphasis on development of the seeing and sketching skills needed to describe three-dimensional objects on two-dimensional pieces of paper. For prospective art majors, this course or an equivalent ability level is prerequisite for many 200-level studio courses. Recommend art majors take concurrently with Introduction to Visual Arts ART 101 and Basic Design: Fundamentals ART 115. Non-sequential. This course may be repeated.

ART 132 Drawing . . . . . 3 credits
(All Terms) . . . . . 6 lecture/lab hrs/wk
Prerequisite: Beginning Drawing ART 131 or equivalent or instructor permission by portfolio. Training in the basic drawing skills of observation, selection, representation, perception and hand-eye-mind coordination. Emphasis on composition and the understanding of visual form. This course is recommended before taking Printmaking ART 271, 272, and 273 or any 200-level painting course. This course may be repeated. Non-sequential.

***ART 234 Figure Drawing** . . . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 6 lecture/lab hrs/wk
Prerequisite: Beginning Drawing ART 131 or its equivalent. Training in drawing from the human figure. Emphasis on understanding complex form relationships in light and space through drawing the human figure. Basic anatomical structure, proportion, foreshortening, composition, techniques, and expression. This course may be repeated. Class fee required.

Printmaking

ART 271 Printmaking . . . . . 3 credits
(Fall Term) . . . . . 6 lecture/lab hrs/wk
Prerequisite: Beginning Drawing ART 131 or a 200-level drawing course, or instructor permission by portfolio. Studio training in the methods, materials, and techniques of printmaking in the media of intaglio (etching, etc.), and collagraphy (mixed-media). Lectures, demonstrations, and studio experience. Recommend Printmaking ART 271, 272, 273 be taken sequentially. Class fee required.

ART 272 Printmaking . . . . . 3 credits
(Winter Term) . . . . . 6 lecture/lab hrs/wk
Prerequisite: Beginning Drawing ART 131 or a 200-level drawing course, or instructor permission by portfolio. Studio training in the methods, materials, and techniques of printmaking in the media of relief (woodcut or linocut). Lectures, demonstrations, and studio experience. Recommend Printmaking ART 271, 272, 273 to be taken sequentially. Class fee required.

ART 273 Printmaking . . . . . 3 credits
(Spring Term) . . . . . 6 lecture/lab hrs/wk
Prerequisite: Beginning Drawing ART 131 or a 200-level drawing course, or instructor permission by portfolio. Studio training in the methods, materials, and techniques of printmaking in the media of collagraphy and monoprint (mixed-media). Lectures, demonstrations, and studio experience. The student may elect to continue working in media learned in another term with approval of the instructor. It is recommended that Printmaking ART 271, 272, 273 be taken sequentially. Class fee required.

Painting

***ART 181 Beginning Painting** . . . . . 3 credits
(All Terms) . . . . . 6 lecture/lab hrs/wk
A beginning course in painting for the student with no significant previous training. The medium used will be oil pigments on canvas. The student will be introduced to the basic technical skills of painting, as well as the composition and color knowledge needed for 200-level painting courses. Several simple painting compositions on self-stretched canvas will be completed.

***ART 184 Beginning Watercolor** . . . . . 3 credits
(All Terms) . . . . . 6 lecture/lab hrs/wk
Prerequisite: Beginning Painting ART 181 or equivalent and Beginning Drawing ART 131 or equivalent. Studio training in the basic watercolor painting skills. Introduction to the methods, materials and techniques needed to paint the kind of watercolor statement the student desires. Non-sequential.

***ART 281 Painting: Oils** . . . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 6 lecture/lab hrs/wk
Prerequisite: Beginning Painting ART 181 and Beginning Drawing ART 131 or their equivalent with instructor permission by portfolio. A basic oil painting course for the student already familiar with the medium. Emphasis on the development of the student's ability and knowledge in the fundamentals of composition, color, and the use of oil painting as a unique and personal statement. This course may be repeated.

ART 284 Watercolor . . . . . 3 credits
(All Terms) . . . . . 6 lecture/lab hrs/wk
Prerequisite: Beginning Watercolor ART 184 or equivalent. The technique and use of watercolor. An intermediate level course in watercolor painting. Further development of technical skills and expressive development in the medium of transparent watercolor. Repeatable.

ART 287 Airbrush Painting . . . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 3 class, 3 lab hrs/wk
Prerequisite: At least one beginning-level drawing *or* painting class, or the equivalent experience. A basic painting course in the use and maintenance of airbrush, in developing technical skills in the use of airbrush and integrating these skills into creative works in a lecture/lab situation. This class may be repeated. Class fee required.

ART 299 Special Studies: Painting . . (variable) 3 credits
(Fall, Winter, & Spring Terms) . . . . . 6 lecture/lab hrs/wk
Prerequisite: 200-level painting class or equivalent AND instructor permission. A specialized, in-depth exploration of a specific painting project, method, or technique undertaken by a group of students with previous painting experience (oils or acrylics), with classroom/studio guidance by an instructor. Repeatable.

ART 299 Special Studies: Airbrush . . . . . 3 credits
(All Terms) . . . . . 6 lecture/lab hrs/wk
Prerequisite: Airbrush Painting ART 287 or equivalent AND instructor permission. A specialized, in-depth exploration of a specific airbrush painting project, method, or technique undertaken by a group of students with previous airbrush skills, with classroom/studio guidance by an instructor. Repeatable. Class fee required.

Sculpture

***ART 191 Beginning Sculpture** . . . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 6 lecture/lab hrs/wk
A beginning course for the student without prior training in

sculpture. The course is designed to provide an overview of the basic processes of sculpture, and their aesthetic considerations. A project in each of the three basic processes will be completed. Emphasis on development of hand-eye-mind coordination skills and understanding of space and form, plus the tool-usage knowledge needed for 200-level sculpture courses. This course may be repeated. Class fee required.

ART 192 Sculpture: Welding . . . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 6 lecture/lab hrs/wk
Prerequisite: None, but it is recommended that Beginning Sculpture ART 191 or Basic Design: 3 Dimensional ART 117 be taken first. A beginning-level sculpture class emphasizing the process of metal welding fabrication. Emphasis on development of hand-eye-mind coordination skills needed for 200-level sculpture courses. Repeatable. Class fee required.

***ART 193 Sculpture: Wood** . . . . . 3 credits
(Winter & Spring Terms) . . . . . 6 lecture/lab hrs/wk
Prerequisite: None, but it is recommended that Beginning Sculpture ART 191 or Basic Design: 3 Dimensional ART 117 be taken first. 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. Non-sequential. This course may be repeated. Class fee required.

***ART 293 Sculpture: Metal Casting** . . . . . 3 credits
(Spring Term) . . . . . 6 lecture/lab hrs/wk
Prerequisite: Beginning Sculpture ART 191 or Basic Design: 3 Dimensional ART 117 or equivalent. A sculpture course designed for the student with prior sculpture training who desires to learn the lost-wax foundry casting process. The student 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. Non-sequential. This course may be repeated. Class fee required.

Ceramics

ART 154 Beginning Ceramics (Hand Building) . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 6 lecture/lab hrs/wk
Introduction to the materials, methods, and techniques of pottery design and construction. Emphasis on basic handbuilding skills, simple glaze application and an understanding of the fundamental pottery processes. Non-sequential. Repeatable. Students should plan on at least one term of this course and/or ART 155 before advancing to Ceramics: Intermediate ART 254. Class fee required.

ART 155 Ceramics (Wheel Throwing) . . . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 6 lecture/lab hrs/wk
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. Non-sequential. Repeatable. Student should plan on at least one term of this course and/or ART 154 before advancing to Ceramics: Intermediate ART 254. Class fee required.

***ART 254 Ceramics: Intermediate** . . . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 6 lecture/lab hrs/wk
Prerequisite: Beginning Ceramics (at least one term), or equivalent and instructor permission. A course for the student with

previous ceramic training. Emphasis will be on the development of specific skills in the use of the potter's wheel, pottery decoration, a basic understanding of glaze formation and kiln firing. This course may be repeated. Class fee required.

ART 299 Special Studies: Ceramics . . . . . 3 credits
(Spring Term) . . . . . 6 lecture/lab hrs/wk
Prerequisite: A 200-level Ceramics class AND instructor permission. A specialized, in-depth exploration of a specific ceramics method, process, or projects undertaken by a group of students with previous ceramics experience, with studio guidance by an instructor. Repeatable. Class fee required.

Weaving

***ART 151 Beginning Weaving (Off-Loom)** . . . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 6 lecture/lab hrs/wk
This is a beginning fiber arts course with a special emphasis of weaving on simple looms with a concentration on the two-harness weaves. Design, process, and projects for several different techniques will be carried out: tapestry, inkle, back-strap and table weaving. This course prepares the student to weave and work independently, and to take a course for four-harness table or floor weaving. The video series for "Craft of the Weaver" and other video tapes on weaving will be used.

ART 152 Fiber Spinning and Dyeing . . . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 6 lecture/lab hrs/wk
Preparation and spinning a variety of fibers and dyeing fibers with both chemical and natural dyestuffs.

ART 251 Weaving: Loom (Table-Loom) . . . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 6 lecture/lab hrs/wk
Prerequisite: Beginning Weaving ART 151. The purpose of this course is to teach the fundamentals of weaving on a four-harness loom. The entire weaving process from designing to finishing will be learned in two separate table loom samplers – one, a loom-controlled sampler, and the second, a weaver-controlled sampler. The sampler teaches basic weaving processes, skills, structures, and design options, both loom- and weaver-controlled. Students will have access to a computer aided textile design course for the Apple II, using the computer lab on campus, and will learn how to draft and design with "Weaver Planner," a program to be used in the classroom on an IBM-type computer.

***ART 252 Weaving (Floor-Loom)** . . . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 6 lecture/lab hrs/wk
Prerequisite: Beginning Weaving ART 151. This is a course for the intermediate or advanced weavers who can weave independently on the four-harness loom. Students will work on supervised projects or on group study projects selected by the class. The course may be repeated for credit. In past years, some special studies have been done on color, brocading weft-face pattern weaves, and overshot weaves. Students will have access to a computer aided textile design course for Apple II, using the computer lab on campus, and will learn how to draft and design with "Weaver Planner," a program to be used in the classroom on an IBM-type computer.

Jewelry

***ART 157 Beginning Jewelry and Metalsmithing** . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 6 lecture/lab hrs/wk
A beginning course for the student with no prior jewelry or metalsmithing training. The course is designed to introduce the student to the fundamental jewelry and metalsmithing techniques and the proper use of tools relating to these processes. The student will complete five projects, one in each of the following processes: (1) piercing, (2) simple band ring from sheet metal, (3) simple stone setting, (4) metal forming, and (5) casting. Non-sequential. This course may be repeated. Class fee required.

ART 257 Jewelry and Metalsmithing . . . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 6 lecture/lab hrs/wk
Prerequisite: Beginning Jewelry and Metalsmithing ART 157 or equivalent. An intermediate level jewelry and metalsmithing course for the student with some prior training. The student should improve present skills and will learn the processes of hinge construction, box construction, advanced casting, electroforming, and more advanced metalworking techniques. Class fee required.

Woodart

ART 246 Woodworking Arts . . . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 3 class, 3 lab hrs/wk
A basic course in the designing and building of small functional and aesthetic objects out of wood and plastics. Wood inlaying, marquetry, plastics-forming, and fabrication will be techniques learned. May be repeated twice.

Photography

The following photography courses are offered through the Mass Communication Department. See the Mass Communication Department course descriptions in this catalog.

ART 161 Beginning Photography
ART 162 Photography
FA 251 Film Production 1
FA 252 Film Production 2

* *In order to determine how many credits of a repeatable course will be accepted, check with a counselor or the curriculum of the university to which you plan to transfer.*

Other Courses

3.986 Color Theory for Auto Refinishing . . . . . 2 credits
(Fall or Winter Term) . . . . . 1 class, 2 lab hrs/wk
Lectures, demonstrations, and developmental problems in basic color theory designed to enable Auto Body Refinishing students to distinguish color/relationship required for accurate color matching and mixing.

ART 101 Introduction to Visual Arts . . . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
A lecture course supplemented by visual materials concerning elements, principles, and functions of the visual arts as seen from the viewpoint of the artist. Designed for the student with little or no background in the visual arts. Emphasis on developing visual perception, appreciation, and application. Recommend art majors take concurrently with Basic Design: Fundamentals ART 115 and Beginning Drawing ART 131. Registration permitted any term.

ART 204, 205, 206 History of Western Art . . . . 3 credits
(ART 204, Fall; ART 205, Winter;
ART 206, Spring) . . . . . 3 class hrs/wk
Historical survey of visual arts from prehistoric to modern times with emphasis on the western world. Designed for both majors and non-majors. Registration permitted any term; however, sequential order is preferred.

ART 207 History of Oriental Art . . . . . 3 credits
(Fall Term) . . . . . 3 class hrs/wk
A historical survey of Indian art from the Indus Valley civilization through Mughal art, culminating with the Taj Mahal (3000 B.C. through 18th Century, A.D.). First term of three term sequence. Registration is permitted any term; however, sequential order is preferred.

ART 208 History of Oriental Art . . . . . 3 credits
(Winter Term) . . . . . 3 class hrs/wk
Prerequisite: None, but it is recommended ART 207, 208, 209 be taken in sequence. An historical survey of Chinese art from the Neolithic period to the 20th Century. Major emphasis will be on the development and stylistic changes in landscape painting, with minor emphasis on bronzes and ceramic works of art.

ART 209 History of Oriental Art . . . . . 3 credits
(Spring Term) . . . . . 3 class hrs/wk
Prerequisite: None, but it is recommended ART 207, 208, 209 be taken in sequence. A historical survey of the major monuments and movements of Japanese art from prehistoric times through the early 19th Century (including painting, wood block prints, sculpture, architecture, ceramics, and gardens). The course will proceed chronologically and thematically. The emphasis will be on stylistic developments and changes, themes and their interrelationships.

ART 211 Survey of Visual Arts: Modern Art . . . 3 credits
(Fall Term) . . . . . 3 class hrs/wk
An historical survey of contemporary or "modern" art from its origins in the mid-19th century in Europe to World War I. Emphasis is on the major styles, monuments and artists, and their social and political implications.

Art 212 Survey of Visual Arts: Modern Art . . . . 3 credits
(Winter Term) . . . . . 3 class hrs/wk
An historical survey of contemporary or "modern" art from World War I to the present day. Emphasis is on the major monuments and artists, their social and political implications, and on the significance of the shift of major art centers from Europe to the United States in the 20th Century.

ART 298 Independent Study: Topical* . (variable) 3 credits
(All Terms) . . . . . 2-6 lab hrs/wk
Prerequisite: Prior courses in the particular field of interest and instructor permission. An independent study experience is designed to allow the student with prior training in his/her field of interest to initiate individual projects, with instructor approval, which will enable 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. Independent Study; Topical ART 298 will be available in the following areas: Design, Drawing, Ceramics, Jewelry and Metalsmithing, Painting, and Sculpture. Class fees required.

*Abbreviated in class schedule as "I.S."

ART 299 Special Studies: Art Survival Skills . . . 3 credits
(Winter or Spring Term) . . . . 2 class, 2 lecture/lab hrs/wk
Prerequisite: Three 200-level studio courses or equivalent. A specialized, in-depth study of the skills needed to survive as an artist in today's society.

Business

The Business Department offers one-year programs in Real Estate, Sales and Marketing, and Office Administration. The Office Administration program includes the Accounting Clerk and Clerical Assistant options.

Two-year programs include Banking and Finance, Real Estate, Business Management, and Office Administration. The Office Administration program includes the Associate Accountant, Professional Secretary, and Legal Secretary options.

In addition, courses are offered in apparel merchandising, interior decorating, and consumer education.

Business Courses

1.120 Business English 1 . . . . . 3 credits
(All Terms) . . . . . 3 class hrs/wk
This course provides an in-depth analysis of the structure of the English language. Special emphasis is placed on the appropriate use of the parts of speech; specifically, nouns, pronouns, and verbs. Reference skills, spelling improvement, and vocabulary building are also stressed.

1.122 Business English 2 . . . . . 3 credits
(All Terms) . . . . . 3 class hrs/wk
This course provides further analysis of the structure of the English language. Emphasis is placed on sentence structure, vocabulary, business letter format, proofreading, and the mechanics of punctuation, spelling, capitalization, word division, and abbreviations.

2.104 Personal Use Typing . . . . . (variable) 3 credits
(See Term Schedule) . . . . . 5 class hrs/wk
This course is designed for beginning students with a desire to learn the basic skills for personal or occupational needs, those students with a desire to extend their present typing abilities, and students with a desire to remedy typing deficiencies with an end result of improvement in degree of typing skills according to individual interests. The course includes projects in correspondence, themes, outlines, tabulations, reports, and speed and accuracy development.

2.110 Accounting 1 . . . . . 3 credits
(All Terms) . . . . . 2 class, 2 lec/lab hrs/wk
An introduction to fundamental principles of full cycle, double-entry accounting; sole proprietorship; general and special journals; ledgers; business forms; and the preparation of basic financial statements.

2.111 Accounting 2 . . . . . 3 credits
(All Terms) . . . . . 2 class, 2 lec/lab hrs/wk
Prerequisite: Accounting 1 2.110. Continuation of Accounting 1 with emphasis on adjusting entries for accrual accounting. The use of the voucher system is covered, as well as an introduction to partnerships and corporations, and year-end accounting procedures.

2.112 Accounting 3 . . . . . 3 credits
(See Term Schedule) . . . . . 2 class, 2 lec/lab hrs/wk
Prerequisite: Accounting 2 2.111. Continuation of Accounting 1, 2. Basic accounting for departments, corporations, and partnerships is covered. Financial reports and statements are prepared and analyzed by applying principles learned in Accounting 1 and 2 and by completing a computerized practice set.

2.116 Introduction to Office Technology . . . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
A course designed to introduce students to office procedures required of an executive assistant. The content covers information processing concepts, distribution of correspondence, duplicating processes, the use of reference materials, organization of meetings and itineraries, and other aspects of the office environment.

2.119 Medical Office Accounting 1 . . . . . 3 credits
(Fall Term) . . . . . 2 class, 2 lec/lab hrs/wk
Prerequisite: Entry into Medical Office Assistant program or instructor consent. An introduction to fundamental principles of full cycle, double entry accounting; sole proprietorship, general and special journals; ledgers; business forms; and the preparation of basic financial statements. Emphasis is placed on accounting in the medical office.

2.120 Medical Office Accounting 2 . . . . . 3 credits
(Winter Term) . . . . . 2 class, 2 lec/lab hrs/wk
Prerequisite: Medical Office Accounting 1 2.119. This course is designed to prepare the student to work with the various accounting systems utilized in medical offices; specifically, units on use of pegboard accounting and automated or computer assisted accounting. Cash basis vs. accrual basis accounting is covered, as well as combinations of the above systems. Other areas covered are partnerships and private corporations and calculating machines.

2.124 Medical Formatting . . . . . 3 credits
(Winter Term) . . . . . 3 class, 2 lab hrs/wk
Prerequisite: Keyboard Skillbuilding OA 124/2.109, Formatting 1 OA 121/2.101. A course designed to increase typing skills including proofreading, spelling, English grammar, medical terminology, and ability to format medical reports and correspondence in proper manner, utilizing all of the above.

2.515 Office Procedures 2 . . . . . (variable) 1-4 credits
(Fall, Winter, & Spring Terms) . . . 2 class, 4 lec/lab hrs/wk
Prerequisites: Typing 45 words per minute, Introduction to Office Technology 2.116. This class offers classroom supervised simulated job activities and training in tasks that are frequently found in entry-level and intermediate levels of office work.

2.540 Civil Service Preparation . . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
A course designed to prepare the student in the methods of taking federal, state civil service, or Lane County tests for clerical, clerk-typist, and/or secretarial positions. Students are also given an opportunity to test for typing and shorthand speeds to qualify for the various job classifications.

2.545 Word Processing Applications . (variable) 1-3 credits
(All Terms) . . . . . 3 lab hrs/wk per credit
Prerequisite: Formatting 2 OA 122/2.102 (grade of C or better) or instructor approval. A course to allow students who have completed training or experience on word processing equipment to develop greater skills on a specific piece of automated typing equipment.

2.559 Word Processing . . . . . (variable) 1-3 credits
(See Term Schedule) . . . . . 6 lec/lab hrs/wk
Prerequisite: 45 wpm typing speed. Individualized instruction on a dedicated microprocessor or personal computer with floppy disk storage and multiple capability for word processing applications.

BA 101 Introduction to Business . . . . . 4 credits
(See Term Schedule) . . . . . 3 class, 1 lab hr/wk
(No credit if Business Environment BA 125 has been completed.) Business organization, operation, and management intended to orient the student in the field of business and to help the student determine a field of major concentration.

BA 103/2.206 Business Mathematics . . . . . 3 credits
(All Terms) . . . . . 3 class hrs/wk
A review of basic mathematics including fundamental processes, fractions, percentages, and interest. Business applications include banking records, installment buying, discounts, commissions, markup, and promissory notes. Use of a computer may be featured.

BA 106 Legal Secretary Leadership Practicum . . . . . (variable) 1-2 credits
(Winter & Spring Terms) . . . . . 2 class hrs/wk
This course, along with the LCC Association of Legal Students (campus organization), is designed to develop an interest in and encourage the pursuit of careers in the legal field; to develop students' leadership qualities; to introduce the student to the legal community; to unite students interested in the legal field; and to sponsor speakers and field trips.

BA 107 Improving Managerial Performance . . . . . (variable) 1-6 credits
(See Term Schedule) . . . . . 1-6 class hrs/wk
A course of basic management principles specifically aimed at the practicing, or soon-to-be practicing managers in business, industry, government, or any other formal organized activity. The principles are presented in a logical and interesting manner so their application to the everyday work situation is assured.

BA 110 Microcomputer: Business Applications . . . . . (variable) 1-6 credits
(All Terms) . . . . . 1 class hr/wk per credit
This course provides students with knowledge of business applications on microcomputers. Individual applications will include prewritten software for business applications in areas such as graphics, spreadsheet, finance, data base, word processing, workstation management, "window" environments, artificial intelligence, decision support, and automation applications.

BA 125 Business Environment . . . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
(No credit if credit is received for Introduction to Business BA 101.) The business organization's role and responsibility in society. The interrelationships of major functional areas of business. The study of the systems approach to management process with the intention of orienting students in the field of business and helping them determine their field of major concentration.

BA 156/1.506 Applied Economics . . . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
Principles involved in the operation of the American economic system. Roles of business, industry, and government in the total economy. Topics considered include organization of the U.S. economy, control of the business cycle through monetary and fiscal policies, domestic economic problems, economic development, and comparative economic systems.

BA 160 Introduction to Purchasing . . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
This course is designed to provide students with the fundamentals of purchasing. Topics of discussion will include the purchasing function; purchasing policies, procedures and manuals; public relations and purchasing ethics; supply quality and sources; storekeeping and personnel.

BA 177 Payroll Records & Accounting . . . . . 3 credits
(Fall & Spring Terms) . . . . . 3 class hrs/wk
Prerequisite: Accounting 1 2.110 or Principles of Accounting BA 211. Provides practice in all payroll operations, the recording of accounting entries involving payroll, and the preparation of payroll tax returns that are required of business.

BA 198 Independent Study . . . . . (variable) 1-3 credits
(All Terms) . . . . . 2-6 hrs/wk
This course features an individualized format for the student who desires to pursue in-depth study in a variety of topics related to business. Emphasis is placed on individualized instruction and research projects. Independent Study BA 198 is available in Management and Real Estate.

BA 206 Management Fundamentals . . . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
A survey approach to the broad fundamental principles of management as a basic framework for managerial thinking and operating. A study of organizational structure and factors which contribute to organizational interaction and human behavior conflicts.

BA 209 Microcomputer: Accounting Applications . . . . . (variable) 1-6 credits
(See Term Schedule) . . . . . 1 class hr/wk per credit
Prerequisite: One quarter of accounting or instructor consent. This course is a case study in the individualized components of a computerized accounting system. Individual modules are available in areas such as general ledger, accounts receivable, accounts payable, payroll, and inventory. Attention will be given to financial reports including cash and capital budgets.

BA 211 Principles of Accounting . . . . . 3 credits
(All Terms) . . . . . 3 class hrs/wk
Introduction to the field of accounting; account construction; preparation of financial statements; application of accounting principles to practical business problems; proprietorship studies from standpoint of single owner, partnership, and corporation.

BA 212 Principles of Accounting . . . . . 3 credits
(All Terms) . . . . . 3 class hrs/wk
Prerequisite: Principles of Accounting BA 211. The second course in the accounting sequence is designed to prepare the student for some of the more complex accounting problems encountered in the business community. Specifically, units are included on inventory valuation, liabilities, depreciation, accounting theory, and the analysis of financial statements.

BA 213 Principles of Accounting . . . . . 3 credits
(All Terms) . . . . . 3 class hrs/wk
Prerequisites: Principles of Accounting BA 211, 212. This course is primarily concerned with the measuring and control of costs and the analysis and interpretation of accounting data for making appropriate decisions. Much emphasis is placed on determining cost behavior patterns, particularly relevant cost concepts, break-even analysis, target income considerations, the pricing model, make or buy decisions, and limiting factors. Included is a special section on budgeting and planning, which consists of preparation of the master budget, forecasting models, flexible budgets, variance analysis, setting budget standards and control systems. The course concludes with coverage of capital budgeting, the discounted cash flow model, sensitivity analysis, the net present value concept, and the inclusion of income taxes and inflation adjustments to cash flow problems.

BA 214 Business Communications . . . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
Prerequisites: Business English 1 1.120 and 2 1.122 or English Composition Wr 121 and Composition: Style Wr 122, or by consent of instructor. Practice in writing letters and memoranda. Study of mechanics, principles, tone, and effectiveness to achieve desired results. Students will write a formal report and give an oral presentation. Study and/or practice in the employment process: application letters, resumes, and interviewing.

BA 215 Basic Cost Accounting . . . . . 4 credits
(Spring Term) . . . . . 3 class, 3 lab hrs/wk
Prerequisite: Accounting 1 2.110 and 2 2.111 or Principles of Accounting BA 211 and BA 212. Analyzing methods of detailed and specific identification of cost elements within the business enterprise. Of particular concern are job order, process, and standard cost accounting data, and the use of budgets and performance reports as they relate to cost accounting.

BA 218 Personal Finance . . . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
Savings and investment opportunities available to the American consumer. Emphasis on personal budgets, real estate ownership, wise use of consumer credit, credit institutions, personal investing, social security, stock market, and mutual funds. The course is designed for nonbusiness, vocational, or college transfer students and for business students who wish an additional course dealing primarily with personal financial problems.

BA 220 Tax Accounting . . . . . 3 credits
(Winter Term) . . . . . 3 class hrs/wk
The various tax forms and accounting methods are studied. Emphasis is placed on studying and preparing income taxes for individuals, with some discussion of business problems.

BA 221 Production . . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
An introductory analysis to allocation of productive resources, i.e., capacity, control, authority, productivity, and facilities. Introduction to the operating principles of production concepts of energy management, OSHA, and safety. Production techniques introduced are relevant to many types of industries including service organizations such as hospitals.

BA 222 Finance . . . . . 3 credits
(Winter & Spring Terms) . . . . . 3 class hrs/wk
Prerequisite: Principles of Accounting BA 211, BA 212. This course provides students with an understanding of typical financial problems encountered by business organizations, and an awareness of various financial tools for solving those problems. Covered in the course are units on financial goal establishment, analysis and planning, working capital management, and capital budgeting.

BA 223 Marketing . . . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
Role of marketing in our socio-economic system. Emphasis upon market problem-solving and decision-making required by management. Sales promotion critically analyzed and promotional methods evaluated. The course is designed as a background course for those students specializing in marketing and for those students in business and other divisions who will be taking only one course in the field. Both groups are provided with comprehensive treatment of marketing as it operates in American industry today.

BA 224 Personnel Administration . . . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
Analysis of selected personnel problems. Special attention is given to human behavior, employment, employee development, performance appraisal, wage and salary administration, deployment and job rights, discipline and due process, and labor-management relations.

BA 226 Business Law . . . . . 3 credits
(All Terms) . . . . . 3 class hrs/wk
The framework of the law as it affects the business world; how the law operates and is enforced in business. The course is valuable to both the business and nonbusiness student because of its emphasis on practical aspects of the framework of the law and its relation to society and business.

BA 227 Law of Business Transactions . . . . . 3 credits
(Spring Term) . . . . . 3 class hrs/wk
A survey of the application of the Uniform Commercial Code in the study of legal rules and principles which constitute the framework of law as it relates to business decisions. Major emphasis is on decision-making for the small business manager involving personal property, sales, insurance, partnership and corporate creation and termination, and real property. The situation problem-solving approach is employed to provide prospective business students an opportunity to determine applicable legal principles.

BA 232 Introduction to Business Statistics . . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
Prerequisite: Intermediate Algebra Mth 100 or College Algebra Mth 101. This course will explore statistical techniques which are useful in business presentations and managerial decision making.

BA 233 Marketing Research . . . . . 3 credits
(Winter Term) . . . . . 3 class hrs/wk
Examination of the different types of markets that exist in our economy, how these markets may be identified, the analysis and preparation of products for presentation, and the analysis of projected and perceived product and brand images.

BA 238 Selling . . . . . 3 credits
(Fall & Spring Terms) . . . . . 3 class hrs/wk
Roles of sales as an integral part of the total marketing function. The application of selling to the behavioral science is included, with special emphasis on sales psychology, sales techniques, and the fundamental principles of sales communications.

BA 239 Advertising . . . . . 3 credits
(Winter Term) . . . . . 3 class hrs/wk
Detailed examination of the purposes, preparation, placement, and analysis of the various types of advertisements within each of the media such as television, radio, and the newspaper. The relative merits of several media are then explored. The course involves practice in the planning and analysis of complete advertising campaigns and their coordination with other marketing strategies.

BA 242 Investments . . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
Investment alternatives available to the private investor. Units covered include the determination of investment objectives, the establishment of a sound individual program and portfolio, the selection and analysis of corporate securities, and the securities markets and their operation. Includes units on options, tax planning and the commodity markets.

BA 249 Retailing . . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
A study of retail strategy and structure. A management approach is utilized with emphasis on the role of the supervisor involved with day-in and day-out tasks of getting retail work done. Special emphasis is placed upon details of the job and how to prepare for any eventuality.

BA 250 Small Business Management . . . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
Role, organization, and operation of small business in the American society. Emphasis upon the spirit of free enterprise and problems of the small merchant in meeting competition.

BA 251 Office Management . . . . . 3 credits
(Fall & Spring Terms) . . . . . 3 class hrs/wk
Discussion and application of principles and practices of office management, including employee behavior and motivation, communication skills (including listening), effective work practices and environment, ergonomics, modern office management techniques and theories, laws, benefits, problems, systems, budgets, and productivity.

BA 255 Supervisory Management . . . . . 3 credits
(Fall Term) . . . . . 3 class hrs/wk
Analysis of problems common to the first-line supervisor. Intensive study of selected issues, including management functions, motivation, training, control, leadership, communication, evaluation, discipline, and organizational behavior.

BA 265 Real Estate Office Management and Supervision of Sales Personnel . . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
Prerequisites: Real Estate Law 1 BA 287, Real Estate Finance 1 BA 288, and Real Estate Practice 1 BA 289. This course is a survey of the methods for establishig and operating a small real estate office and the supervision of the activities of sales personnel in this office. Emphasis is placed upon operation and selection and training of personnel in a small real estate office.

BA 269 Inside Commercial Banking . . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
An introductory course in banking for other financial courses involved in the banking process. The course is a survey of all aspects of full service banking. It serves as an introduction to the diversified services offered by the banking industry.

BA 270 Money and Banking . . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
This course discusses ways financial institutions can best meet the needs of society. This course seeks answers to how the financial institutions operate today, why they have been modified to their present forms, and what we have accomplished by these changes.

BA 271 Analyzing Financial Statements . . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
This course is organized into two main sections: Characteristics of financial statements and financial statement analysis. The first section reviews basic accounting principles. The second section examines the various parts of the financial statements.

BA 273 Marketing for Bankers . . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
This course discusses the basis of public relations, both internal and external, and seeks to explain the why, the what, and some of the how of public relations and marketing. It is intended as an overview for all bankers seeking knowledge of bank public relations and marketing.

BA 274 International Banking . . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
The course is an introduction to a vast field of subjects for those working in international departments, as well as those involved in the domestic activities of banks. The course presents the basic framework and fundamentals of international banking: the transferring of money from one country to another, financing trade, identifying internal agencies and ways they supplement the work of commercial banks, and the changing of money from one currency to another.

BA 275 Bank Management . . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
This course is specifically designed to aid the student in developing managerial skills. New trends which have emerged in the philosophy and practice of bank management will be presented. The study and application of the principles outlined provide new and experienced bankers with a working knowledge of bank management.

BA 281 Consumer Lending . . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
In this course, the techniques of installment lending are presented concisely. Emphasis is placed on establishing the credit, obtaining the checking information, servicing the loan, and collecting the amounts due. Each phase of a bank's installment credit operation is carefully scrutinized. Other topics discussed are inventory financing, special loan programs, business development and advertising, and the public relations aspect of installment lending.

BA 285 Introduction to Real Estate . . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
This course is a general overview of the major factors involved in the purchase, sale, lease, or exchange of real estate. Emphasis is placed on the following phases of real estate: law, appraisal, brokerage, finance, escrow, investment, construction/development, property management, and taxation.

BA 286 Practical Supervision . . . . . 2 credits
(See Term Schedule) . . . . . 2 class hrs/wk
This course is designed to improve the effectiveness of the first-line supervisor in managing the day-to-day problems and situations in the workplace. The focus is on clarity in understanding and communicating.

BA 287 Real Estate Law 1 . . . . . 3 credits
(Fall & Spring Terms) . . . . . 3 class hrs/wk
This course is a survey of Oregon real estate law as it applies to the ownership, use, and transfer of real property. Emphasis is placed on basic real property law, legal descriptions, landlord/tenant relationships, transfer of title, real estate contracts, encumbrances, title insurance, recordation, taxes, assessments, and land use controls. It is intended for the student planning to obtain a real estate salesperson's license.

BA 288 Real Estate Finance 1 . . . . . 3 credits
(Fall & Winter Terms) . . . . . 3 class hrs/wk
This course is a survey of the methods of financing the acquisition of real property. Emphasis is placed on lending laws, the mortgage market, financing documents, foreclosures, governmental loan programs, non-governmental loan programs, appraisals, mathematical calculations, taxation, and other methods of financing. It is intended for the student planning to obtain a real estate salesperson's license.

BA 289 Real Estate Practice 1 . . . . . 3 credits
(Winter & Spring Terms) . . . . . 3 class hrs/wk
This course is a survey of the procedures involved in the listing, selling, and closing of residential property. Emphasis is placed on agency relationships, the Oregon Real Estate License Law (ORS 696), listing agreements, purchase agreements, client trust accounts, neutral escrows, co-op transactions, closing procedures, codes of ethics, professional organizations, and related real estate activities. It is intended for the student planning to obtain a real estate salesperson's license.

BA 290 Real Estate Appraisal . . . . . 3 credits
(Spring Term) . . . . . 3 class hrs/wk
This course is a survey of the methods of appraising real estate. Emphasis is placed on the appraisal process, definition of the appraisal problem, the appraisal plan, data collection, the market approach to value, the cost approach to value, the income approach to value, correlation of estimates, and writing the appraisal report.

BA 296 Real Estate License Review and Preparation . . . . . 3 credits
(Spring Term) . . . . . 3 class hrs/wk
Prerequisites: Real Estate Law 1 BA 287, Real Estate Finance 1 BA 288, and Real Estate Practice 1 BA 289. A comprehensive summary of all real estate information covered on the real estate salesperson licensing exam in the state of Oregon, this course will prepare/review the student to take the exam after having completed the required preparation classes of real estate law, finance, and practice.

BA 297 Real Estate Investments . . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
A survey of the decisions made by a real estate investor. Emphasis is placed on benefits of a real estate investment, analysis of return, selecting a proper investment strategy, acquisition management, divesting and reinvesting.

BA 298 Real Estate Exchange and Taxation . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
This course is a survey of income taxation as it relates to the ownership and transfer of investment real estate. A detailed study of the process and documentation necessary to complete a real estate exchange (both taxable and tax deferred).

BA 299 Business Trends . . . . . (variable) 1-3 credits
(See Term Schedule) . . . . . 1-3 class, or 3-9 lab hrs/wk
This course is a seminar on current changes or trends within the business environment. The content will vary from term to term and offering to offering, but will emphasize topics on finance, management, insurance, personnel, data processing, banking, real estate, taxation, investment, securities, etc. See current LCC class schedule for courses offered under Business Trends BA 299.

OA 101 Professional Development . . . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
This class is designed to introduce students to Office Administration offerings and programs, to explore effective human relations strategies, to build self esteem and image (the look of success), to define and encourage professional development of career choices, to enhance public relations skills including use of telephone, verbal and nonverbal media, and to introduce computer and office technology to students as the groundwork for successful completion of other more advanced courses in the Business Department.

OA 111/2.105 Gregg Shorthand 1 . . . . . 3 credits
(Fall Term) . . . . . 1 class, 4 lec/lab hrs/wk
Introduction to all the basic theory of Gregg Series 90 Shorthand, including the alphabet, brief forms, phrasing and abbreviating principles. Transcripts will be produced in handwritten form.

OA 112/2.106 Gregg Shorthand 2 . . . . . 3 credits
(Winter Term) . . . . . 1 class, 4 lec/lab hrs/wk
Prerequisite: Gregg Shorthand 1 OA 111/2.105 or equivalent, and 40 wpm. Review of Gregg Shorthand Series 90 theory and principles. This course will develop the students' ability to construct outlines for unfamiliar words under the stress of dictation. This course will also extend the students' knowledge of basic non-shorthand elements of transcription and will introduce typewritten transcription stressing the mailabilty of the document.

OA 113 Gregg Shorthand 3 . . . . . 3 credits
(Spring Term) . . . . . 1 class, 4 lec/lab hrs/wk
Prerequisite: Gregg Shorthand 2 OA 112/2.106 or equivalent, amd 60 wpm. An advanced course designed to train students for production work. A good deal of the course will be spent developing students' dictation speed to the highest point possible. The course will teach the students to handle simple problems of office-style dictation and will include dictation from specialized areas such as education and banking. Emphasis is on producing mailable copy that can be used by employers.

OA 114/2.108 Speedwriting 1/Briefhand . . . . . 3 credits
(Winter & Spring Terms) . . . . . 3 class hrs/wk
An alphabetic system of notetaking for vocational or personal use. Introduction of theory of personal shorthand, including basic rules, phonetic abbreviations, and brief forms. Development of dictation and transcription skills.

OA 120/2.501 Keyboarding . . . . . (variable) 1-3 credits
(All Terms) . . . . . 1 class, 2 lec/lab, 3 lab hrs/wk
Prerequisite: No previous typing/keyboarding instruction. Introduction to the keyboard utilized on typewriters, microcomputers, and word processors; mastery of the alphabetic and numeric keyboard emphasizing the touch system. Introduction to basic formatting.

OA 121/2.101 Formatting 1 . . . . . (variable) 1-3 credits
(All Terms) . . . . . 1 class, 2 lec/lab, 3 lab hrs/wk
Prerequisite: 20 wpm with 6 or fewer errors on a 3-minute timed writing. Introductory course in formatting business documents such as centering activities, reports, correspondence, and tables. Word processing will be on microcomputers.

OA 122/2.102 Formatting 2 . . . . . 3 credits
(All Terms) . . . . . 1 class, 3 lec/lab, 3 lab hrs/wk
Prerequisites: Formatting 1 OA 121/2.101 and 45 wpm on a 3-minute timing. Preparation of business reports, letters, tabulated materials, business forms, and advance materials including arrangement of problems with minimum instruction. This course work will include advanced word processing techniques on microcomputers.

OA 124/2.109 Keyboard Skillbuilding . (variable) 1-3 credits
(All Terms) . . . . . 1 class, 2 lec/lab, 3 lab hrs/wk
Prerequisite: Typing with 20 wpm on a three-minute writing. This course will provide growth in typing speed and improvement in accuracy level through individual student skill assessment, prescribed drill work, and a review of typing production work.

OA 131 Legal Secretarial Procedures 1 . . . . . 4 credits
(Winter Term) . . . . . 3 class, 2 lec/lab hrs/wk
Prerequisite: Typing 50 wpm or instructor consent. This course introduces the student to the law office, to the courts, and to the law library; ethics and duties of the legal secretary; familiarization with national, state, and local professional organizations; qualifications, duties, and responsibilities of a notary public; the purpose, the form, and the disposition of selected non-court documents operative in Oregon; practice given in office-style legal dictation and transcription as it pertains to non-court documents and legal correspondence.

OA 132 Legal Secretarial Procedures 2 . . . . . 4 credits
(Spring Term) . . . . . 3 class, 2 lec/lab hrs/wk
Prerequisite: Legal Secretarial Procedures 1 or instructor's consent. As an extension of Legal Secretarial Procedures 1, the course emphasizes the legal fundamentals, purposes, form, and disposition of court documents as they apply to specialized legal fields operative in Oregon. Specialized areas will consist of personal injury, dissolutions, probate, guardianships, bankruptcy, criminal, worker's compensation, and the like. Practice given in office-style legal dictation and transcription as it pertains to court documents and court procedure.

OA 133/2.133 Legal Secretarial Procedures 3 . . 3 credits
(Spring Term) . . . . . 1 class, 2 lec/lab, 3 lab hrs/wk
Prerequisites: Legal Secretarial Procedures 1 OA 131 and 2 OA 132, Formatting 2 OA 122/2.102, or instructor consent. As an extension of Legal Secretarial Procedures 1 and 2, the course is designed to give students knowledge and application of legal procedures and formatting using word processing.

OA 214 Shorthand Skill Building . . . . . 3 credits
(See Term Schedule) . . . . . 1 class, 4 lec/lab hrs/wk
Prerequisite: Knowledge of Gregg Shorthand theory and typing speed of 32 wpm. This course will provide students who have been away from shorthand for awhile, or who require additional practice before progressing to more advanced levels, an opportunity to review all the basic theory principles. Students will renew knowledge of phrasing, practice writing shorthand that can be easily read (fluency and proportion), and review all the brief forms that are so important in rapid writing. It will provide a dictation program that will further enhance or maintain the ability to take verbatim office dictation and to transcribe that dictation in a usable form.

OA 220/2.522 Business Machines: Calculators . . . . . (variable) 1-3 credits
(All Terms) . . . . . 3 class hrs/wk
Prerequisite: Business Mathematics BA 103/2.206 or instructor consent. This course provides the student the opportunity for intensive practice on the basic operations of the electronic calculator. Business math principles are applied in solving problems through the use of electronic calculators. Use of a computer may be incorporated.

OA 225/2.532 Machine Transcription . . . . . 3 credits
(All Terms) . . . . . 2 class, 2 lec/lab hrs/wk
Prerequisites: Typing 45 wpm and Business English 1 1.120 and 2 1.122. This course will provide students an opportunity to learn to operate a transcribing machine and to practice transcribing material in mailable form. Students apply grammar, punctuation, spelling, formatting, and proofreading skills. Students are introduced to dictation equipment and procedures found within the electronic office and choose some of the materials from various career fields.

OA 240/2.508 Records Management . . . . . 3 credits
(All Terms) . . . . . 3 class hrs/wk
This course covers the rules and principles of indexing and filing, establishing and maintaining filing systems and training in methods of alphabetical, numerical, subject, geographic, and chronological filing. It also includes an introduction to special-purpose records, microforms, mechanical and automated retrieval systems, organization of records management programs, and control of record systems.

Apparel Merchandising and Interiors

9.180 Introduction to Interior Decorating . . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
This class is designed to help individuals solve decorating problems in a practical, functional, and aesthetically pleasing manner. The course will be an active one, with students working on projects and exercises that will allow identifying decorating problems and then solving them. The course deals with interior design as a career choice, color, buying furniture, city and country antique furniture styles, and use of space.

9.181 Interior Decorating Materials . . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
Interior Decorating Materials is designed to help individuals select practical, functional, and aesthetically pleasing furnishings. The course will be an active one, with students working on projects and exercises that will allow identifying decorating problems and then solving them. The course deals with floors, windows, lighting, walls, art, and accessories.

CT 210 Clothing Construction . . . . . 3 credits
(See Term Schedule) . . . . . 2 class, 3 lab hrs/wk
Basic course in college sequence. Principles of selection of pattern, fabrics, and notions; use of equipment and management of time; basic construction techniques including fabric preparation, marking, making and attaching collars, sleeves, facings, and waistbands, bound or piped buttonholes; zipper applications; pattern alterations and basic fitting points of a dress and pants. Student will use different fabrics to construct garments. Open to majors and non-majors.

CT 211 Clothing and Culture . . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
Historical, sociological, psychological, aesthetic and economic factors affecting the selection of clothing. Basic principles of selection of clothing for individuals including line, texture, color, and their effect in relation to the basic figure types and face shapes.

CT 226 Fashion Merchandising: Apparel Evaluation . . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
This course provides for an analysis and evaluation of garment components (fabrics, construction methods, sizing and fit) of men's, women's, and children's apparel. A comparison of the processes involved in the production of ready-to-wear and custom made garments is included.

CT 250 Textiles . . . . . 3 credits
(See Term Schedule) . . . . . 4 class hrs/wk
Fibers, yarns, and fabrics of today, including their basic properties, identification, selection, fabric finishes, application of color, both woven and knitted fabrics. Students learn to evaluate fabrics and what to expect from them, as well as how to care for them for maximum performance.

CT 298 Independent Study: Clothing . . . . . 1-3 credits
(See Term Schedule) . . . . . 2-6 hrs/wk
Independent study in an advanced area of clothing construction or clothing behavior research. The course is designed to give the student an opportunity to examine an area of interest in more detail.

FRM 120 Personal Money Management . . . . . 1 credit
(See Term Schedule) . . . . . 1 class hr/wk
Development of skills to manage personal money. Analysis of income, expenses, and goals to develop a plan which reflects financial realities.

SSC 250/2.150 Consumer Education . . . . . 1-5 credits
(See Schedule) . . . . . 4-20 lab hrs/wk
Consumer Education is an open-ended, variable credit (1-5) course which provides a survey of the field of consumerism and is available to both vocational (2.150) and college transfer (SSc 250) students. It is divided into 30 equal modules with similar activities centered around a 30-minute audio-visual presentation. The modules are sequentially organized so that each follows the other logically within each of six general areas: planning, buying, financing, protecting, investing, and sharing.

Data Processing

The Data Processing Department provides three instructional programs. Two-year associate of applied science degree programs are designed to prepare students for jobs as computer programmers or as computer operators. A one-year certificate program is offered to prepare specialists in developing and implementing information systems on microcomputers.

The department also offers service courses in computer literacy, microcomputer software tools, and computer programming to students in other fields of study, as well as courses that transfer to a four-year college or university.

Data Processing Courses

2.617 Data Processing Computer Operations 1 . 5 credits
(Winter Term) . . . . . 3 class, 6 lab hrs/wk
Prerequisite: Second-year standing and department permission. The course provides hands-on experience to prepare the computer for processing, to operate a console device, and to operate peripheral equipment to complete processing tasks. Students experience the complete processing of an entire task through the computer system.

2.618 Data Processing Computer Operations 2 . 5 credits
(Spring Term) . . . . . 3 class, 6 lab hrs/wk
Prerequisite: Data Processing Computer Operations 1 2.617 and department permission. This is the second course in computer operations in a mainframe environment. Topics include input/output processing, quality controls and production controls. Handling of documentation, output, and data files on various media are also emphasized.

CS 110 Introduction to Microcomputers: Spreadsheet Applications . . . . . 3 credits
(All Terms) . . . . . 2 class, 2 lec/lab hrs/wk
This course provides an introduction to microcomputers, their capabilities, operation, and software. Students engage in hands-on use of an electronic spreadsheet to illustrate problem-solving on microcomputers.

CS 111 Microcomputer Database Applications . . 3 credits
(Fall & Winter Terms) . . . . . 2 class, 2 lec/lab hrs/wk
Microcomputer Database Applications is a study of the application of a database software package to problem-solving. It introduces frequently used features in a database system, including creating, editing, searching and sorting, and report preparation. Techniques for evaluating and selecting a database program are discussed. The dBASE III + program has been used recently as the target software (contact the department for changes).

CS 112 Microcomputer Integrated Systems Applications . . . . . 3 credits
(Spring Term) . . . . . 2 class, 2 lec/lab hrs/wk
Prerequisites: Microcomputer Spreadsheet Applications CS 110 or Microcomputer Database Applications CS 111, or instructor's

permission. This course covers the steps necessary to implement a microcomputer software system: needs analysis, hardware selection, software specifications and selection, and systems implemementation. It provides practical experience with an integrated microcomputer software package.

CS 121 Concepts of Computing . . . . . 3 credits
(All Terms) . . . . . 2 class, 2 lec/lab hrs/wk
This course introduces a wide range of computer and data processing concepts. It is intended as a first course for data processing majors and for others interested in a general survey of the computer field.

NOTE: An optional hands-on lab for one additional credit is offered as Special Studies in Computing CS 199. The one-credit lab option provides an easy, hands-on introduction to several typical programs used on personal computers.

CS 131 Introduction to Computer Information Processing . . . . . 4 credits
(See Term Schedule) . . . . . 3 class, 3 lab hrs/wk
Students will learn the basic principles of computer data processing, including hardware and software capabilities, and applications of computers to business problem-solving. Business software packages, including word processor, spreadsheet, and data manager, are introduced to provide hands-on experience.

CS 133 Beginning Programming . . . . . 4 credits
(All Terms) . . . . . 8 lec/lab hrs/wk
An introduction to problem analysis and programming to solve computation problems is provided. The course is intended as an introduction to programming for those with little or no previous experience. The language used varies and is selected from BASIC, FORTRAN, C, and others. Programming and operations majors should select the BASIC language version of CS 133.

CS 198 Independent Study: Computer Information Processing . . . . . (variable) 1-3 credits
(All Terms) . . . . . 6 lec/lab hrs/wk
Prerequisite: Beginning Programming CS 133 or equivalent knowledge and instructor's consent. The course allows students to undertake independent study of an area of special interest in the computer field. A contract between the student and instructor defines the learning objectives for the course.

CS 199 Special Studies in Computing . (variable) 1-5 credits
(See Term Schedule) . . . . . 1-5 class,
or 2-10 lec/lab,
or 3-15 lab hrs/wk,
or any appropriate combination
Prerequisite: Department permission. Credits, hours, and topics will be arranged. Topics vary with the interests and needs of students. Typical subjects include microcomputer programming, microcomputer systems, programming languages, and modeling and simulation. Credit will be given based on the number of hours of completed lab work.

CS 201 Introduction to Computer Science 1 . . . 4 credits
(All Terms) . . . . . 3 class, 3 lab hrs/wk
This is an introductory course in structured programming methods. Topics include the structure of computers, problem-solving methods, algorithm design, elementary data structures, and an introduction to programming in Pascal and/or other languages.

CS 203 Introduction to Computer Science 2 . . . 4 credits
(Spring Term) . . . . . 8 lec/lab hrs/wk
Prerequisite: Introduction to Computer Science 1 CS 201. This course is a continuation of CS 201. Advanced data structures, pointers, recursive procedures, and advanced structure programming methods in Pascal are covered. It is intended primarily for students seriously interested in computer science.

CS 233 Advanced Programming . . . . . 4 credits
(All Terms) . . . . . 8 lec/lab hrs/wk
Prerequisite: Beginning Programming CS 133 or demonstrated competency at an equivalent level. Advanced Programming will present advanced ideas of numerical computation, programming, and problem analysis in an advanced computer language.

CS 235 Microcomputer Graphics . . . . . 4 credits
(See Term Schedule) . . . . . 8 lec/lab hrs/wk
Prerequisites: College Algebra Mth 101 and Beginning Programming CS 133, or equivalent experience. An introduction to graphics hardware and software capabilities is presented. The course covers drawing, moving, and changing two- and three-dimensional shapes and objects.

CS 241 Introduction to Business Data Processing . 5 credits
(Fall Term) . . . . . 4 class, 5 lab hrs/wk
Prerequisite: Second-year standing as a data processing major. An introduction to the COBOL programming language on a mainframe computer system is presented. Topics include program divisions, input/output processing, arithmetic operations, data files, and simple reports.

CS 242 Advanced Business Data Processing . . 5 credits
(Winter Term) . . . . . 4 class, 5 lab hrs/wk
Prerequisite: Introduction to Business Data Processing CS 241 and second-year standing as a data processing major. This is a continuation of CS 241. Topics include sort operations and report generation in COBOL, an introduction to RPG, and an introduction to a fourth-generation programming language.

CS 244 Introduction to Systems Analysis . . . . 3 credits
(Fall Term) . . . . . 3 class hrs/wk
Prerequisite: Second-year standing as a data processing major. Strategies and methods in the systems development process are introduced. Emphasis is on the structured design of information producing systems, including forms layout and control, record formats, decision tables, file organization and management, system control techniques, and documentation of procedures.

CS 245 Introduction to Operating Systems . . . . 4 credits
(Winter Term) . . . . . 3 class, 2 lec/lab hrs/wk
Prerequisites: Second-year standing as a data processing major and assembly language programming or equivalent experience. CS 245 is a study of the functions of supervisory systems, compilers and interpreters, job control language, and utility programs as used by applications programmers. It covers the creation and maintenance of program and data libraries and basic methods of programming systems generation.

CS 270 Programming Information Systems . . . . 5 credits
(Spring Term) . . . . . 3 class, 6 lab hrs/wk
Prerequisites: Second-year standing as a data processing major and Advanced Business Data Processing CS 242. Advanced programming methods with emphasis on business computer applications are covered. An opportunity to apply concepts and methods to a programming project is provided. Projects will be implemented primarily in COBOL; other languages may be arranged with the instructor.

CS 275 Database Program Development . . . . . 4 credits
(See Term Schedule) . . . . . 3 class, 5 lab hrs/wk
Prerequisite: Introduction to Business Data Processing CS 241 or equivalent programming experience. This is an introduction to the database environment. Included in the course are discussion and application of data structures, file organizations, database models, program and query development in a database environment, and database administration.

CS 278 Data Communications . . . . . 4 credits
(See Term Schedule) . . . . . 4 class, 2 lab hrs/wk
Prerequisites: Assembler Language Programming CS 290 or Microcomputer Assembly Language CS 291. This course is an introduction to data communication in distributed data processing systems. The course discusses the dynamic technology of transmitting, accessing and controlling data. It introduces several communications and networking strategies as well as applications of data communications.

CS 282 Expert Systems . . . . . 4 credits
(See Term Schedule) . . . . . 3 class, 5 lab hrs/wk
Prerequisites: Introduction to Computer Science 1 CS 201 and Introduction to Systems Analysis CS 244. This course will introduce the programming environment of expert systems. Students will learn the concepts of knowledge bases and knowledge engineering. Lab work provides hands-on-experience, using an expert system shell, and engineering prototype systems.

CS 290 Assembler Language Programming . . . 4 credits
(Spring & Summer Terms) . . . . . 3 class, 3 lab hrs/wk
Prerequisite: Introduction to Computer Science 1 CS 201. This is an introductory course in Assembler Language. Topics include data representation and manipulation, arithmetic operations, branching instructions, data editing, and simple input/output instructions.

CS 291 Microcomputer Assembler Language . . 4 credits
(See Term Schedule) . . . . . 3 class, 3 lab hrs/wk
Prerequisite: Beginning Programming CS 133 or an equivalent course. CS 291 is an introduction to assembler language for microcomputers. Topics include hardware, machine language, data representation, and programming in an assembler language. Lab work provides experience with instructions to perform arithmetic, disk input/output, and table look-ups.

Electronics

The Electronics Department offers an Associate of Applied Science degree in Industrial Maintenance, Electronics Technician, Electronic Engineering Technician, and Technical Drafting: Mechanical Emphasis/Architectural Emphasis.

Courses for the Industrial Maintenance program include refrigeration, heat pumps, electrical motors, motor and industrial control devices, and appliances.

The Electronics Technician program emphasizes two-way radio communication, computer troubleshooting, and repair, and troubleshooting of TV, VCR, stereos, etc..

The Electronic Engineering Technician program provides the basics for electrical engineering technology, offering digital micro-processing (applications), industrial instrumentation, and robotics. The math emphasis enables transfer to a technological college.

The Technical Drafting curriculum includes both machine drafting and architectural design. There is a strong emphasis on computer-aided drafting (2D - 3D), and strength of materials (wood, steel, and concrete).

Electronics Courses

1.300 CWE – Bio Med 1 . . . . . 2 credits
1.300 CWE – Bio Med 2 . . . . . 2 credits
1.300 CWE – Bio Med 3 . . . . . 2 credits
1.300 CWE – Bio Med 4 . . . . . 2 credits
1.300 CWE – Bio Med 5 . . . . . 2 credits
(Fall, Winter, & Spring Terms) . . . . . 36 hours/credit
Prerequisite: Third term in Electronic Engineering or Electronics Technician program. Introduction to troubleshooting of medical electronic instrumentation using visual, preventative maintenance (PM), metrology specifications, diagnostic and problem solving/logical strategies. Inclusive is exposure to the multi-departmental structures of the hospital/clinical arena of the biomedical profession.

4.103 Electrical Drafting . . . . . 2 credits
(Winter & Spring Terms) . . . . . 1 class, 2 lec/lab hrs/wk
Techniques required for the electrical and electronic fields. Charts, graphs; schematic, wiring and routing diagrams; location drawings.

3.471 Motor Control Devices . . . . . 2 credits
(Spring Term) . . . . . 2 class hrs/wk
Prerequisite: Motors 1 3.629. May be taken concurrently. This course provides instruction in ON-OFF controls, variable speed methods, motor reversing, motor steppers and clamping, and protective devices.

3.473 Opportunities in Electronic Technology . . 1 credit
(Fall Term) . . . . . 1 class hr/wk
A one-term overview of jobs available in electronic and electronic-related fields. Exposes the student to areas that otherwise might not have been considered.

3.474 Active Circuits 1 . . . . . 4 credits
(Winter Term) . . . . . 3 class, 3 lab hrs/wk
Prerequisite: Electrical Theory 1 6.229 or instructor consent. The first of a two-term sequence covering basic electronic circuits. Active Circuits 1 will introduce the student to semiconductor devices and explain their use in modern electronic equipment. The class will cover diodes and transistor circuits with emphasis on power supplies and amplifiers.

3.475 Active Circuits 2 . . . . . 4 credits
(Spring Term) . . . . . 3 class, 3 lab hrs/wk
Prerequisite: Active Circuits 1 3.474 or instructor consent. The second of a two-term sequence covering basic electronic circuits. Active Circuits 2 deals with more complex circuits such as multi-stage amplifiers using discrete components. The student is then introduced to integrated circuits as substitutes for discrete designs.

3.476 Understanding Microprocessors . . . . . 3 credits
(Fall Term) . . . . . 3 class hrs/wk
Prerequisite: First year Electronics program or instructor consent. A one-term course covering currently available microcomputer devices. This course covers the theory and operation of these small computers at the chip level.

3.477 Electronics Troubleshooting 1 . . . . . 4 credits
(Fall Term) . . . . . 3 class, 3 lab hrs/wk
Prerequisite: First year Electronics program or instructor consent. Second year class dealing with the repair of small computers and computer systems at board level. Lecture and lab with emphasis on high failure areas such as drives and power supplies.

3.478 Electronics Troubleshooting 2 . . . . . 4 credits
(Winter Term) . . . . . 3 class, 3 lab hrs/wk
Prerequisite: First year Electronics program or instructor consent. The second term of the troubleshooting sequence deals with the repair and maintenance of radio communications equipment. Lecture and lab stress proper maintenance, adjustment, and verification of performance to FCC standards.

3.479 Electronics Troubleshooting 3 . . . . . 5 credits
(Spring Term) . . . . . 3 class, 6 lab hrs/wk
Prerequisite: First year Electronics program or instructor consent. This is the third of a three-term sequence relating to the repair of electronic equipment. Troubleshooting 3 deals with the service and maintenance of consumer and industrial equipment including audio and audio tape, video and videotape, radio, and television.

3.480 Hardware Computer Systems (Interfacing and Input/Output) . . . . . 4 credits
(Fall Term) . . . . . 3 class, 3 lab hrs/wk
Prerequisite: First year Electronics program or instructor consent. A one-term course covering input/output equipment. The serial and parallel interconnection of peripheral devices such as modems and printers.

3.481 Radiotelephone and Communications Equipment . . . . . 4 credits
(Winter Term) . . . . . 3 class, 3 lab hrs/wk
Prerequisite: First year Electronics program or instructor consent. A one-term second year level course covering radio communications systems including data communication, land mobile, paging, trunking, and cellular telephone.

3.482 Radiotelephone Operator Preparation . . . 3 credits
(Winter Term) . . . . . 3 class hrs/wk
Prerequisite: First year Electronics program or instructor consent. A one-term course designed to acquaint the student with the rules and regulations that govern the operation of federally licensed equipment.

3.483 Consumer Electronic Systems . . . . . 3 credits
(Spring Term) . . . . . 3 class hrs/wk
Prerequisite: First year Electronics program or consent of instructor. A one-term second year class covering the systems and subsystems found in various types of consumer electronic equipment including audio, videotape, radio, and television.

3.484 Senior Seminar — Electronic Technician . . 2 credits
(Spring Term) . . . . . 1 class, 3 lab hrs/wk
Prerequisite: Second year Electronics program or instructor consent. This course is for the student who is completing the last part of their training and is preparing to enter the electronics job market. Senior Seminar-Electronic Technician will help to ready the student for an effective job search in today's competitive market.

3.485 Customer Relations for Technicians . . . . 2 credits
(Spring Term) . . . . . 1 class, 3 lab hrs/wk
This course is designed for technicians who are directly involved in field services, customer services, and interface with sales/service related industries. The class involves lecture, guest business/industrial representatives, and role playing in simulated service/customer/business transactions.

3.486 IS: Electronics Technician
3.640 IS: Industrial Maintenance
6.243 IS: Electronic Engineering Technology . . . 3 credits
(All Terms)
An independent 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.

3.600 Major Appliance Service 1 . . . (variable) 1-5 credits
(Winter Term) . . . . . 5 class hrs/wk

3.601 Major Appliance Service 1 Lab . (variable) 1-8 credits
(Winter Term) . . . . . 20 lab hrs/wk
Prerequisite: Shop Practices for Electronics 4.921 and Introduction to Electronics 6.193 or equivalent. Work with mock-ups of appliance components to gain familiarity with their characteristics and operation. Troubleshooting, repairing components. Introduction to modern home appliances.

3.606 Refrigeration and Air Conditioning 1 . . . . . (variable) 1-5 credits
(Fall Term) . . . . . 5 class hrs/wk

3.607 Refrigeration and Air Conditioning 1 Lab . . . . . (variable) 1-8 credits
(Fall Term) . . . . . 16 lec/lab hrs/wk
Principles of refrigeration. Use of hand tools and their care, bending and flaring of copper tubing, silver soldering, theory of compressors, uses of gauges and manifold assemblies.

3.621 Heat Pumps (Reverse Cycle Refrigeration) . 2 credits
(Winter Term) . . . . . 2 class hrs/wk
Prerequisite: Completion of first two terms of refrigeration or consent of instructor. Planned to provide students in domestic refrigeration classes with a basic understanding of reverse-cycle refrigeration (heat-pump) units that are in expanded use for home heating in winter and cooling in summer because of their energy effectiveness. Since such heat-pumps are actually specialized refrigeration systems, the course will deal largely with such factors as efficiency, heat sources, and installation problems.

3.622 Heat Pumps Lab (Reverse Cycle Refrigeration) . . . . . 1 credit
(Winter Term) . . . . . 2 lec/lab hrs/wk
Prerequisite: Completion of first two terms of refrigeration or consent of instructor. Hands-on basic operation and understanding of reverse cycle refrigeration (working with mock-ups); a study of installation; a study of each component of the basic system.

3.625 Introduction to Appliance-Refrigeration . . 2 credits
(Fall Term) . . . . . 2 class hrs/wk
Introduction to Appliance-Refrigeration will enable the student to compare the different theories of operation (mechanical and electrical) of major appliances. Basic theory on automatic washers, dryers, ranges, dishwashers, refrigerators, and motors will be covered so the student will have a working knowledge of basic repairs. This course will be lecture and demonstration.

3.626 Refrigeration1/Air Conditioning . . . . . 6 credits
(Fall Term) . . . . . 2 class, 8 lec/lab hrs/wk
Corequisites: Electrical Theory 1 6.229, Silver Brazing/Metal Joining 3.628, and Shop Practices for Electronics 4.921. This course is planned to provide the latest up-to-date information to the student regarding refrigeration systems, with a working knowledge of refrigerants and the necessary equipment. Hands-on instruction and practice. Complete study of diagnosing systems such as mechanical and electrical. Study of lubrications and how to recharge a system with refrigerant. How to properly test system after servicing.

3.627 Refrigeration 2/Air Conditioning . . . . . 5 credits
(Winter Term) . . . . . 2 class, 6 lec/lab hrs/wk
Prerequisite: Refrigeration 1/Air Conditioning 3.626. Refrigeration 2/Air Conditioning is a second year class dealing with the service and maintenance of HVAC-R equipment. Lecture and lab with emphasis on high failure parts and their replacement. This course is planned to provide advanced training in the HVAC-R equipment.

3.628 Silver Brazing/Metal Joining . . . . . 2 credits
(Fall Term) . . . . . 1 class, 3 lab hrs/wk
This course is planned to provide needed information for the student dealing with repairs and installation of HVAC-R equipment. Several methods of joining copper, steel, and brass tubing will be discussed, as well as different methods of joining metals for frames, covers, and cabinets of HVAC-R equipment. The art of silver brazing will be stressed, as well as the use of rivet gun, compression fittings.

3.629 Motors 1 . . . . . 3 credits
(Winter Term) . . . . . 2 class, 3 lab hrs/wk
Corequisites: Electrical Theory 1 6.229 and Shop Practices for Electronics 4.921. Discussion of the theory and practice underlying the operation of motors used in industry, home appliances, etc. Emphasis on the use of modern electronic test equipment in checking such motors, both in theory and servicing techniques, is stressed.

3.630 Motors 2 . . . . . 4 credits
(Fall Term) . . . . . 2 class, 6 lab hrs/wk
Prerequisite: Motors 1 3.629. This course is planned to give the student knowledge of how motors used in HVAC-R equipment operate, as well as troubleshooting problems.

3.631 Control Devices . . . . . 4 credits
(Winter Term) . . . . . 3 class, 3 lab hrs/wk
Prerequisites: Electrical Theory 1 6.229 and Shop Practices for Electronics 4.921. This course is planned to provide students with general information on the typical controls found in use in today's residential systems. Electromagnetic and thermostatic concepts are presented, and the understanding of principles and the knowledge of correct installation and troubleshooting are emphasized.

3.632 Ice Machines . . . . . 4 credits
(Spring Term) . . . . . 2 class, 4 lec/lab hrs/wk
Prerequisites: Refrigeration 1/Air Conditioning 3.626, Motors 1 3.629, and Control Devices 3.631. The purpose of this course is to provide information on the operation, preventative maintenance, and general service needed on ice machines in order for them to perform at maximum efficiency.

3.633 Furnaces/Ducting . . . . . 4 credits
(Spring Term) . . . . . 2 class, 4 lec/lab hrs/wk
Prerequisites: Motors 1 3.629 and Control Devices 3.631. This course is designed to provide the necessary facets of theory and the subject of comfort heating with gas, oil, electricity, and freon solar systems. Examples to help reinforce theory will be given.

3.634 Programmable Controllers . . . . . 4 credits
(Fall Term) . . . . . 3 class, 3 lab hrs/wk
Prerequisite: Control Devices 3.631. This course is planned to present current information on various mechanical, electrical, and water systems. Robotic controls will be explored as well.

3.635 Electric/Gas Appliances . . . . . 5 credits
(Winter Term) . . . . . 2 class, 6 lec/lab hrs/wk
Prerequisites: Electrical Theory 1 6.229, Motors 1 3.629, Motors 2 3.630, and Control Devices 3.631. This course is planned to give the student current information regarding service on electric/gas appliances. Different cycles of operation will be covered. Electrical and mechanical systems and installation information will be studied. The course will allow students to compare the different theories of operation (mechanical, electrical, and gas).

3.636 Industrial Preventative Maintenance . . . . 4 credits
(Spring Term) . . . . . 3 class, 3 lab hrs/wk
Prerequisites: Shop Practices for Electronics 4.921 and Electrical Theory 1 6.229. This course presents current information about industrial preventative maintenance. The intent is to present the most current findings, theories, and applications concerning their relationship. Specifically, it covers the needs for preventative maintenance.

3.637 Cryogenics . . . . . 5 credits
(Spring Term) . . . . . 2 class, 9 lab hrs/wk
Prerequisites: Refrigeration 1/Air Conditioning 3.626 and Refrigeration 2/Air Conditioning 3.627. This course is planned to provide the knowledge and understanding of the complexities of ultra-low temperature refrigerating machines, 35 degrees C. to minus 120 degrees C. Such machines are in use for biological storage, research, testing, reasoning, and other low temperature requirements. A study of Cascade refrigerating machines will be stressed.

3.638 Senior Seminar — Service Technician . . . 2 credits
(Spring Term) . . . . . 1 class, 3 lab hrs/wk
Prerequisites: Refrigeration 1/Air Conditioning 3.626 and Refrigeration 2/Air Conditioning 3.627. This course is for the student who is completing the last part of training and is planning to enter the industrial maintenance industry or become a service technician. The service technician practices and principles presented here are valid by research in the field, and more importantly, through actual experience. Established service techniques are based upon a real understanding of equipment, customer attitudes, and the ability to resolve problems that occur in most typical service situations. Obstacles and objectives are directly dealt with in this course and will help the student to achieve the knowledge and confidence needed to effectively handle service procedures and problems encountered in the typical maintenance service industry.

4.921 Shop Practices for Electronics . . . . . 1 credit
(Fall Term and on demand) . . . . . 3 lab hrs/wk
Basic hand and power tools use. Soldering techniques. Chassis construction. Safety procedures.

6.100 Reading & Conference . . . . . (variable) 1-3 credits
(All Terms) . . . . . 2-6 lab hrs/wk
A flexible course offering all students in electronics classes an opportunity for remedial, supplemental, and developmental training.

6.170 Advancement of Medical Instrumentation (AAMI) 1 . . . . . 2 credits
(Fall Term) . . . . . 2 class hrs/wk
Prerequisite: Second year in Electronics or Electronics Engineering Technician program. The Advancement of Medical Instrumentation (AAMI) 1 curriculum is the first in a series of classes designed to provide the review and test materials for biomedical technicians to successfully compete in the industry certification testing for biomedical electronics technician through the Association for the Advancement of Medical Instrumentation.

6.171 Advancement of Medical Instrumentation (AAMI) 2 . . . . . 2 credits
(Winter Term) . . . . . 2 class hrs/wk
Prerequisite: Second year in Electronics or Electronics Engineering Technician program. The Advancement of Medical Instrumentation (AAMI) 2 curriculum is the second in a series of classes designed to provide the review and test materials for biomedical technicians to successfully compete in the industry certification testing for biomedical electronics technician through the Association for the Advancement of Medical Instrumentation.

6.172 Biomedical Instrumentation . . . . . 4 credits
(Spring Term) . . . . . 3 class, 3 lab hrs/wk
Prerequisite: Second year in Electronics Engineering or Electronics Technician program. Biomedical Instrumentation will concentrate in the electronic circuitry, sensors and equipment utilized in the medical industries along with a layman understanding of the various human circulatory systems and service and maintenance phases that are performed on the associated equipment used in bio-medical applications.

6.190 Introduction to Digital Electronics . . . . . 3 credits
(Fall Term) . . . . . 3 class hrs/wk
Numbers systems. Gate functions. Boolean algebra. Timing and control writing and simplification of logic equations. Mechanization of logic: AND/OR, NOR, NAND. Loading limitations. Discussion of counters, registers, arithmetic circuits, and memories. Interfacing techniques, input-output devices, and digital-to-analog and analog-to-digital conversion.

6.193 Introduction to Electronics . . (variable) 1-4 credits
(Fall Term) . . . . . 4 class hrs/wk
Electron theory of matter. Concepts of voltage and current. Ohm's law, Kirchhoff's laws, series & parallel circuits, DC/AC, energy & power, magnetism, concepts of resistance, capacitance, inductance, and frequency.

6.194 Introduction to Electronics Lab . . . . . 1 credit
(Fall Term) . . . . . 2 lab hrs/wk
Experiments dealing with color codes—series, and parallel circuits — Ohm's law and Kirchhoff's laws.

6.198 Introduction to Robotics . . . . . 3 credits
(Fall Term) . . . . . 2 class, 2 lec/lab hrs/wk
Prerequisite: At least three credits in any of the following programs: Technical Drafting, Electronic Engineering Technician, Industrial Maintenance, or Manufacturing Technology, or departmental consent. Introduction to Robotics is designed as a layperson's exposure to automation using robotics; their characteristics, implementation in the workplace and general operational techniques.

6.201 Industrial Instrumentation . . . . . 3 credits
(Fall Term) . . . . . 2 class, 3 lab hrs/wk
Prerequisite: Second-year standing in the Electronic Engineering Technician program. This is a required course for the Electronic Engineering Technician program. The student is introduced to the sensing devices which provide input to industrial process control systems. The student makes use of the sensing devices to measure and display parameters in simple process monitoring circuits.

6.203 Advanced Circuit Analysis . . . . . 3 credits
(Winter Term) . . . . . 3 class hrs/wk
Prerequisite: Industrial Instrumentation 6.201. This is a required course for the Electronic Engineering Technician program. The student analyzes process control circuits with the aim of developing an independent ability to analyze circuits. The student associates abnormal circuit behavior with possible causes.

6.206 Digital Electronics 1 . . . . . 4 credits
(Fall & Winter Terms) . . . . . 3 class, 3 lab hrs/wk
Prerequisite: High school proficiency in the algebra of three variables. This is a required course for the Electronic Engineering Technician program directed to introduce the student to digital techniques with emphasis on number systems and arithmetic, elements of logic, analysis and synthesis of combinational logic circuits, implementation of logic circuits with state-of-the-art hardware, and exploration of integrated circuit logic families.

6.207 Digital Electronics 2 . . . . . 4 credits
(Winter & Spring Terms) . . . . . 3 class, 3 lab hrs/wk
Prerequisite: Digital Electronics 1 6.206. Primary emphasis in the use of MSI devices (multiplexers ALU-arithmetic, Encoders/Decoders and ROM devices). In addition, sequential circuits and their networking for synchronous operation of clocking circuits. TTL-CMOS and Schottky device characteristics are also covered.

6.208 Digital Electronics 3 . . . . . 4 credits
(Spring & Summer Terms) . . . . . 3 class, 3 lab hrs/wk
Prerequisite: Digital Electronics 2 6.207. This is a required course for the Electronic Engineering Technician program. This course will introduce the student to the industrial design LSI devices and system design and development. The student participates in design seminars and manages a small project through design, production, and test.

6.217 Linear Systems . . . . . 4 credits
(Spring Term) . . . . . 3 class, 3 lab hrs/wk
Prerequisite: Linear Circuits 2 6.248. An introduction to control system theory and the LaPlace Transform with emphasis on the graphical solution of transfer functions.

6.219 Switching and Wave Generation Circuits . 4 credits
(Fall Term) . . . . . 3 class, 3 lab hrs/wk
Prerequisite: Second-year standing in the Electronic Engineering Technician program. This course introduces the student to the complexities of signal switching and signal conditioning. It does so by combining the basic theory of passive devices and active devices into representative switching and waveforming circuits.

6.229 Electrical Theory 1 . . . . . 4 credits
(Fall & Winter Terms) . . . . . 3 class, 3 lab hrs/wk
Prerequisite: High school proficiency in the algebra of three variables and basic right triangle relationships. This course is the first course of a three-term sequence that covers electrical theory as it applies to the field of electronics. The basic units, vocabulary, and laws are explored in this first term.

6.230 Electrical Theory 2 . . . . . 4 credits
(Winter & Spring Terms) . . . . . 3 class, 3 lab hrs/wk
Prerequisite: Electrical Theory 1 6.229 or equivalent. This is the second term of a three-term sequence that covers electrical theory as it applies to the field of electronics. Basic transformer theory, network analysis techniques, time constants, and resonance are the topics to be introduced.

6.231 Electrical Theory 3 . . . . . 4 credits
(Spring & Summer Terms) . . . . . 3 class, 3 lec/lab hrs/wk
Prerequisites: Electrical Theory 1 6.229 and 2 6.230. Electrical Theory 3 continues the development of electrical theory developed in Electrical Theory 1 and 2. Passive circuit resonance and the application of resonance phenomena in frequency selective circuits are examined in detail. The course continues by introducing transformer theory and the use of transformers as circuit coupling devices. Other methods of circuit coupling are discussed. The final topic is a functional discussion of the basic elements of a dc power supply.

6.232 Robotics . . . . . (variable) 1-3 credits
(Spring Term) . . . . . 2 class, 2 lec/lab hrs/wk
Prerequisite: Second-year standing in Electronic Engineering Technician program. This is a required course for the Electronic Engineering program. The student is introduced to the robot and its capabilities. The student is also introduced to the various tasks required to make use of the robot, such as teaching the robot to perform.

6.237 Microprocessor Applications 1 . . . . . 4 credits
(Fall Term) . . . . . 3 class, 3 lab hrs/wk
Prerequisite: Second-year standing in Electronic Engineering Technician program. This is a required course for the Electronic Engineering Technician program. The student is introduced to microprocessor structure and usage. The student writes simple machine codes and demonstrates their execution.

6.238 Microprocessor Applications 2 . . . . . 4 credits
(Winter Term) . . . . . 3 class, 3 lab hrs/wk
Prerequisite: Microprocessor Applications 1 6.237. This course provides an introduction to the process of assembler for a central processing unit to memory and input/output devices with emphasis on proper timing, loading considerations, and diagnostics programming.

6.239 Microprocessor Applications 3 . . . . . 5 credits
(Spring Term) . . . . . 3 class, 6 lab hrs/wk
Prerequisite: Microprocessor Applications 2 6.238. Students are introduced to the process of interfacing various peripheral devices to the central processing unit, utilizing hardware and software techniques.

6.241 Logic Analyzer Techniques . . . . . 2 credits
(On Student Demand) . . . . . 1 class, 2 lec/lab hrs/wk
Prerequisite: Second-year standing in the Electronic Engineering Technician program or consent of instructor.An elective course covering digital logic analyzer functions, controls, and performance specifications. Synchronizing techniques, the instrument's limitations, and connections to the typical computer systems will be discussed and demonstrated. Included are sophisticated features such as internal storage of reference data and automatic comparison of two sets of data for finding intermittent computer hardware and software faults.

6.245 Semiconductor Devices 1 . . . . . 4 credits
(Winter & Spring Terms) . . . . . 3 class, 3 lab hrs/wk
Prerequisites: Electrical Theory 1 6.229 and concurrent enrollment in Electrical Theory 2 6.230. This course is the first course of a two-term sequence that covers the theory of solid-state semiconductor devices beginning with the applicable physics and continuing through integrated circuit semiconductor devices.

6.246 Semiconductor Devices 2 . . . . . 4 credits
(Spring & Summer Terms) . . . . . 3 class, 3 lab hrs/wk
Prerequisite: Semiconductor Devices 1 6.245. This course is the second course of a two-term sequence that continues the development of solid-state semiconductor devices which began in the previous course. Field-effect devices are discussed, followed by combining p-n junction theory and field-effect theory into integrated circuit devices.

6.247 Linear Circuits 1 . . . . . 5 credits
(Fall Term) . . . . . 3 class, 6 lab hrs/wk
Prerequisite: Second-year standing in Electronics Engineering Technician program. An introduction to linear circuits including simple voltage, power amplifiers, and operational amplifiers.

6.248 Linear Circuits 2 . . . . . 5 credits
(Winter Term) . . . . . 3 class, 6 lab hrs/wk
Prerequisite: Linear Circuits 1 6.247. A continuation of the study of linear circuits. This second term covers related power supplies, linear amplifiers, an introduction to feedback theory, active filters, and a brief introduction to circuits related to analog computers.

6.249 Visual Displays 1 . . . . . 3 credits
(Winter Term) . . . . . 2 class, 3 lab hrs/wk
Prerequisite: Second-year standing in the Electronic Engineering Technician program. The first term of a two-term sequence

in the study of electronic visual displays. This course covers the basic principles involved in various types of display.

6.250 Visual Displays 2 . . . . . 3 credits
(Spring Term) . . . . . 2 class, 3 lab hrs/wk
Prerequisite: Visual Displays 1 6.249. The second term of a two-term sequence in the study of electronic visual displays. This course covers character generation, multiplexing, drive circuit, and amplifiers for visual display systems.

GS 125/6.324 Air Conditioning Fundamentals . . 4 credits
(Fall Term) . . . . . 3 class, 2 lec/lab hrs/wk
Prerequisites: Fundamentals of Physics Ph 103/6.332, Electrical Devices and Distribution GS 133/6.333. An overview of the refrigeration cycle, HVAC system types, combustion and steady state, efficiency testing of oil and gas furnaces, air-duct design, psychrometrics, and energy-conserving retrofit options.

EE 213/6.233 Microcomputer Systems . . . . . (variable) 1-12 credits
(All Terms) . . . . . 3-36 lab hrs/wk
Prerequisite: Acceptance by department. Microcomputer Systems is an all-inclusive course to give students the opportunity to work in a simulated electronic company. Students may gain "real world" type experience in design, fabrication, integration, and testing of microcomputer sub-systems.

Technical Drafting Courses

4.103 Electrical Drafting . . . . . 2 credits
(Winter & Spring Terms) . . . . . 1 class, 2 lec/lab hrs/wk
Techniques required for the electrical and electronic fields. Charts, graphs; schematic, wiring and routing diagrams; location drawings.

4.110 Introduction to AutoCad . . . . . 4 credits
(All Terms) . . . . . 3 class, 3 lab hrs/wk
A technical drafting course designed to apply traditional drafting concepts toward computer-aided drafting practices. IBM microcomputers and AutoCad drafting software will be utilized in a laboratory environment to augment lecture material.

4.114 Architectural Measurement . . . . . 2 credits
(Winter Term) . . . . . 1 class, 3 lab hrs/wk
Corequisite: Architectural Design - Remodeling Arch 100. Fundamentals of architectural measurement and layout: basic land description, site topography, tape triangulation, and machine bearings.

4.116 IS: Technical Drafting . . . . . 3 credits
(All Terms)
Prerequisites: Introduction to Drafting: Basic Skills 4.152, Introduction to Drafting: Orthographic Projection 4.153, and Mechanical Drafting 1 4.121, and instructor approval. An independent 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.

4.118 Cartography . . . . . 4 credits
(Spring Term) . . . . . 2 class, 4 lec/lab hrs/wk
Prerequisites: Introduction to Drafting: Basic Skills 4.152, Introduction to Drafting: Orthographic Projection 4.153, and Mechanical Drafting 1 4.121. Elementary mapping; government system, independent grids, metes and bounds. Map reproduction copying, tracing, materials, inking, sources of information.

4.121 Mechanical Drafting 1 . . . . . 4 credits
(Fall, Winter, & Spring Terms) . . . . . 6 lec/lab hrs/wk
Prerequisite: Introduction to Drafting: Basic Skills 4.152, Introduction to Drafting: Orthographic Projection 4.153, and Introduction to the third dimension. Oblique, isometric, and perspective. Measure-up and shop drawing.

4.127 Technical Illustration . . . . . 3 credits
(Winter Term) . . . . . 1 class, 6 lab hrs/wk
This course presents techniques required for modern technical illustrations and drawing in catalogs, published presentation, or exploded drawings: free-hand drawing, architectural rendering techniques.

4.132 Mechanical Design . . . . . 4 credits
(Fall Term) . . . . . 6 lec/lab hrs/wk
Prerequisite: Introduction to Drafting: Basic Skills 4.152, Introduction to Drafting: Orthographic Projection 4.153, and Mechanical Drafting 1 4.121. Advanced techniques as applied to the mechanical trades with machine part emphasis including special applications of sectioning, auxiliary and revolved presentations, applied dimensioning, metric-English, and dual systems.

4.133 Geometric Tolerancing . . . . . 4 credits
(Winter Term) . . . . . 6 lec/lab hrs/wk
Prerequisite: Mechanical Drafting 1 4.121. Advanced methods in the mechanical trades: threads, fasteners, springs, working drawings, shop practice, piping drawings.

4.134 Power Trains and Accessories Design . . . 4 credits
(Spring Term) . . . . . 6 lec/lab hrs/wk
Prerequisite: Mechanical Drafting 1 4.121. Advanced methods in the mechanical trades: gears, cams, welding expression, developments and layout.

4.135 Drafting Fundamentals . . . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 2 class, 3 lab hrs/wk
Introduction to basic attitudes, knowledges, and skills required of a drafter. The course will build abilities in lines, lettering, dimensioning, and disciplines; use of equipment, machinery, and media.

4.136 Introduction to Fabrication Practices . . . . 2 credits
(Fall Term) . . . . . 1 class, 3 lab hrs/wk
Exposure to fabrication practices by visit to manufacturing facilities.

4.137 Architectural Drafting - Plans . . . . . 4 credits
(Winter Term) . . . . . 2 class, 4 lec/lab hrs/wk
Architectural drafting techniques, methods and procedures, layout and drafting of standard residential working drawings for a 1,200 sq. ft. building permit.

4.138 Architectural Drafting - Details . . . . . 4 credits
(Spring Term) . . . . . 2 class, 4 lec/lab hrs/wk
Preparation of design development drawings of an architect-designed house. Design development is the phase which converts preliminary design into working drawings.

4.139 Architectural Drafting – Development . . . . 4 credits
(On Request) . . . . . 2 class, 4 lec/lab hrs/wk
Development and drafting of construction details from design/development documents prepared in Architectural Drafting - Details. Emphasis will be placed on reproduction techniques and media. Solar Construction details are featured.

4.140 Structural Drafting – Steel . . . . . 4 credits
(Fall Term) . . . . . 2 class, 4 lec/lab hrs/wk
Structural drafting procedures based on *American Institute of Steel Construction Manual and Handbook.* Structural shapes, details, layout.

4.141 Structural Drafting – Wood . . . . . 4 credits
(Winter Term) . . . . . 2 class, 4 lec/lab hrs/wk
Structural drafting procedures and standards based on *Western Woods Use Book.* Select structural members; design connec-

tions, details; prepare structural plans and sections for a heavy timber building.

4.142 CAD: Architectural . . . . . 4 credits
(Spring Term) . . . . . 2 class, 4 lec/lab hrs/wk
Prerequisites: Introduction to AutoCad 4.110, Architectural Drafting - Plans 4.137, and Architectural Drafting - Details 4.138. Use of personal computers and software for architectural drafting applications.

4.143 Customizing AutoCad . . . . . 4 credits
(Spring Term) . . . . . 2 class, 4 lec/lab hrs/wk
Prerequisites: Introduction to AutoCad 4.110. Use of personal computers and software for mechanical drafting applications.

4.144 Blueprint Reading for Drafters/Architects . 2 credits
(Fall Term) . . . . . 1 class, 3 lab hrs/wk
This course is intended to introduce drafting majors to the process of the creation of a set of working drawings for a complex, multi-story building project. It will involve the coordination, from the standpoint of architectural drafters, of the architectural, structural, mechanical, electrical, and landscape drawings. The course emphasis is on the creation, rather than the interpretation or use, of working drawings.

4.145 Construction Literature . . . . . 2 credits
(Spring Term) . . . . . 1 class, 3 lab hrs/wk
Introduction to sources of literature used in the preparation of contract documents, including catalogs, contracts, trade magazines, files, and codes.

4.146 Structural Drafting – Concrete . . . . . 4 credits
(Spring Term) . . . . . 2 class, 4 lec/lab hrs/wk
This course will provide instruction in structural drafting procedures and standards based on the ACI (American Concrete Institute) and CRSI (Concrete and Reinforced Steel Institute) reference books. Selection of structural members, details and plans for concrete construction will be covered.

4.147 Computer-Aided Drafting/Electronics Engineering (CAE) . . . . . 4 credits
(Fall Term) . . . . . 2 class, 4 lec/lab hrs/wk
Prerequisite: Electrical Drafting 4.103, or Introduction to AutoCad 4.110, or Electronic Engineering Technician second-year standing, or departmental consent. This course is to provide the electronics or drafting technician with the electronics engineering skills of schematics, assembly/parts and printed circuit board layouts utilizing the computer-aided drafting techniques inherent in CAE related software.

4.152 Introduction to Drafting: Basic Skills . . . . 2 credits
(All Terms) . . . . . 1 class, 2 lec/lab hrs/wk
The basic attitudes, knowledge, and skills required of a drafter are introduced. The course will build abilities in lines, lettering, layout, dimensions, and disciplines; use of equipment, machinery, and media.

4.153 Introduction to Drafting: Orthographic Projection . . . . . 2 credits
(All Terms) . . . . . 1 class, 2 lec/lab hrs/wk
Prerequisite: Introduction to Drafting: Basic Skills 4.152 or successful completion of equivalency exam. A drafting course for students who have demonstrated basic drafting skills. This course encompasses the proper use of drafting instruments, geometric construction, orthographic projections, and simple sectioning.

4.154 Introduction to Drafting: Pictorials and Axonometric Projections . . . . . 2 credits
(All Terms) . . . . . 1 class, 2 lec/lab hrs/wk
Prerequisites: Introduction to Drafting: Basic Skills 4.152 and Introduction to Drafting: Orthographic Projections 4.153 (drafting majors) or instructor consent for drafting majors. This is a basic drafting skills course which introduces the three-dimensional concepts to drawing. These include axonometric, oblique projections and pattern development for three-dimensional object drawings.

4.155 Introduction to Drafting: Special Projects . 2 credits
(All Terms) . . . . . 1 class, 3 lab hrs/wk
Prerequisites: Introduction to Drafting: Basic Skills 4.152 and Introduction to Drafting: Pictorials and Axonometric Projections 4.154 (drafting majors). Introduction to Drafting: Basic Skills 4.152 (nonmajors). This course consists of drafting projects of specific interest to various curricula in which drafting is considered a useful skill. These areas of interest include landscape design, building construction, mapping, machine shop, welding, electronics, sheet metal, cabinet building and others. May be repeated for credit for the different drafting projects.

4.157 Introduction to VersaCad . . . (variable) 2-4 credits
(Fall, Winter, & Spring Terms) . . . . . 3 class, 3 lab hrs/wk
Prerequisites: Introduction to Drafting: Basic Skills 4.152 and Introduction to Drafting: Orthographic Projection 4.153 (may be enrolled concurrently in Introduction to Drafting: Orthographic Projection 4.153). This course covers techniques required for the electrical and electronic fields. Charts, graphs, schematics, wiring and routing diagrams, and location drawings are included.

6.107 Strength of Materials 1 . . . . . 4 credits
(Spring Term) . . . . . 6 lec/lab hrs/wk
A study of the stresses and strains that occur in bodies when subjected to tensile, compressive and shearing forces, including the common theory of beams. The distribution and magnitude of stresses are examined in welded and riveted joints, thin-wall cylinders, torsional members and beams. Practice problems emphasize the materials studied.

Arch 100 Architectural Design – Remodeling . . . 5 credits
(Winter Term) . . . . . 2 class, 4 lec/lab hrs/wk
Remodel and redesign of a conventional builder residence house with emphasis on energy conservation and efficient use of space.

Arch 101 Architectural Design – Solar Residence . 4 credits
(Spring Term) . . . . . 2 class, 4 lec/lab hrs/wk
Design of a 1,200 sq. ft. residence with emphasis on design strategies for passive solar; direct thermal gain, thermal storage, rules of thumb.

Arch 102 Architectural Design – Custom . . . . . 5 credits
(On Request) . . . . . 2 class, 4 lec/lab hrs/wk
Design of a 1,200 sq. ft. family residence to be built in Eugene, Oregon. Apply passive solar principles. Solution to emphasize application of efficiency of space use to create humane spaces.

GS 127/6.327 Passive Solar Design . . . . . 3 credits
(On Request) . . . . . 6 lec/lab hrs/wk
Prerequisites: Drafting 1 4.120 or Architectural Drafting - Plans 4.137. Spacial design strategies associated with direct gain, thermal storage walls, and attached solar greenhouse passive systems. Emphasis is on the use of rules of thumb for passive solar designers. The course is project oriented.

English and Foreign Language

The English and Foreign Language Department serves all other departments of the college and prepares students for four-year colleges and universities by providing required courses in languages, literature, written and speech communications.

Foreign Languages Courses

Foreign languages are provided to allow students to study the written and spoken languages of French and Spanish speaking countries, as well as to learn some elements of the cultures of these countries.

Foreign language courses with 100 numbers may be used to meet elective requirements at the state public four-year institutions. Foreign language courses with 200 numbers meet specific graduation requirements.

One credit of Language Laboratory 0.593.1 is required for all students in foreign language courses.

FR 101, FR 102, FR 103 French, First Year . . . . 4 credits
(FR 101 Fall; FR 102 Winter;
FR 103 Spring Terms) . . . . . 4 class hrs/wk
Introduction to French, including emphasis on oral comprehension, and some reading-writing practice. Oriented toward students with no previous experience with French. Must be taken in sequence.

FR 150, FR 151 French, First Year . . . . . 6 credits
(See Term Schedule) . . . . . 6 class hrs/wk
This course contains the same materials as FR 101, 102, and 103, but is taught in a two-term sequence of six credits each.

FR 201, FR 202, FR 203 French, Second Year . . 4 credits
(FR 201 Fall; FR 202 Winter;
FR 203 Spring Terms) . . . . . 4 class hrs/wk
Prerequisite: First Year French FR 101, FR 102, FR 103 or equivalent. Review of grammatical principles, reading from representative authors, emphasis on oral use, conversation and pronunciation. Must be taken in sequence.

FR 211, FR 212, FR 213 Conversational French . . 2 credits
(See Term Schedule) . . . . . 2 class hrs/wk
Prerequisite: One year French or concurrent enrollment in third term, first year French. This course is oral communication for those who have already acquired some basic grammar skills to help them improve oral competence in spoken French. This is accomplished through the expansion of vocabulary and expressions and through the exchange of experiences and ideas in various areas of interest.

SPAN 101, SPAN 102, SPAN 103 Spanish, First Year . . . . . 4 credits
(SPAN 101 Fall; SPAN 102 Winter;
SPAN 103 Spring Terms) . . . . . 4 class hrs/wk
Introduction to Spanish with emphasis on listening, speaking, reading, writing; limited vocabulary and uncomplicated material. Must be taken in sequence.

SPAN 150, SPAN 151 Spanish, First Year . . . . . 6 credits
(See Term Schedule) . . . . . 6 class hrs/wk
This course contains the same materials as SPAN 101, 102, and 103, but is taught in a two-term sequence of six credits each.

SPAN 201, SPAN 202, SPAN 203 Spanish, Second Year . . . . . 4 credits
(SPAN 201 Fall; SPAN 202 Winter;
SPAN 203 Spring Terms) . . . . . 4 class hrs/wk
Prerequisite: First Year Spanish SPAN 101, SPAN 102, SPAN 103 or equivalent. Intermediate course with intensive review of structure and growth of vocabulary. Readings from Spanish and Latin-American authors. Must be taken in sequence.

Literature Courses

The department offers a wide variety of literature courses to provide as broad a field of literary study as possible.

All literature courses meet qualifications as electives for the state system of public education. In addition, the following sequences meet the cluster requirements of the University of Oregon: Eng 101, 102, 103; Eng 104, 105, 106; Eng 107, 108, 109; Eng 151, 240, 250; Eng 195, 196, 197; Eng 201, 202, 203; and Eng 253, 254, 255.

The following literature courses meet group requirements but not cluster requirements: Eng 222, Eng 256, Eng 260, Eng 274.

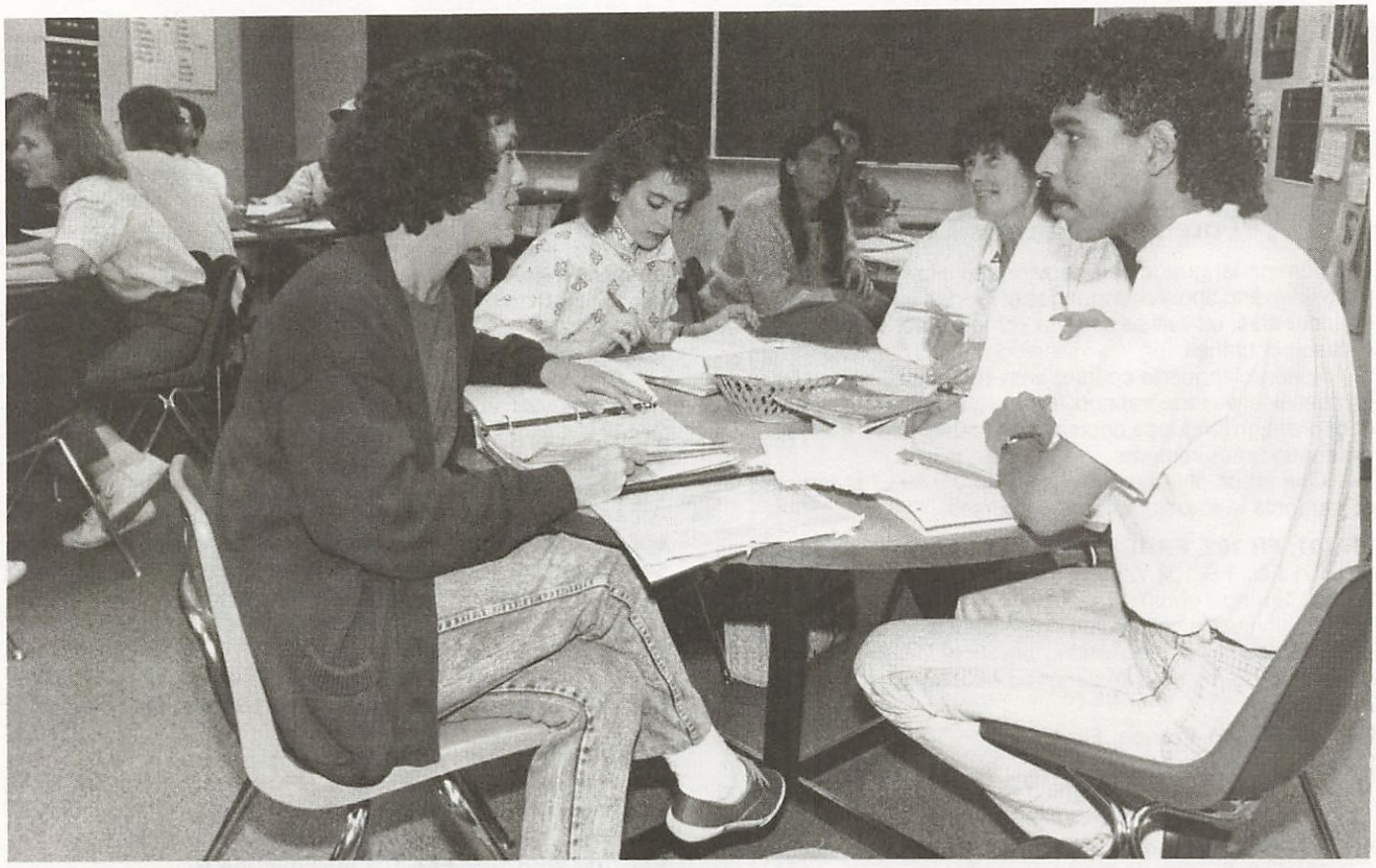
Eng 100 Children's Literature . . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
A basic course that deals with many aspects of children's literature, including history, trends, range of subject matter, criteria for selection and evaluation, correlation of books to children's needs and interests, reading and storytelling programs, illustrations and artists, multimedia approaches and materials, and enrichment ideas. Includes the reading of children's books from different categories and on varied subjects.

Eng 101, Eng 102, Eng 103 English Literature, Survey of . . . . . 3 credits
(Eng 101 Fall; Eng 102 Winter;
Eng 103 Spring Terms) . . . . . 3 class hrs/wk
Readings in chronological order selected to represent great writers, literary forms, and significant currents of thought.

Eng 104, Eng 105, Eng 106 Introduction to Literature . . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
Study of types of literature for understanding and enjoyment. Works are from all ages, especially the present. Designed more as an exploration of themes and techniques than as an historical survey; thus extensive background not needed. Eng 104, fiction; Eng 105, drama; Eng 106, poetry.

Eng 107, Eng 108, Eng 109 World Literature, Survey of . . . . . 3 credits
(Eng 107 Fall; Eng 108 Winter;
Eng 109 Spring Terms) . . . . . 3 class hrs/wk
Survey of World Literature is a three-term sequence focusing on selected fiction, poetry, and plays from Western literature. Specific sections also include Eastern literature, or literature by and about women. Fall term is concerned with ancient and medieval works, such as mythology, Greek drama and heroic epics; winter term deals with works by major European authors from the Renaissance through Romanticism; spring term with recent and contemporary literature. No prerequisite; students may enter any term.

Eng 112, Eng 113, Eng 114 Science Fiction: Studies in Speculative Literature . . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
Offers opportunity for those interested in science fiction/fantasy to study currently popular fiction, its literary styles, techniques, and content, and to explore the interaction of self and society through the study of possible futures.



Eng 121 Detective Fiction . . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
This class provides a broad introduction to British and American "Whodunit?" authors with some emphasis on the novels translated to television and the movie screen. For old and new readers this class will operate as an open-minded seminar where the study of detective fiction and film (history and criticism, plot, milieu, theme, and style) will offer students the opportunity to explore and debate literary, social, and individual significance. It will cover A. Conan Doyle, Agatha Christie, E.A. Poe, Erle Stanley Gardner, Mickey Spillane, Dashill Hammet, and R. Chandler.

Eng 151 Black American Literature . . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
Prerequisite: None. May be combined with Introduction to Folklore and Myth Eng 250 and Introduction to Native American Literature Eng 240 to form a cluster acceptable to the University of Oregon. This course is designed to provide a wide sampling of Black writings in America. It also allows the student considerable freedom of direction in pursuing an independent program of reading.

Eng 195, Eng 196, Eng 197 Film as Literature . . 3 credits
(Eng 195 Fall; Eng 196 Winter; 3 class hrs/wk
Eng 197 Spring Terms) . . . . . 3 film viewing hrs/wk
A course in film appreciation. Eng 195 focuses on the form of film, Eng 196 on film style, and Eng 197 on analysis.

Eng 201, Eng 202, Eng 203 Shakespeare . . . . . 3 credits
3 class hrs/wk
Eng 201 Fall, The Apprentice: experimental elements of the early plays, including Comedy of Errors, Merchant of Venice, Romeo and Juliet, and Richard III.
Eng 202 Winter, The Journeyman: characteristic Shakespearean dramatic treatment of the middle period, including Henry IV, Part 1, Much Ado, Hamlet, and Macbeth.
Eng 203 Spring, The Master: the culmination of Shakespeare's flexibility and range in such comedies and tragedies as Twelfth Night, As You Like It, Othello, King Lear, and The Tempest.

Eng 222 Images of Women in Literature . . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
This course is designed to focus on a survey of the various images of women as presented in literature. The roles, myths, and stereotypes of women (in literature) will be identified and analyzed as a reflection and an influence on the culture of the time.

Eng 240 Introduction to Native American Literature . . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
Prerequisite: None. May be combined with Introduction to Folklore and Myth Eng 250 and Black American Literature Eng 151 to form a cluster acceptable to the University of Oregon. The oral traditional and formal written literature of Native American cultures will be introduced through a wide variety of text from different tribes, regions, and individual authors. Students will examine the world view expressed in the literature, the major thematic currents of oral and written Native American literature, the characteristics of Native American writing, and the characteristics it shares with Euro-American writing.

***Eng 250 Introduction to Folklore and Myth** . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
The nature and principles of folklore and mythology will be introduced and illustrated through a wide variety of folk artifacts and ideas. Students will examine folkloric elements in each other's backgrounds and textbook examples of folklore and folklife from regional, religious, ethnic, age, sex, or work groups. Problems and methods of documenting folklore will be introduced.

Eng 253, Eng 254, Eng 255 American Literature, Survey of . . . . . 3 credits
(Eng 253 Fall; Eng 254 Winter;
Eng 255 Spring Terms) . . . . . 3 class hrs/wk
A study of the principal works of American Literature from its beginning to the present day based on readings presenting outstanding writers, various literary forms, social movements like urbanism or the emergence of minority groups, and significant currents of influential thought from Calvinism to existentialism.

Eng 260 Introduction to Women Writers . . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
This course is designed to present a survey of literature written by women and will include a brief review of the history of women writers, their problems with writing and publishing in a society and in an industry which has been dominated by males. The course will focus on an appreciation of the achievements of women writers and of the presentations of human experience as seen through the insights and sensitivities of female perspectives in their works of fiction, drama, and poetry.

Speech Communication Courses

Speech courses are designed to help students develop an appreciation of speech communication, gain confidence in their abilities to communicate, and to understand their responsibilities as communicators. The goal is to help students become more effective speakers and more sensitive listeners.

Sp 105 Listening . . . . . 3 credits
(All Terms) . . . . . 3 class hrs/wk
Analysis of listening behavior with an emphasis on developing an understanding and appreciation of listening as a vital element in the communication process. To help the student improve listening proficiencies in a variety of listening settings. *Students are urged to take Listening before taking Interpersonal Communication.*

Sp 110 Voice and Articulation . . . . . 3 credits
(All Terms) . . . . . 3 class hrs/wk
Study and practice of the principles of voice production and articulation of speech sounds, with attention to elementary speech physiology and phonetics. Intended for students who desire to develop more effective speech and to meet the special needs of teachers, radio and television speakers, public speakers, and the foreign born and others who require special competence in speaking or who seek for other reasons to improve their voice production. Study and practice in the perception and production of the elements of American speech.

Sp 111 Fundamentals of Speech: Communication . 3 credits
(All Terms) . . . . . 3 class hrs/wk
Speech 111 is the first of a three-course sequence which covers the basics of human communication that includes the following variables: listening, perception, self-concept, self-disclosure, thinking and reasoning, language, and nonverbal messages. Students are exposed to these variables as they apply to the contexts of intrapersonal, interpersonal, family, organizational, small group, and public speaking. The course is a blend of theory and practice with student performances in each context. This enables each student to develop skills of message preparation, organization, audience analysis and delivery in a variety of contexts.

Sp 112 Fundamentals of Speech: Effective Speaking . . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
Prerequisite: Fundamentals of Speech: Communication Sp 111. Students further develop their communication skills by examining varying styles and preparing various types of presentations which will help students to discover and develop an individual approach to speaking situations which is versatile, effective, and comfortable.

Sp 113 Fundamentals of Speech: Persuasion . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
Prerequisite: Fundamentals of Speech: Communication Sp 111. This course is designed to provide students with the understanding of the process necessary to make persuasive presentations and to understand the mechanisms of persuasive messages they encounter.

Sp 170 Projects in Public Speaking: Speech Team . . . . . (variable) 1-2 credits
(Fall Term) . . . . . 4 lecture/lab hrs/wk
Prerequisite: Fundamentals of Speech: Communication Sp 111 or consent of instructor. (Fundamentals of Speech: Communication Sp 111 may be taken as a corequisite.) This course offers training in two to four novice-level public speaking events in preparation for participation in intercollegiate speech (forensics) competition.

Sp 171 Projects in Public Speaking: Speech Team . . . . . (variable) 1-2 credits
(Winter Term) . . . . . 4 lecture/lab hrs/wk
Prerequisite: Projects in Public Speaking: Speech Team Sp 170 or consent of instructor. This course offers intermediate-level training in several public speaking styles in preparation for participation in intercollegiate (forensics) competition. Special emphasis is on expository and extemporaneous speaking and on dramatic interpretation.

Sp 172 Projects in Public Speaking: Speech Team . . . . . (variable) 1-2 credits
(Spring Term) . . . . . 4 lecture/lab hrs/wk
Prerequisite: Projects in Public Speaking: Speech Team Sp 171 or consent of instructor. This course offers intermediate-level training in several public speaking styles in preparation for participation in intercollegiate speech (forensics) competition. Special emphasis is on persuasion, impromptu speaking, and dramatic duo interpretation.

Sp 214 Interpersonal Communication . . . . . 3 credits
(All Terms) . . . . . 3 class hrs/wk
This course is designed to assist students in using effective practices of intra- and inter- personal communication in a variety of face-to-face settings. The goal is to better understand one's self, others, and the role of communication in achieving and maintaining satisfying relationships. Knowledge and skill building are used to enable improvement, with special attention to self-concept, listening, emotions, intimacy, verbal and non-verbal communication. Learning to manage stress and conflict, and to use assertive/supportive rather than aggressive/defensive messages are emphasized as a tool for improving "significant" relationships (friends, spouses, children, employees/employers, clients) and for conducting more productive "inciden-

tal" relationships (salespersons, neighbors, groups, landlords, etc.) *Students are urged to take Listening before taking Interpersonal Communication.*

Sp 215 Small Group Communication: Process and Theory . . . . . 3 credits
(Winter & Spring Terms) . . . . . 3 class hrs/wk
Prerequisite: Interpersonal Communication Sp 214. This course is designed to assist students in using effective small group techniques in a variety of settings. The goal is to better function in small group decision making (both as a leader or as a participant) in a family group, a business group, a social group, or as a member of any committee. The course stresses skillbuilding and theory in decision making, goal setting, presentation planning, and knowledge of group process. Some major concepts included are cooperation, conformity, persuasive use of information, and community action.

Sp 216 Understanding Media . . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
Emphasis on the effects of mass media on society. Special discussions include media violence studies, children and TV commercials, sexism and racism in the media, media and the aged, media and social movements, agenda-setting functions of mass media, and critical consumption skills.

Writing Courses

The general objective of the Lane Community College composition program is to develop the ability to express ideas clearly and directly in prose acceptable in terms of the writer's purpose and audience.

1.100, 1.102, 6.126 Communication Skills 1, 2, 3 . . . . . 3 credits each
(See Term Schedule) . . . . . 3 class hrs/wk
A sequence course in improving skills in communication through writing, listening, and reading. Introduction through individualized subject units and personal discussion with the instructor creates effective learning for the student. Principles of communication are emphasized through practical application to aid the vocational student to meet his/her employment needs. Courses must be taken in sequence unless waived by instructor for special requirements. Subject units for Communication Skills 1 and 2 are: business letter, paragraph, vocabulary, notetaking, essay writing, summary, outline, expository writing, job application, and library research paper. Communication Skills 3 is technical report writing.

Wr 120 Preparatory English Composition . . . . 1-3 credits
(All Terms) . . . . . 3 class hrs/wk
Fundamentals of expository prose, frequent written paragraphs. Upon completion of this course, the student should be able to write clear and direct sentences, observing the conventions of standard English grammar. Preparation for required Wr 121.

Wr 121 English Composition . . . . . 3 credits
(All Terms) . . . . . 3 class hrs/wk
This is the fundamental course for all writing students. It assists students in the development of focus, organization, idea development, clarity, coherence, accuracy, logical thinking, analysis, and evaluation. Students wishing to enroll in Wr 121 must take the Sentence Structure Test in the Testing Office.

Wr 122 Composition: Style . . . . . 3 credits
(All Terms) . . . . . 3 class hrs/wk
Prerequisite: English Composition Wr 121. Although the emphasis remains expository, experimentation with a variety of techniques and forms of expression is encouraged. This course assists students to develop such elements of style as appropriateness, imagery, tone, mood, emphasis, sound, and rhythm.

Wr 123 Composition: Research . . . . . 3 credits
(All Terms) . . . . . 3 class hrs/wk
Prerequisite: English Composition Wr 121. This course focuses on the writing of the research paper with emphasis on the principles and skills of research and documentation.

Wr 241, Wr 242, Wr 243 Introduction to Imaginative Writing . . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
Prerequisite: Wr 121 or equivalent. Opportunity and encouragement for students who wish to express themselves through literary mediums and develop a critical appreciation of the art of writing in its varied forms. General consideration of style; criticism and essentials of short story and novella; fundamentals of playwriting; criticism and writing poetry. Major emphasis: Wr 241, short story; Wr 242, drama; Wr 243, poetry.

Wr 227 Technical Report Writing . . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
Prerequisite: English Composition Wr 121. A transfer course for students who must report the results of research which is not basically literary. Technical writing concentrates on sources of information, evaluation of material, organization, and presentation of information. It includes business letters and memorandum forms, as well as technical report formats.

Supervised Field Experience

Students interested in all aspects of writing, literature, and foreign language may apply for experience and credit in Supervised Field Experience. Resumé writing, interviewing techniques, and career choices will be topics discussed in depth at a required one-hour seminar.

Twelve credits of FE 207 may be transferred to the University of Oregon as elective credits. Eighteen credits of FE 207 earned in the English and Foreign Language Department may apply toward an associate of arts degree or an associate of applied science degree from Lane Community College.

Students may contact Peggy Marston, Center 431, to determine registration procedures and enroll.

**Introduction to Folklore and Myth ENG 250 may be combined with Black American Literature ENG 151 and Native American Literature ENG 240 to form a cluster acceptable to the University of Oregon.*

Flight Technology

The Flight Technology Department offers a two-year degree program with flight training in various late-model light aircraft, including airplanes, helicopters, and a flight simulator. Training is available from the private pilot level through commercial, instrument, and flight instructor certification. Openings for flight training are limited. Contact the department for application information.

Flight Lab Courses

6.431 Flight 1 . . . . . (variable) 1-6 credits
(All Terms) . . . . . variable hrs
Prerequisite: Admission to the Flight Technology program. The student flies 33 hours in late-model Cessna or Piper aircraft, learning fundamental piloting techniques and air traffic control

procedures under the supervision of experienced professional instructors. This course includes 15 to 20 additional hours of pre-flight and post-flight oral instruction.

6.433 Flight 2 . . . . . (variable) 1-6 credits
(All Terms) . . . . . variable hrs
Prerequisite: FAA private pilot written passed and completion of Flight 1 6.431. The student flies 33 hours, learning light airplane navigation procedures and completing FAA requirements for certification as a Private Pilot. This course includes 10 to 15 additional hours of pre-flight and post-flight oral instruction.

6.435 Flight 3 . . . . . (variable) 1-6 credits
(All Terms) . . . . . variable hrs
Prerequisite: Possession of an FAA private pilot certificate and must meet commercial pilot certification course enrollment requirements. The student flies 33 hours, checks out in a complex airplane, takes the first phase of commercial pilot training, and acquires additional solo cross-country experience. This course includes at least 10 hours of pre-flight and post-flight oral instruction.

6.439 Flight 4 . . . . . (variable) 1-6 credits
(All Terms) . . . . . variable hrs
10 Dual-30 solo hours. Prerequisite: Possession of a current passing score on the FAA commercial pilot written examination and satisfactory completion of Flight 3 6.435. Students will gain experience in cross-country flights, including one of at least 600 nautical miles. The training will be a continuation toward Commercial Pilot certification. This course includes at least 10 hours of pre-flight and post-flight instruction.

6.441 Flight 5 . . . . . (variable) 1-6 credits
(All Terms) . . . . . variable hrs
10 Dual-30 solo hours. Prerequisite: Satisfactory completion of Flight 4 6.439. Students will continue training toward Commercial Pilot certification. Additional knowledge and experience will be gained in operation of complex airplanes and aircraft performance limitations. This course includes at least 10 hours of pre-flight and post-flight instruction.

6.443 Flight 6 . . . . . (variable) 1-6 credits
(All Terms) . . . . . variable hrs
30 Dual hours. Prerequisite: Possession of a current passing score on the FAA instrument-airplane written examination and completion of Flight 5 6.441. Students will receive training in instrument flight operations in a complex airplane. This course will complete instrument rating requirements necessary for Commercial Pilot certification. This course includes at least 10 hours of pre-flight and post-flight instruction.

6.445 Flight 7 . . . . . (variable) 1-3 credits
(All Terms) . . . . . variable hrs
Prerequisite: Must hold at least an FAA private pilot certificate. This course will provide the private or commercial pilot with an additional class rating in multiengine airplanes.

6.447 Flight 8 . . . . . (variable) 1-5 credits
(All Terms) . . . . . variable hrs
Prerequisite: FAA fundamentals of instruction written passed, FAA flight instructor/airplanes written passed, and must hold an FAA commercial-instrument certificate. Flight 8 is a course of ground and flight training that prepares a student to pass the FAA Flight Instructor Flight Test and receive a Flight Instructor Airplane Certificate.

6.449 Flight 9 . . . . . (variable) 1-5 credits
(All Terms) . . . . . variable hrs
Prerequisite: FAA instrument instructor written passed, and must hold an FAA flight instructor certificate with airplane single engine rating. Flight 9 is a course of flight and ground training that prepares the student to pass the oral and FAA Flight Test for the Instrument Instructor rating.

6.451 Flight 12
(Conventional Aircraft Familiarization) . . (variable) 1-2 credits
(All Terms) . . . . . variable hrs
Prerequisite: FAA Private Pilot Certificate. This course is offered to pilots who are interested in improving their flying skills and/or who want to add "tail dragger" experience to their flying. Students will receive ten hours of dual flight instruction in a conventional geared airplane. This exposure is designed to improve the pilot's awareness of wind effects on aircraft during ground maneuvers, to add both confidence and competence to the pilot's flying abilities, and to improve the pilot's flying credentials.

6.453 Flight 20
(Primary Helicopter Transition) . . . . . (variable) 1-6 credits
(All Terms) . . . . . variable hrs
Prerequisite: FAA 3rd Class Medical. This course is offered to pilots who are interested in gaining helicopter flight experience. Students will receive 30 hours of flight instruction both dual and solo. This course will expose the student to all aspects of helicopter flight and operations while leading to a Rotocraft-Helicopter rating.

6.454 Flight 21
(Advanced Helicopter Transition) . . . . . (variable)1-4 credits
(All Terms) . . . . . variable hrs
Prerequisite: Flight 20 6.453, FAA 2nd Class Medical. This course is offered to pilots who are interested in continuing helicopter training beyond Flight 20. Students will gain an additional 20 hours of flight experience while working towards a Commercial Pilot Rotocraft-Helicopter rating. Upon completion of the course, the student will meet the flight and skill requirements required by the FAA Flight Test Standards Guide for Commercial Pilots.

9.610 Flight 10 . . . . . (variable) 1-3 credits
(All Terms) . . . . . variable hrs
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.

Ground School Courses

6.415 Aircraft Structures and Systems . . . . . 3 credits
(Spring Term) . . . . . 3 class hrs/wk
Designed to give the pilot a thorough understanding of airplane systems, from the Cessna 150 through light twin engine and turboprop aircraft.

6.428 Multiengine Ground School . . . . . 1 credit
(Spring Term) . . . . . 1 class hr/wk
Prerequisite: Must hold FAA Private Pilot license. Ground training on the operation of multiengine aircraft. Training will include operations of aircraft systems under normal and emergency conditions.

6.430 Primary Flight Briefing . . . . . 3 credits
(Fall Term) . . . . . 3 class hrs/wk
Prerequisite: Students must have departmental permission to enter course. Corequisite: Students must be enrolled in Flight 1 or Flight 2. Students will receive classroom instruction in ground elements which coincide directly with actual flight lessons of department courses Flight 1 and Flight 2. This course will help students to master key areas of aeronautical knowledge necessary to progress efficiently toward the Private Pilot Certificate.

BA 254 General Aviation Management . . . . . 3 credits
(Spring Term) . . . . . 3 class hrs/wk
This course will present a detailed examination of general aviation's role in the national economy, regional economy, and the 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.

6.452 Helicopter Fundamentals . . . . . 2 credits
(Fall & Spring Terms) . . . . . 2 class hrs/wk
This ground course will give an overview of helicopter operations, basic aerodynamics, components, systems, and procedures. Also covered will be specific make and model pre-flight, hover, flight operations, and emergency procedures.

6.455 Aviation Safety Review . . . . . 1 credit
(All Terms) . . . . . 2 lab hrs/wk
Prerequisite: Enrollment in an aviation ground school in Flight Technology. A survey of aeronautical safety information through a format of supervised audio-visual programmed instruction.

FT 102 General Aviation Careers . . . . . 1 credit
(Fall Term) . . . . . 1 class hr/wk
A survey of general aviation career areas, both flying and non-flying, as presented by a variety of guest speakers from the aviation industry. Class attendance is mandatory for credit; this is not a graded course.

FT 103 Aircraft Development . . . . . 4 credits
(Fall Term) . . . . . 4 class hrs/wk
A survey of: 1) The first successful means of human flight; 2) Development of the light airplane in America; 3) Significant contributions of military aviation; 4) Design characteristics of light aircraft types manufactured in the United States since 1946; 5) The historical influence of the federal government on the development of commercial air transportation in America.

***FT 250 Private Pilot Ground School** . . . . . 5 credits
(All Terms) . . . . . 5 class hrs/wk
Aircraft nomenclature, essential Federal Aviation Regulations, air traffic control procedures relevant to VFR flight, basic navigation theory, elementary weather analysis, principles of flight pertinent to the private pilot. Upon completion of the course, the student should have sufficient knowledge for passing the FAA private pilot written examination. Successful completion of this examination is a prerequisite for enrollment in Flight 2 or any other subsequent professional ground school courses.

* *This course is also offered as a three-credit telecourse. Those students completing the Flight Technology program are required to take the on-campus, five-credit course rather than the telecourse.*

FT 251 Commercial Pilot Ground School . . . . . 5 credits
(Spring Term) . . . . . 5 class hrs/wk
Prerequisite: Private Pilot license or equivalent. This course includes all areas found to be necessary for passing the FAA Commercial Pilot written examination. Emphasis is on weather, FAR's, navigation, computer, radio aids, and government publications for the pilot. Successful completion of the FAA Commercial Pilot written examination is prerequisite for enrollment in Flight 4 and any subsequent professional ground school courses.

FT 252 Instrument Ground School . . . . . 4 credits
(Fall Term) . . . . . 4 class hrs/wk
Prerequisite: Completion of Private Pilot Ground School FT 250. Basic radio fundamentals as used by the pilot. A description and practical use of various radio aids to safe aerial navigation. Upon completion of this course, the student should have sufficient knowledge to pass the FAA instrument written.

FT 254 Aerodynamics . . . . . 3 credits
(Winter Term) . . . . . 3 class hrs/wk
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 & Flight Instructor—Instrument Ground School . . . . . 3 credits
(Winter Term) . . . . . 3 class hrs/wk
Prerequisites: Current passing score on FAA commercial pilot and instrument pilot written tests or possession of valid commercial or ATP pilot certificate. A survey of psychological principles relating to the human learning process, plus a concise review of federal regulations, radio navigation, and principles of meteorology appropriate to IFR flight operations in the United States.

FT 256 Flight Instructor—Airplane Ground School . . . . . 3 credits
(Spring Term) . . . . . 3 class hrs/wk
Prerequisites: Current passing score on FAA commercial pilot, instrument pilot, and fundamentals of instruction written tests or possession of a valid FAA ATP or commercial pilot certificate with instrument rating. A survey of the aeronautical knowledge requisite to successful completion of the FAA flight instructor airplane written examination.

***GS 107 Meteorology** . . . . . 4 credits
(Winter Term) . . . . . 3 class, 3 lab hrs/wk
An introduction to structure of the atmosphere, measurement parameters of the atmosphere, and primary analysis of air structure including clouds, stability, winds, air masses, and fronts. Weather discussions primarily related to winter, western Oregon situations.

* *This course is designed for Flight Technology program students but is open to any student interested in learning about the weather patterns of the western United States.*

Air Carrier Courses

9.601 Metro SA Systems Ground School . . . . . 9 credits
(Winter Term) . . . . . 9 class hrs/wk
Prerequisite: FAA commercial license. Students will receive approximately 100 hours of classroom instruction about the Metro SA 227 aircraft, its systems, and their operating procedures. The "Metro" is a 19-passenger turbo-prop airplane used by several regional air carrriers.

9.602 Cockpit Crew Resource Management . . . . . 1 credit
(Spring Term) . . . . . 1 class hr/wk
Prerequisite: Private pilot license. Corequisite: Human Relations 2: Cockpit Crew Resource Management 1.609. This course is a study by lecture and discussion on the processes for cooperation, decision making, and conflict resolution in the busy and complex environment of the airplane cockpit.

9.603 Regional Airline Procedures and Policies . . . . . 5 credits
(Spring Term) . . . . . 5 class hrs/wk
Prerequisite: FAA commercial license. Students will learn about company structure, policies, benefits, hiring procedures, interview, and resume preparation. FAR 135 regulations and general company rules will be covered.

Health and Physical Education

The Health and Physical Education Department offers classes in health education, physical education, and recreation; intramural and extramural sports; and intercollegiate athletic programs. Students with physical injuries or disabilities are assigned exercise programs of fitness or physical therapy. Courses of study are offered in coaching and dance. Health and physical education classes can be applied toward majors in physical education, health education, and recreation and leisure studies.

Activity Courses (PE 170, 180, 190)

See Dance and Outdoor Education for additional activity courses.

PE 170 (Co-Educational)

PE 170 Archery Beg . . . . . 1 credit
(Fall & Spring Terms) . . . . . 3 class hrs/wk
Fundamentals including safety, history, care and use of equipment, basic rules, and skill techniques. Target shooting with emphasis on self-testing and improvement. Class competition in regulation and novelty shoots.

PE 170 Badminton Beg-Int . . . . . 1 credit
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
Beg–Fundamental skills of serving, clears, drop, smash, backhand, singles and doubles play, terminology and rules.
Int–Review and practice of basic shots. Additional shots added to repertoire (round-the-head clears, drops, and smashes, cut smashes, etc.). Variations of singles and doubles serves. Singles, doubles, and mixed doubles play patterns.

PE 170 Basketball Beg-Int . . . . . 1 credit
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
Emphasis on Fundamentals. . . Development of offensive and defensive techniques and strategies. Team play. . . 2 on 2, 3 on 3, 4 on 4 and game situations. Rule differences for men and women.

PE 170 Basketball Conditioning Adv . . . . . 1 credit
(Fall Term) . . . . . First 3 wks, 12 class hrs/wk
A conditioning class designed for students interested in participating in intercollegiate basketball. Emphasis on conditioning and development of fundamentals.

PE 170 Bowling . . . . . 1 credit
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
Additional Fees . . . . . Off Campus
Fundamentals, techniques, rules, scoring, and game etiquette.

PE 170 Circuit Weight Training . . . . . 1 credit
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
Improving body form, function, and muscle tone through the use of individual exercises, universal gym, barbells, and dumbbell weights. Limited jogging and interval running are included for cardiovascular-respiratory endurance and lung ventilation.

PE 170 Conditioning Beg-Adv . . . . . 1 credit
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
Development of overall body conditioning, flexibility and endurance through specific exercise programs, rope jumping, and jogging.

PE 170 Correctives . . . . . 1 credit
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
Prerequisite: Consent of the instructor. Students with physical injuries, disabilities, or handicaps are assigned exercise programs of fitness or physical therapy.

PE 170 Exercise Walking . . . . . 1 credit
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
The exercise walking course is designed to increase cardiovascular fitness, muscular endurance, and joint flexibility. Students will walk for fitness, examine the processes affected by exercise walking, learn to take self fitness measurements, and learn the principles used to design an exercise walking program.

PE 170 Exercise and Weight Loss Beg . . . . . 1 credit
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
A weight reduction program for individuals (male and female) 20 percent or more overweight with emphasis on diet, exercise, and educational counseling.

PE 170 Fencing Beg . . . . . 1 credit
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
Instruction in skills basic of foil fencing, including offensive and defensive skills, rules, etiquette, judging, and bout experience.

PE 170 Fit for Life/Conditioning . . . . . 1 credit
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
This course is offered to students seeking to increase proficiency in developing and assessing individual levels of physical fitness. Students will participate in a program designed to develop and test cardiovascular fitness, joint flexibility , and muscle strength and endurance. The fundamental principles of fitness testing, and use of appropriate norms will be examined and discussed. Each student will participate in, and administer, selected fitness tests which will comprise an individual fitness profile.

PE 170 Flag Football Beg . . . . . 1 credit
(See Term Schedule) . . . . . 3 class hrs/wk
Fundamentals, rules, strategy, team play.

PE 170 Golf Beg-Int . . . . . 1 credit
(Fall & Spring Terms) . . . . . 3 class hrs/wk
Additional Fees . . . . . Off-Campus
Beg–Fundamentals such as grip, stance, and mechanics of the swing. Use of short irons, long irons, woods, and putter. Instruction in rules of the game, social etiquette, and play.
Int–Prerequisite: Beginning Golf or demonstrated playing ability. Continuation from beginning golf with emphasis on playing the game of golf, also work on specialty shots such as sand trap shots, hill and sloping shots, etc.

PE 170 Jogging Beg-Adv . . . . . 1 credit
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
Beg- Development of form, pace, and endurance. Various systems of training such as: pace judgment work with timing, Fartlek (speed play) endurance running for set periods of time, cross country jogging, self-predicted time jogging, and pyramid type jogging. Students work according to their own abilities and physical condition.
Adv- Continuation from beginning jogging with emphasis on preparing for road runs; specialty work on hills; downhill; filmed analysis; body fat analysis; diet considerations; pre-marathon work for selected students.

PE 170 Karate Beg-Int . . . . . 1 credit
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
Fundamentals including basic stances, inside and outside blocks, straight punch, rising block, kick block, front, side, and back kicks, basic throws, come-alongs, and techniques of detaining, restraining, and searching subjects as related to law enforcement.

PE 170 Personal Defense . . . . . 1 credit
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
Fundamental personal defense skills, precautionary measures to insure one's safety, countering attacks whereby various types of weapons are employed, and developing a skill level that promotes self-assurance to reduce panic.

PE 170 Racquetball Beg-Int-Adv . . . . . 1 credit
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
Additional Fees
A racket game that combines the skills and strategies of tennis, squash, and handball in one fast-moving physical activity. Women and men enjoy the challenge of this sport. Offered at beginning, intermediate, and advanced levels.

PE 170 Relaxation/Stress Reduction . . . . . 1 credit
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
A course designed to meet the needs of individuals who need a little "quiet time" in their daily routine. Students will go through a series of stretching techniques, followed by cassette tapes explaining muscular relaxation and deep breathing techniques.

PE 170 Ski Conditioning Beg . . . . . 1 credit
(Fall Term) . . . . . 3 class hrs/wk
A course designed for conditioning of down hill and cross country skiers. Emphasis on lower body exercises. Selected exercises and weight training program designed to prevent physical stress and strain injury to skiers. Emphasis on knee and ankle.

PE 170 Soccer-Indoor Beg . . . . . 1 credit
(Winter Term) . . . . . 3 class hrs/wk
Instruction and practice in the fundamental indoor soccer techniques including position play, offensive and defensive tactics, team formation and rules of the game.

PE 170 Soccer Beg . . . . . 1 credit
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
Instruction and practice in the fundamental soccer techniques, position play, offensive and defensive tactics, team formation and rules of the game.

PE 170 Softball Beg . . . . . 1 credit
(Fall & Spring Terms) . . . . . 3 class hrs/wk
Fundamental skills and rules taught through team play.

PE 170 Sports Conditioning Adv . . . . . 1 credit
(See Term Schedule) . . . . . 3 class hrs/wk
Special conditioning class for both men and women athletes as pre-season preparation for sports in which they will participate. Consent of instructor required.

PE 170 Strength Training Beg-Int . . . . . 1 credit
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
Beg-Progressive resistance exercises with barbells, dumbbells, and weights to develop strength, muscular size, and to improve general physical condition. Basic weight training program for the beginner, schedule for advanced students, and special programs for athletes.
Int-Offered to students who have participated in beginning Strength Training or basic work in other schools or gyms. More advanced lifting excercises and routines to follow.

PE 170 Swimming Beg . . . . . 1 credit
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
Classes are held at the University of Oregon. Treading water, sculling, finning, survival swimming, underwater swimming, water entries, turns, diving. Achieve correct techniques in front crawl, back crawl, elementary backstroke, breaststroke, and sidestroke. Elementary forms of rescue and self rescue, flotation devices, life jackets, reaching and wading assists, throwing assists, artificial respiration.

PE 170 Tai Chi Chuan . . . . . 1 credit
(See Term Schedule) . . . . . 3 class hrs/wk
This course is offered to students seeking to attain proficiency in one of the Orient's oldest martial arts system. Students will participate in a program designed to improve flexibility, balance, reflexes, stamina, and general all-around fitness. The fundamental principles of Tai Chi Chuan will be examined and practiced through exposure to the Long, Classical Yang-Family style.

PE 170 Tennis Beg-Int . . . . . 1 credit
(Fall & Spring Terms) . . . . . 3 class hrs/wk
Beg–Forehand, backhand, serve, strategy, and application of rules, etiquette.
Int–Perfection of skills and strategy in singles and doubles play.

PE 170 Volleyball Beg-Int-Adv . . . . . 1 credit
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
Beg–USVA rules, basic skills, and simple strategies of the game taught through individual and team play.
Int–USVA rules (men, women, and co-ed teams). Semi-sophisticated drills to improve basic skills. All drills, two, three, or more techniques involved in patterns. Much more emphasis placed on strategies, offensive and defensive.
Adv–Prerequisite: Instructor's consent. Use of drills similar to those used by coaches of teams. High physical proficiency level and knowledge of various offensive and defensive tactics.

PE 170 Weight Training . . . . . 1 credit
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
Introduction to weight training with an emphasis on Olympic/Power Lifting, as well as strength training.

PE 170 Yoga Beg . . . . . 1 credit
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
A course designed for students who have a basic knowledge of the asanas (body positions) and breathing techniques. The course will provide opportunities and instruction to improve these skills.

PE 190

Designed primarily for, but not restricted to, men

PE 190 Baseball Conditioning Int . . . . . 1 credit
(Fall Term) . . . . . 3 class hrs/wk
Int–Emphasis on fundamentals. Development of understanding of conditioning as part of baseball training. Development of overall skills necessary to successfully participate in the game, knowledge of offensive and defensive strategy, good sportsmanship habits, rules and conduct of the game.

PE 190 Basketball Int . . . . . 1 credit
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
Emphasis on fundamentals. Development of offensive and defensive technique and strategies. Team Play. . . 2 on 2, 3 on 3, 4 on 4, and game situations. Rules for men.

Independent Study

PE 298 Independent Study: Physical Education . . . . . 1 credit
(Fall, Winter, & Spring Terms)
Independent study in physical education can be arranged if for some reason a student cannot participate in the regular physical education program. To qualify for independent study, a student must be interviewed by the department head, who will evaluate the situation. Qualifications for independent study are based primarily on two factors: (1) Does the activity meet the stated departmental objectives for physical education? (2) What is the legal liability involved with granting independent study for the

activity in question? If students qualify, they will be assigned to a physical education instructor who will set up a program for them and ascertain their progress throughout the term. For more information see the Health and Physical Education department head.

Dance Classes

PE 170 Dance Aerobics Beg-Int . . . . . 1 credit
(See Term Schedule) . . . . . 3 class hrs/wk
Beg-An exercise class utilizing simple dance movement in an exhilirating way to improve strength, flexibility, and cardiovascular fitness. Heart rates are monitored as a regular part of every class to insure safety for individual training.
Int-An intermediate level cardiovascular fitness course designed for the competent dancer who is trained for a high intensity work-out. Heart rate monitoring, strength and flexibility will be incorporated into the class routine.

PE 170 Folk Dance Beg . . . . . 1 credit
(See Term Schedule) . . . . . 3 class hrs/wk
Forms of locomotion, basic dance steps, positions, formations and step patterns, and a variety of international dances.

D 256 Anatomy/Body Fundamentals . . . . . 3 credits
(Fall Term) . . . . . 2 class, 2 lec/lab hrs/wk
Prerequisites: At least two of the following courses: aerobics, ballet, jazz, or modern dance. This course is designed to introduce students to the musculoskeletal systems as they impact the potential for human movement in a variety of dance idioms. Fundamentals of ideokinesis (imagined movement) and Bartenieff Theory will be introduced and applied in a laboratory setting to the analysis of posture, corrective movement patterns, warm-up and conditioning techniques.

D 266 Introduction to Teaching Dance/Aerobics 1 . 2 credits
(Winter Term) . . . . . 1 class, 3 lab hrs/wk
Prerequisite: Anatomy/Body Fundamentals D 256. This course is designed to give the dance student practical experience as a teacher in training in ballet, modern, jazz, or aerobics. Students will serve as an assistant to the instructor during regularly scheduled dance classes. Students also will practice corrections, dance mechanics, leadership, and group organization.

D 276 Introduction to Teaching Dance/Aerobics 2 . 3 credits
(Spring Term) . . . . . 2 class, 2 lec/lab hrs/wk
Prerequisites: Anatomy/Body Fundamentals D 256 and Introduction to Teaching Dance/Aerobics 1 D 266. This course presents the dance student with the basis for building class structures in ballet, modern, jazz, and aerobics. Students will elect their particular area of interest and practice teaching in one or more of the above idioms. The goal is to prepare prospective teachers to work in private dance studios, community centers, or fitness centers. The class also serves as a continuing education course for aerobic/fitness instructors already in the field.

Outdoor Education Classes

PE 170 Backpacking Beg . . . . . 1 credit
(Spring Term) . . . . . 5 wks duration
Additional Fees
Selection and use of basic equipment: packs, shelters, sleeping bags, stoves, clothing, footwear, and other essential items. Meets in classroom and outdoors. Two-day trip to Rogue River area.

PE 170 *Canoeing . . . . . 1 credit
(Fall Term) . . . . . 3 class hrs/wk
Additional Fees
Prerequisite: Intermediate swimming ability. The course is offered to students seeking skill and knowledge in the sport of canoeing.

PE 170 Downhill Skiing Beg-Int . . . . . 1 credit
(Winter Term) . . . . . 3 class hrs/wk
Additional Fees
Instruction and practices in fundamental skills of downhill skiing. Emphasis on safety awareness and development of conditioning necessary for safe and enjoyable further recreational activity. Instruction provided for beginner through advanced skill level.

PE 170 Kayaking . . . . . 1 credit
(Spring Term) . . . . . 3 class hrs/wk
Additional Fees
Prerequisite: Participants must be able to swim (25 yards minimum). Instruction and practice of fundamental skills of kayaking. Conditioning exercises for the sport; mastery of basic skills and safety techniques for safe and effective participation in this adventure activity.

PE 170 Trap and Skeet Shooting . . . . . 1 credit
(See Term Schedule) . . . . . 3 class hrs/wk
Additional Fees
This course is designed to provide students with the basic techniques of trap and skeet shooting. Emphasis will be placed on the importance of proper gun handling and safety.

PE 232 Backpacking Expedition . . . . . 2 credits
(Fall & Spring Terms) . . . . . 1 class, 2 lec/lab hrs/wk
Backpacking Expedition is offered to students seeking to acquire the skills and knowledge which will allow them to plan and experience a safe and enjoyable expedition in wilderness environment. Students will attend lectures prior to the field trips, and will participate in two day hikes; and a two-night, three-day trip on the Rogue River area or Cascade Range.

PE 239 Whitewater River Rafting . . . . . 2 credits
(Fall, Spring, & Summer Terms) . . 1 class, 2 lec/lab hrs/wk
This course is designed for students seeking to acquire the skills and knowledge which will allow them to plan and conduct a safe and enjoyable river rafting excursion within the contemporary parameters of wilderness use ethics and available resources. Students will participate in preliminary/preparaton lectures and in lecture/lab sessions on the river. The course will include several river trips, traveling a section of local rivers selected to elicit the safe practice of rafting skills and knowledge.

PE 240 Cross Country Ski . . . . . (variable) 1-2 credits
(Winter Term) . . . . . 1 class, 2 lec/lab hrs/wk
The Cross Country Ski course is offered to students seeking to acquire the skills and knowledge which will allow them a safe and enjoyable ski experience in a winter environment. This class will provide three days of cross country skiing experience.

PE 241 Winter Camping/Survival . . (variable) 1-2 credits
(Winter Term) . . . . . 1 class, 2 lec/lab hrs/wk
The Winter Survival/Camping course is offered to students seeking to acquire the skills and knowledge which will allow them a safe and enjoyable overnight snow camping experience. Students will participate in a 24-hour overnight camping trip, and one cross country ski trip.

PE 242 Bicycle Touring . . . . . (variable) 1-2 credits
(Fall & Spring Terms) . . . . . 1 class, 2 lec/lab hrs/wk
This course will provide the opportunity to develop the skills and knowledge which will enable the student to plan and implement a safe and enjoyable bicycle tour. Variable credit allows students to elect day or overnight field trips.

Physical Education Major Courses

Professional Activity courses are designed for physical education majors as well as for students who wish vocational training for coaching-related jobs at schools and community agencies.

Courses numbered PE 194 and PE 294 in the class schedule publication are Professional Activity courses, and enrollment is by consent of advisor.

FE 207/1.300 Supervised Field Experience
Supervised Field Experience credit is available for students majoring in Health, Physical Education, Recreation, and Dance programs. Students should see their advisor for qualifications and placement priority. A course description may be found at the beginning of the course description section of the catalog.

PE 131 Introduction to Physical Education . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
For physical education majors, or students who want to explore the possibility of becoming a major in the field of physical education. Professional orientation, basic philosophy and objectives, professional opportunities, qualifications and obligations.

PE 207 Sports Officiating . . . . . (variable) 1-2 credits
(Winter Term) . . . . . 2 class, 1 lab hr/wk
This course is designed to introduce beginning referees and umpires to proper officiating techniques. Rules, mechanics, conditioning, and job opportunities will be emphasized.

PE 299 Introduction to Care and Prevention of Athletic Injury . . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
Students will learn how to recognize, care for, and prevent common athletic injuries to the ankles, knees, spine, and upper extremities. They will practice skills in preventative taping, and immobilization techniques.

PE 299 Special Studies: Sport and Recreation . . . . . (variable) 1-4 credits
(See Schedule) . . . . . 1-4 class or 2-8 lec/lab or 3-12 lab hrs/wk or any appropriate combination
This course will provide opportunities for students to examine current topics in sport and recreation. Examples of topic areas include new games, indoor recreational sports, intramural/extramural sports, lifetime sports, etc. See the class schedule publication each term for topics offered.

Services for Handicapped or Injured

Correctives is open-entry/open-exit and is designed to give individual exercise and therapy programs to those unable to participate in the regular physical education program because of a physical disability, abnormality, or handicap. Conditions include recent surgery, low back strains, cerebral palsy, quad-

riplegia, paraplegia, nerve injuries, post-fractures, joint sprains, arthritis, obesity, and temporary conditions which restrict regular physical education for one to two weeks.

PE 170 Correctives . . . . . 1 credit
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
Prerequisite: Consent of the instructor. Students with physical injuries, disabilities, or handicaps are assigned exercise programs of fitness or physical therapy.

Techniques and Varsity Sports Courses

These courses are provided for students interested in participating in a very competitive setting. Student athletes will be expected to represent the college in tournaments, league, and/or intercollegiate play. Individuals who wish to enroll in these classes should be well versed in rules and strategy, and meet the Northwest Athletic Association of Community Colleges eligibility requirements. A high level of competency in the execution of all skills is essential. Student athletes will be admitted with consent of instructor only. The techniques and varsity courses available are:

PE 180 (Women)	PE 190 (Men)
Basketball	Baseball
Cross-Country	Basketball
Track	Cross-Country
Volleyball	Track

Refer to Sports Conditioning PE 170 Adv for a description of the pre-season conditioning course.

Health Education Courses

HE 125 Industrial Safety . . . . . (variable) 1-3 credits
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
This course is an overview of individual and corporate factors contributing to safety in industrial, agricultural, and recreational settings. OSHA protocols will be examined, and competencies in first aid, CPR, and emergency response will be developed and assessed.

HE 199 Health and Cardiovascular Disease . . . . . (variable) 1-3 credits
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
Provides introduction to the anatomy and physiology of the cardiovascular system. Study of the risk factors associated with cardiovascular disease and the techniques of detection and treatment. Emergency treatment procedures for cardiovascular ailments will be presented and practiced. This course meets the standards of the American Red Cross for CPR certification.

HE 199 Human Sexuality . . . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
This course deals with the development and expression of human sexuality. A wide variety of information is presented pertaining to the biological, psychological, and cultural forces that include, but are not limited to, sexuality in childhood, adolescence, and adulthood; the sexual response cycle; contraception; and sexual dysfunction.

HE 199 Self Concept: Origins & Change . . . . . 3 credits
(Spring Term) . . . . . 3 class hrs/wk
This course is designed for any student in any major. It deals with self-understanding and self-acceptance. It can assist students in gaining a higher degree of success by identifying, understanding, and accepting themselves, as well as being beneficial in raising children.

HE 201 Death and Dying . . . . . 3 credits
(Fall Term) . . . . . 3 class hrs/wk
Offers a focus for developing a framework to assist the student to understand, anticipate, cope with, and go beyond the death of an intimate person. Also helps him/her understand and prepare for his/her own death. Topics include death defined, death in other cultures, death and the living, grieving, euthanasia, and suicide.

HE 202 Health in Later Years . . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
This course focuses on the health concerns of persons fifty years of age and older. Students will be exposed to information to help them understand, anticipate, and cope with the health problems associated with maturing and aging. Topics include, but are not limited to, the basic concepts of aging, the psychosocial and physiological aspects of aging, the degenerative effects of disease, and the importance of life style on one's health.

HE 222 Consumer Health . . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
This course provides factual information and useful guidelines that will enable students to effectively select health products and services, maximize their health dollar, and minimize their risk of becoming a victim in the health marketplace.

HE 250 Personal Health . . . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
This course deals with some of the physical, emotional, and social factors that affect one's quality of life. Emphasis is placed on the role of the individual in the maintenance and improvement of his/her own level of well-being. Topics include, but are not limited to, prevention of chronic and communicable diseases; nutrition; sexuality; drug use and abuse; and consumer health.

HE 251 Community Health . . . . . 3 credits
(See Term Schedule) . . . . . 4 class hrs/wk
This course investigates common community health problems and the agencies responsible for dealing with those problems. Emphasis is placed on how health agencies protect the individual and the relationship of personal health to community health.

HE 252 *First Aid . . . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
Provides instruction in fundamental first aid care and emergency procedures. Includes techniques in handling the sick and injured. Study and practice of the life saving skills related to asphyxiation, hemorrhage, shock, poisoning, radiation, exposure to heat and cold, fractures, emergency childbirth, sudden illness, rescue, transfer, and extrication. Meets the standards of the American Red Cross for the Advanced First Aid and Emergency Care certification.

HE 254 Advanced Emergency Care . (variable) 1-3 credits
(Winter and Spring Terms) . . . . . 3 class hrs/wk
Prerequisite: HE 252 (First Aid) or hold a current Red Cross Advanced First Aid Card. Advanced first aid procedures and techniques; meets the needs of those people who have the opportunity to give first aid frequently in the course of daily routines. The course also covers cardiopulmonary resuscitation (CPR), techniques of how to recognize and handle emergency situations, and provides training to prepare for survival in time of disaster.

HE 261 Cardiopulmonary Resuscitation . . . . . 1 credit
(All Terms) . . . . . 1 class hr/wk
This course describes the principles and procedures of basic life support to victims of airway obstruction, respiratory arrest, and/or cardiac arrest.

HE 275 Wellness and Health Assessment . . . . . (variable) 1-3 credits
(See Term Schedule) . . . . . 3 class, 1 lab hr/wk
This course will examine the components of wellness in terms of health and fitness enhancement through lifestyle modification. Assessment of health, fitness, and lifestyle will be a basis for reviewing activities, behaviors, and attitudes that impact on a healthy lifestyle. Laboratory activities will supplement lectures on major topic areas.

HE 299 Special Studies: Health . . . (variable) 1-4 credits
(See Schedule) . . . . . 1-4 class or 2-8 lec/lab or 3-12 lab hrs/wk or any appropriate combination
This course will provide opportunities for students to examine current topics in health. Examples of topic areas include substance abuse, aging, medical emergencies, AIDS, wellness, mental health, stress, etc. See the class schedule publication each term for topics offered.

Health Occupations

The Health Occupations Department offers the following programs: Associate Degree Nursing, Practical Nursing, Dental Assisting, Dental Hygiene, Medical Office Assistant, Respiratory Care, Early Childhood Education, and Early Childhood Education: Nanny Option. Nursing programs begin in the summer; all other programs begin in the fall. Application deadlines vary.

Additional classes are offered for individuals who may have an interest in becoming or are currently employed as health professionals.

Dental Assisting

5.395 Chairside Procedures 1 . . . . . 6 credits
(Fall Term) . . . . . 4 class, 4 lec/lab hrs/wk
Prerequisite: Admission to Dental Assisting program and/or instructor consent. Basic chairside assisting procedures, such as preparation of patient, oral evacuation techniques, instrument exchange, placement and removal of rubber dam, dental examination procedures, sterilization procedures, operative dentistry.

5.396 Chairside Procedures 2 . . . . . 7 credits
(Winter Term) . . . . . 5 class, 5 lec/lab hrs/wk
Prerequisite: Successful completion of all fall term Dental Assisting courses and/or instructor consent. Specialties of dentistry, principle procedures, set-ups, clinical experience.

5.397 Dental Materials . . . . . 2 credits
(Fall Term) . . . . . 1 class, 3 lec/lab hrs/wk
Prerequisite: Admission to Dental Assisting program and/or instructor consent. The composition, clinical properties, preparation, use and storage of materials used in dentistry.

5.398 Dental Materials 2 . . . . . 2 credits
(Winter Term) . . . . . 1 class, 3 lab hrs/wk
Prerequisite: Successful completion of Dental Materials 5.397 and/or instructor consent. Completion of simple laboratory procedures, such as study model construction, die construction, wax patterns, investing and casting, associated with specialties covered in Chairside Procedures 2 5.396.

5.399 Dental Office Procedures . . . . . 3 credits
(Spring Term) . . . . . 3 class hrs/wk
Prerequisite: Successful completion of fall and winter term Dental Assisting courses and/or instructor consent. Principles of appointment planning, telephone techniques, case presentation, and management of patient accounts.

5.400 Advanced Chairside Procedures . . . . . 2 credits
(Spring Term) . . . . . 1 class, 3 lab hrs/wk
Prerequisites: Enrollment in the Dental Assisting program and successful completion of fall and winter terms. (Prerequisites apply only to occupational preparatory students; if taken as occupational supplement, prerequisites are waived.) This course offers the student experience in extended intraoral responsibilities.

5.403 Introduction to Dentistry . . . . . 2 credits
(Fall Term) . . . . . 2 class hrs/wk
Prerequisite: Admission to Dental Assisting program and/or instructor consent. Course content includes the development of dentistry and its related professions and 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.

5.407 Dental Health Education 1 . . . . . 1 credit
(Fall Term) . . . . . 1 class hr/wk
Prerequisite: Admittance to the Dental Assisting program, and/or instructor consent. This course covers the basic concepts of preventive dentistry including the study of plaque-related diseases, fluoride therapy, brushing and flossing techniques.

5.408 Dental Health Education 2 . . . . . 1 credit
(Winter & Spring Terms) . . . . . 3 lec/lab hrs/wk
Prerequisite: Admission to Dental Assisting Program and/or instructor consent. Must be taken in sequence. Principles taught in Dental Health Education 1 are applied. Students schedule patients and provide information on accepted home care techniques. Some emphasis is placed on patient motivation.

5.409 Dental Health Education 3 . . . . . 1 credit
(Spring Term) . . . . . 1 class hr/wk
Prerequisite: Admission to Dental Assisting program and/or instructor consent. Must have taken Dental Health Education 1 and 2. The course emphasizes nutritional counseling and techniques of preparing and evaluating dental health education materials.

5.410 Health Sciences . . . . . 4 credits
(Fall Term) . . . . . 4 class hrs/wk
Prerequisite: Admission to Dental Assisting program and/or instructor consent. The study of structure and function of cells, tissues, organs, and systems of the human body. Bacteriology, microbiology, physiology, and the importance of these as related to dentistry are discussed.

5.414 IS: Dental Assisting . . . . . 1-3 credits
(All Terms) . . . . . 2-6 hrs/wk
A non-paid variable credit course based on independent study contracted between an instructor and a student. The emphasis will be in areas of student tutoring or research-related projects which provide an opportunity for students to pursue in-depth study into an area previously covered in a survey or introductory course. The instructor will be the final determiner of validity of the project and the credits earned. A student may enroll in one independent study course in a given term. Independent Study may be repeated up to a maximum of 12 credits.

5.415 Dental Anatomy . . . . . 2 credits
(Fall Term) . . . . . 1 class, 3 lab hrs/wk
Prerequisite: Admission to Dental Assisting program and/or instructor consent. The purpose of this instructional, individually paced course is to provide background material and information to assist the student in accomplishing the following objectives:

(1) identify supporting structures, differences and similarities of individual teeth, (2) utilize the Universal Numbering System commonly used in dental offices, and (3) correctly identify surfaces of the teeth.

5.435 Oral Pathology . . . . . 2 credits
(Winter Term) . . . . . 2 class hrs/wk
Prerequisite: Successful completion of fall term Dental Assisting courses and/or instructor consent. The study of oral pathology which includes normal, diseased or injured tissues, developmental anomalies, dental caries, abscesses and cysts.

9.100 Expanded Functions for the Orthodontic Assistant . . . . . 1 credit
(Spring Term) . . . . . 6 class, 12 lec/lab hrs/wk
Prerequisite: Current CPR card, graduate of accredited Dental Assisting program, or currently a certified Dental Assistant, or registered dental assistant, or completion of Basic Examination for dental assistants. This course presents current orthodontic functions information needed to prepare the learner to sit for the board of Dentistry Expanded Function Orthodontic Dental Assisting examination. The course focuses on taking diagnostic impressions, recementing loose orthodontic bands, coronal polishing, use of ultrasonic scaler and removal of cement from orthodontic bands.

DH 210 Oral Roentgenology 2 . . . . (variable) 1-3 credits
(Fall Term) . . . . . 3 class hrs/wk
Prerequisite: Admission to Dental Assisting program and/or instructor consent. Historical background, terminology, and basic physics associated with the roentgen ray (x-ray). Types and speed ratings of x-ray film. Radiological health measures are studied. Examination and operation of a dental x-ray unit. Darkroom chemistry and advanced procedure.

DH 211 Oral Roentgenology 3 . . . . . 2 credits
(Winter Term) . . . . . 1 class, 3 lab hrs/wk
Prerequisite: Completion of fall term Dental Assisting courses, and/or instructor consent. Identification of dental abnormalities as seen on a radiograph. Provides basis for various occlusal film projections and the study of panoramic radiography. Clinical laboratory provides skills in periapical and bite-wing radiography.

DH 212 Oral Roentgenology 4 . . . . . 1 credit
(Spring Term) . . . . . 3 lab hrs/wk
Prerequisite: Completion of winter term Dental Assisting courses, and/or instructor consent. Laboratory devoted to taking intra-oral x-ray film in a clinical setting. Films are critiqued and interpreted, noting radiographic landmarks.

Dental Hygiene

DH 113 Dental Anatomy . . . . . 2 credits
(Fall Term) . . . . . 1 class, 3 lab hrs/wk
The purpose of this instructional, individually-paced course is to provide background material and information to assist the student in accomplishing the following objectives: (1) identify supporting structures, differences and similarities of individual teeth, (2) utilize the Universal Numbering System commonly used in dental offices, (3) duplicate dental anatomy by drawings or wax carvings, and (4) correctly identify surfaces of the teeth.

DH 118 Clinical Dental Hygiene 1 . . . . . 5 credits
(Fall Term) . . . . . 3 class, 6 lab hrs/wk
In this course patient management of oral hygiene is introduced. Emphasis on appearance, effects, and removal of deposits; principles and methods to prevent disease transmission; introduction to instrumentation techniques; and care of dental hygiene instruments and equipment.

DH 119 Clinical Dental Hygiene 2 . . . . . 7 credits
(Winter Term) . . . . . 4 class, 9 lab hrs/wk
Prerequisite: Successful completion of Clinical Dental Hygiene 1 DH 118. Students receive initial contact with patients in the clinical setting. Classwork is devoted to auxiliary services provided (dental and periodontal charting, polishing techniques, medical history, fluoride applications), evaluations of patients, treatment planning, and patient education.

DH 120 Clinical Dental Hygiene 3 . . . . . 6 credits
(Spring Term) . . . . . 2 class, 2 lec/lab, 9 lab hrs/wk
Prerequisite: Admission to the Dental Hygiene program; completion of Clinical Dental Hygiene 2 DH 119 or instructor consent. Continuation of clinical procedures and management of patients with special dental needs. Development of skills in disease control and as a dental health educator. Nutrition in oral health and disease will be emphasized.

DH 132 Dental Materials and Procedures . . . . . 3 credits
(Spring Term) . . . . . 2 class, 3 lab hrs/wk
Prerequisite: Enrolled in Dental Hygiene program. This course provides the student with background information regarding the various procedures followed and materials used in dentistry. Emphasis is placed on learning the physical and clinical properties of and manipulations of materials commonly utilized in the dental office.

Oral Roentgenology 2, 3, 4
Prerequisite: Admission to the Dental Hygiene program. The complete theory background of x-ray, terminology, safety factors, biological effects of radiation, darkroom procedures, operation of the dental x-ray machine including the breakdown of these functions. The various techniques utilized in taking diagnostic films; diagnostic components and legal aspects pertaining to x-ray films.

DH 210 Oral Roentgenology 2 . . . . (variable) 1-3 credits
(Winter Term) . . . . . 3 class hrs/wk
Prerequisite: Admission to Dental Hygiene program. Historical background, terminology, and basic physics associated with the Roentgen Ray (x-ray). Types and speed ratings of x-ray film. Radiological health measures are studied. Examination and operation of a dental x-ray unit. Darkroom chemistry and advanced procedure.

DH 211 Oral Roentgenology 3 . . . . . 2 credits
(Spring Term) . . . . . 4 class hrs/wk
Prerequisite: Admission to Dental Hygiene program and successful completion of Oral Roentgenology 2 DH 210. Identification of dental abnormalities as seen on a radiograph. Provides basis for various occlusal film projections and the study of panoramic radiography. Clinical laboratory provides skills in periapical and bite-wing radiography.

DH 212 Oral Roentgenology 4 . . . . . 1 credit
(Fall Term) . . . . . 3 lab hrs/wk
Prerequisite: Admission to Dental Hygiene program and successful completion of Oral Roentgenology 3 DH 211. Laboratory devoted to taking intraoral x-ray film in a clinical setting. Films are critiqued and interpreted, noting radiographic landmarks.

DH 220 Clinical Dental Hygiene 4 . . . . . 9 credits
(Fall Term) . . . . . 3 class, 2 lec/lab, 15 lab hrs/wk
Prerequisite: Admission to the Dental Hygiene program; completion of Dental Hygiene 3 DH 120 or consent of instructor. The students learn and apply theoretical knowledge to the practice of dental hygiene on patients. As skills increase, students are required to perform more difficult tasks and complete their

requirements in a shorter period of time. Instructors monitor and assist the student. Skills practiced include prophylaxis, scaling, expanded functions, individualized patient preventive instruction, and comprehensive dental hygiene care.

DH 221 Clinical Dental Hygiene 5 . . . . . 7 credits
(Winter Term) . . . . . 2 class, 2 lec/lab, 12 lab hrs/wk
Prerequisite: Admission to the Dental Hygiene program; completion of Clinical Dental Hygiene 4 DH 220 or consent of instructor. Focus on periodontal therapy techniques for Type II and Type III patients. Didactic and clinical instruction on rootplaning and soft tissue currettage; specialized services in periodontics, orthodontics, pedodontics, oral surgery, clinical pathology, and indications for patient referral in a general dental practice will be presented.

DH 222 Clinical Dental Hygiene 6 . . . . . 8 credits
(Spring Term) . . . . . 3 class, 2 lec/lab, 12 lab hrs/wk
Prerequisite: Admission to the Dental Hygiene program; completion of Clinical Dental Hygiene 5 DH 221 or consent of instructor. Continuation of DH 221. Emphasis is placed on improvement of time utilization; mastery of Oregon Expanded Function skills; assessment of plaque control instruction at post treatment appointments; and communication skills for employment in a private dental office.

DH 228 Oral Biology 1 . . . . . 4 credits
(Fall Term) . . . . . 4 class hrs/wk
Prerequisite: Admission to the Dental Hygiene program. The student will learn to 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.

DH 229 Oral Biology 2 . . . . . 4 credits
(Winter Term) . . . . . 4 class hrs/wk
Prerequisite: Admission to the Dental Hygiene program. The student will be able to explain and recognize the processes and terminology related to the development of the teeth and its specific tissues. The student will participate in discussions about immunology, inflammatory processes, healing, and disease of the hard tissues of the teeth.

DH 230 Oral Biology 3 . . . . . 4 credits
(Spring Term) . . . . . 4 class hrs/wk
Prerequisite: Admission to the Dental Hygiene program. The student will state and explain terms related to general and oral pathologic conditions, etiologies of diseases, infection, degenerative and neoplastic processes.

DH 233 Dental Anesthesia and Analgesia . . . . . (variable) 1-3 credits
(Fall Term) . . . . . 2 class, 2 lec/lab hrs/wk
Prerequisite: Currently enrolled in the Dental Hygiene program; successful completion of Pharmacology DH 254, or department consent. Designed to familiarize students with procedures used in local anesthesia and nitrous oxide-oxygen analgesia, including the various types of anesthetics and the techniques for administering. The student will have an opportunity to practice the administration of local infiltration and nitrous oxide analgesia procedures.

DH 234 Trends and Issues in Dental Hygiene . . 2 credits
(Winter Term) . . . . . 2 class hrs/wk
Students will be provided with background information regarding current trends and issues in dentistry and dental hygiene. Students will become familiar with rules and regulations of the state dental practice act governing the ethical practice of dentists and auxillary personnel. The student will receive instruction and assistance relating to application for employment.

DH 235 Community Dental Health . . . . . 1 credit
(Spring Term) . . . . . 2 lec/lab hrs/wk
Prerequisites: Successful completion of Community Dental Health DH 236 and DH 237; instructor consent. Emphasis in this course is placed on the evaluation of the dental health needs of a segment of the population that does not receive regular dental care. Practice as a dental health educator for groups. Students design, present and evaluate dental health education for selected populations.

DH 236 Community Dental Health . . . . . 2 credits
(Fall Term) . . . . . 2 class hrs/wk
Dental Health education in the schools, working with administration and classroom teachers, organizing a dental health program. Students will become involved in dental surveys of school children in selected geographic locations. Continued emphasis on instructional materials.

DH 237 Community Dental Health . . . . . 2 credits
(Winter Term) . . . . . 2 class hrs/wk
Dental health education in the community; exploring local agencies with dental health problems. Field experience in local school districts.

DH 254 Pharmacology . . . . . 3 credits
(Spring Term) . . . . . 3 class hrs/wk
Prerequisite: Student enrolled in Dental Hygiene program. Elementary consideration of action, distribution, and fate of those classes of chemical agents most commonly used in dentistry. Also, the procedures and drugs used for medical emergencies in the dental office.

DH 298 IS: Dental Hygiene . . . . . 1-3 credits
(All Terms) . . . . . 2-6 hrs/wk
A non-paid variable credit course based on independent study contracted between an instructor and a student. The emphasis will be in areas of student tutoring or research-related projects which provide an opportunity for students to pursue in-depth study into an area previously covered in a survey or introductory course. The instructor will determine the validity of the project and the credits earned. A student may enroll in one independent study course in a given term. Independent study may be repeated up to a maximum of 12 credits.

Medical Office Assistant

2.507 Medical Filing and Records Management . 3 credits
(Fall Term) . . . . . 3 class hrs/wk
Principles of filing and records management specifically for the medical office. Legal and ethical concerns of confidentiality. Fundamentals of patient reception, billing and collection procedures, and use of the computer in the medical office.

2.512 Medical Office Procedures 1 . . . . . 3 credits
(Winter Term) . . . . . 3 class hrs/wk
Prerequisite: Medical Typing 1 2.122. Medical reimbursement management for private health and accident insurance, Medicare, Medicaid, Workers's Compensation. Abstracting information from health records for billing and transfer forms.

2.514 Medical Office Procedures 2 . . . . . 3 credits
(Spring Term) . . . . . 3 class hrs/wk
Prerequisites: Medical Office Procedures 1 2.512 and Medical Typing 2 2.124. Management techniques for the medical office including charting, scheduling, telephone, letter composition, minutes of meetings. Includes a unit on resume writing.

5.481 IS: Medical Office Assistant . . . . . 1-3 credits
(All Terms) . . . . . 2-6 hrs/wk
Prerequisite: Admission to the Medical Office Assistant program. Consent of instructor required. A non-paid variable credit course based on independent study contracted between an instructor and a student. The emphasis will be in areas of student tutoring or research-related projects which provide an opportunity for students to pursue in-depth study into an area previously covered in a survey or introductory course. The instructor will determine the validity of the project and the credits earned. A student may enroll in one independent study course in a given term. Independent Study may be repeated up to a maximum of 12 credits.

5.482 Clinical Assistant 1 . . . . . 4 credits
(Winter Term) . . . . . 3 class, 2 lec/lab hrs/wk
Prerequisite: Completion of all fall term Medical Office Assistant courses; consent of instructor. Specifics of medical office assisting will be performed—aseptic techniques, sterilization of instruments, examination room techniques, vital signs, injections, instrument identification, bandages and dressings, and drug identification.

5.483 Medical Terminology 1 . . . . . 2 credits
(All Terms) . . . . . 2 class hrs/wk
A programmed course covering medical terminology, derivation, pronunciation and meaning.

5.484 Medical Law and Ethics . . . . . 2 credits
(Fall Term) . . . . . 2 class hrs/wk
Prerequisite: Admission to Medical Office Assistant program. A study of the ethics of the profession and the laws governing the medical assistant and the profession.

5.485 Laboratory Orientation . . . . . 3 credits
(Spring Term) . . . . . 3 lab hrs/wk
Prerequisite: Completion of fall and winter term courses in the Medical Office Assistant program and consent of the program coordinator. Study of various office laboratory procedures and, in most instances, how to do them; hematology, urinalysis, radiology, immunology.

5.492 Clinical Assistant 2 . . . . . 2 credits
(Spring Term) . . . . . 2 class hrs/wk
Prerequisite: Successful completion of Clinical Assistant 1 5.482. Continuation of Clinical Assistant 1 5.482. The course also includes instruction in ECG and CPR.

5.493 Medical Terminology 2 . . . . . 3 credits
(All Terms) . . . . . 3 class hrs/wk
Prerequisite: Medical Terminology 1 5.483. Proposes to incorporate anatomical and physiological terminology with related medical terminology thus providing the student who has never taken anatomy and physiology with an introduction to terms as to body structure and function. For the student who has completed courses in anatomy and physiology, it will serve as a review with the addition of medical terms. Also for the student entering any health profession. (This course is *not* required for MOA curriculum.)

5.495 Medical Transcription 1 . . . . . 2 credits
(Winter Term) . . . . . 1 class, 2 lec/lab hrs/wk
Prerequisites: Medical Terminology 1 5.383, Typing 40 wpm, consent of instructor. 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.

5.496 Medical Transcription 2 . . . . . 2 credits
(Spring Term) . . . . . 1 class, 2 lec/lab hrs/wk
Prerequisites: Medical Transcription 1 5.495, consent of instructor. Continuation of Medical Transcription 1 5.495 with higher standards for accuracy, neatness, terminology usage, spelling, etc. (This course is *not* required for MOA curriculum.)

5.497 Medical Transcription Laboratory . . . . . (variable) 1-3 credits
(Spring Term) . . . . . 9 lab hrs/wk
Prerequisites: Medical Transcription 2 5.496 or currently enrolled in Medical Transcription 2 5.496, consent of instructor. This course is designed to give the student actual medical transcription practice on authentic tapes dictated by physicians in various specialties.

5.498 Clinical Terminology . . . . . 2 credits
(Spring Term) . . . . . 2 class hrs/wk
Prerequisites: Medical Transcription 1 5.495. 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.

5.499 Introduction to Medical Records Technology . . . . . 3 credits
(Spring Term) . . . . . 3 class hrs/wk
Prerequisite: Medical Terminology 1 5.483 or equivalent. 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-4b including abstracting health records and assigning code numbers to diagnoses and procedures for indexing health data and processing reimbursement claims.

5.510 Physical Science 1 . . . . . 3 credits
(Fall Term) . . . . . 3 class hrs/wk
Designed to help the student identify selected fundamental concepts of the anatomy and physiology of the cell and skin, musculo-skeletal, nervous sensory, endocrine, and circulatory-lymphatic systems. These concepts will be applied as the basis of nursing and medical office assisting practice.

5.512 Physical Science 2 . . . . . 3 credits
(Winter Term) . . . . . 3 class hrs/wk
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. These concepts will be applied as the basis of nursing and medical office assisting practice.

5.525 Survey of Health Occupations . . . . . (variable) 1-2 credits
(See Term Schedule) . . . . . 1 class, 3 lab hrs/wk
This course offers the student an opportunity to learn about Lane Community College health career programs and the health occupations and careers that can be prepared for in the Eugene/Springfield area as well as regional training sites. The student will be able to listen to speakers from each of the occupations and observe the working environment in the related health care facilities.

5.603 Introduction to Medical Science . . . . . 3 credits
(Spring Term) . . . . . 3 class hrs/wk
Prerequisites: Successful completion of Physical Science 1 and 2; or Medical Terminology 1 and 2; or BI 121 and 122; or consent of instructor. This course will provide an overview of human disease in terms of general vocabulary, overall frequency and significance of disease, and diagnostic approach including laboratory resources. The course will cover some basic pathologic processes; diseases of organs and organ systems; and discussion of some multisystem diseases and disease processes.

Nursing

7.133 Caring for the Ill Child . . . . . 2 credits
(Winter or Spring Term) . . . . . 2 class hrs/wk
Prerequisite: A First Aid course strongly recommended. This is a required course for students in the Early Childhood Education: Nanny Option and is also open to parents interested in the content. Topics to be covered include common childhood illnesses and when to notify the pediatrician/physician, what to report to the pediatrician, how to safely administer prescribed medications and other treatments, health care and special sanitation measures, the proper handling of emergency situations, and special concerns related to the care of the newborn.

NUR 100 Introduction to Nursing . . . . . 2 credits
(Summer Term) . . . . . 2 class hrs/wk
Provides an overview of introductory concepts and values basic to contemporary nursing. Concepts of stress, adaptation, health-illness continuum, and therapeutic communications are included. The effects of cultural diversity, the aging process, death and grief on individuals' biopsychosocial needs are introduced. Emphasis is placed on the role of the nurse in the delivery of health care.

NUR 106A Nursing Fundamentals . . . . . 5 credits
(Fall Term) . . . . . 5 class hrs/wk
Prerequisites: Admission to the nursing program, Elementary Human Anatomy and Physiology 1 Bi 121, Introduction to Nursing NUR 100. Corequisites: Elementary Human Anatomy and Physiology 2 Bi 122, Dosage Computation Math 5.606, Nursing Fundamentals Lab NUR 106B. Builds upon the content of Introduction to Nursing NUR 100. Introduces fundamental nursing skills, concepts of client care communication, and Roy's Adaptation theory. Content focuses on fundamental nursing care of clients of any age related to the need for protection: skin integrity and physical safety, elimination, and nutrition. The student is introduced to the use of the nursing process, focusing on data collection and nursing diagnosis. Nursing care of the woman, family, and neonate during normal pregnancy, delivery and post-partum period is also addressed.

NUR 106B Nursing Fundamentals Lab . . . . . 5 credits
(Fall Term) . . . . . 15 lab hrs/wk
Prerequisites: Admission to the nursing program, Elementary Human Anatomy and Physiology 1 Bi 121, Introduction to Nursing NUR 100. Corequisites: Elementary Human Anatomy and Physiology 2 Bi 122, Dosage Computation Math 5.606, Nursing Fundamentals NUR 106A. Focus is on laboratory implementation of theory and fundamental nursing skills related to medical-surgical asepsis, personal hygiene, activity and exercise, vital signs, nutrition, the nursing process, charting, and elimination.

NUR 107A Basic Nursing 1 . . . . . 5 credits
(Winter Term) . . . . . 5 class hrs/wk
Prerequisites: Dosage Computation Math 5.606, Nursing Fundamentals 106A, Nursing Fundamentals Lab NUR 106B, Elementary Human Anatomy and Physiology 2 Bi 122, CPR Certification. Corequisites: Elementary Microbiology Bi 123, Basic Nursing 1 Lab NUR 107B, Child Development HDFS 226. Builds upon the content of Nursing Fundamentals NUR 106A. Content focus is the basic nursing care of clients of any age experiencing common adaptation problems related to oxygenation, circulation, self-concept, sensory regulation, and activity/rest. Principles of pharmacology, the planning and implementation phases of the nursing process, and clients of any age experiencing the stress of surgery are also addressed.

NUR 107B Basic Nursing 1 Lab . . . . . 5 credits
(Winter Term) . . . . . 15 lab hrs/wk
Prerequisites: Nursing Fundamentals NUR 106A, Nursing Fundamentals Lab NUR 106B, Elementary Human Anatomy and Physiology 2 Bi 122, Dosage Computation Math 5.606, CPR Certification. Corequisites: Basic Nursing 1 NUR 107A, Elementary Microbiology Bi 123, Child Development HDFS 226. Focus is on laboratory implementation of theory and basic nursing skills related to the need for oxygenation, circulation, self-concept, sensory regulation, and activity/rest. The nursing process focus broadens to include statement of client outcomes and nursing actions. Basic skills of medication administration are introduced. Clinical experience may include care of the woman, family and neonate during normal pregnancy, delivery, and post-partum period.

NUR 109A Basic Nursing 2 . . . . . 5 credits
(Spring Term) . . . . . 5 class hrs/wk
Prerequisites: Basic Nursing 1 NUR 107A, Basic Nursing 1 Lab NUR 107B, Elementary Microbiology Bi 123, Child Development HDFS 226 or Human Development 1 Psy 235. Corequisite: Basic Nursing 2 Lab NUR 109B. Builds upon the content of Basic Nursing 1 NUR 107A. Focus is on the basic nursing care of clients of any age experiencing common adaptation problems related to nutrition/elimination, circulation, sexual structure/function, neoplasia, and sensory, neurological and endocrine regulation. The evaluation phase of the nursing process and basic nursing care of clients experiencing the stress of physical or substance abuse are also addressed. Applicable pharmacology, pathophysiology, interpersonal communication techniques, and ethical/legal considerations of nursing practice are integrated.

NUR 109B Basic Nursing 2 Lab . . . . . 6 credits
(Spring Term) . . . . . 18 lab hrs/wk
Prerequisites: Basic Nursing 1 NUR 107A, Basic Nursing 1 Lab NUR 107B, Elementary Microbiology Bi 123 or Physical Science 2 5.512, Child Development HDFS 226. Corequisite: Basic Nursing 2 NUR 109A. Focus is laboratory implementation of theory and basic nursing skills related to the need for circulation, elimination, nutrition, sexual function, protection: neoplasia, and sensory, neurological, and endocrine regulation. The nursing process focus broadens to include evaluation and statement of rationales for nursing actions. Basic skills of I.V. therapy are also introduced. Clinical experience may include care of the woman, family, and neonate during normal pregnancy, delivery, and post-partum period.

NUR 204C Nursing Trends and Issues . . . . . 1 credit
(Spring Term) . . . . . 1 class hr/wk
Prerequisite: Second year ADN or third quarter PN standing. Introduces and enables the student to discuss legal and professional responsibilities in relation to employment, economic security, licensure, professional organization, and changing trends in nursing practice.

NUR 206A Advanced Nursing 1 . . . . . 5 credits
(Fall Term) . . . . . 5 class hrs/wk
Prerequisites: Basic Nursing 2 NUR 109A and Lab NUR 109B, Elementary Human Anatomy and Physiology 1 Bi 121 and 2 Bi 122, Elementary Microbiology Bi 123, Child Development HDFS 226, Dosage Computation Math 5.606, and current CPR Certification. Corequisite: Advanced Nursing Lab NUR 206B. Builds upon the content of Basic Nursing 2 NUR 109A. Content is designed to increase the student's depth of knowledge for the advanced nursing care of clients of any age experiencing disturbances in biopsychosocial needs while adapting to common

selected health care problems. Applicable pharmacology, pathophysiology, interpersonal communication techniques, health teaching and ethical/legal considerations of nursing practice are integrated.

NUR 206B Advanced Nursing 1 Lab . . . . . 5 credits
(Fall Term) . . . . . 15 lab hrs/wk
Prerequisites: Basic Nursing 2 NUR 109A and Lab NUR 109B, Elementary Human Anatomy and Physiology 1 Bi 121 and 2 Bi 122, Elementary Microbiology Bi 123, Child Development HDFS 226, Dosage Computation Math 5.606, and current CPR Certification. Corequisite: Advanced Nursing 1 NUR 206A. Emphasis is placed on continued application of the nursing process in providing advanced nursing care to clients of any age experiencing disturbances in biopsychosocial needs while adapting to common selected health care problems. Clinical experiences are selected to assist students in the application of the theoretical concepts learned in NUR 206A and previous nursing courses, and to provide opportunities for maintaining and increasing competencies in nursing process and skills essential to therapeutic nursing interventions. Clinical experience may include care of pediatric clients or those of any age in institutional settings for the treatment of maladaptive psychosocial health problems.

NUR 207A Advanced Nursing 2 . . . . . 4 credits
(Winter Term) . . . . . 4 class hrs/wk
Prerequisites: Advanced Nursing 1 NUR 206A and Lab NUR 206B, Corequisites: Advanced Nursing 2 Lab NUR 207B. Builds upon the content of Advanced Nursing 1 NUR 206A. Content is designed to increase the student's depth of knowledge for the advanced nursing care of clients of any age experiencing disturbances in biopsychosocial needs while adapting to common selected health care problems. The role of the nurse as a coordinator of client care in institutional settings is examined. Descriptions of health care delivery systems are presented with an emphasis on implications for nursing. Integration of pharmacology, pathophysiology, interpersonal communication, health teaching and ethical/legal considerations of nursing practice is continued.

NUR 207B Advanced Nursing 2 Lab . . . . . 5 credits
(Winter Term) . . . . . 15 lab hrs/wk
Prerequisites: Advanced Nursing 1 NUR 206A and Lab NUR 206B, Corequisites: Advanced Nursing 2 NUR 207A. Emphasis is placed on continued application of the nursing process in providing advanced nursing care to clients of any age experiencing disturbances in biopsychosocial needs while adapting to common selected health care problems. Clinical experiences are selected to assist students in the application of the theoretical concepts learned in NUR 207A and previous nursing courses, and to provide opportunities for maintaining and increasing competencies in nursing process and skills essential to therapeutic nursing interventions. Clinical experience may include care of pediatric clients or those of any age in institutional settings for the treatment of maladaptive psychosocial health problems.

NUR 209A Advanced Nursing 3 . . . . . 4 credits
(Spring Term) . . . . . 4 class hrs/wk
Prerequisites: Advanced Nursing 2 NUR 207A and Lab NUR 207B, Corequisites: Advanced Nursing 3 Lab NUR 209B. Builds upon the content of Advanced Nursing 2 NUR 207A. Content is designed to increase the student's depth of knowledge to provide advanced nursing care of clients of any age experiencing disturbances in biopsychosocial needs while adapting to common selected health care problems. High risk and/or abnormal biopsychosocial aspects of the child bearing cycle are included. Integration of pharmacology, pathophysiology, interpersonal communication, health teaching and ethical/legal considerations of nursing practice continues.

NUR 209B Advanced Nursing 3 Lab . . . . . 6 credits
(Spring Term) . . . . . 18 lab hrs/wk
Prerequisites: Advanced Nursing 2 NUR 207A and Lab NUR 207B, Corequisites: Advanced Nursing 3 NUR 209A. Designed to facilitate transition from student to graduate nurse role with an emphasis on the coordination of nursing care for a group of clients. Application of the nursing process in providing advanced nursing care to clients of any age experiencing disturbances in biopsychosocial needs while adapting to common selected health care problems is also continued. Clinical experiences are selected to assist students in the application of the theoretical concepts learned in NUR 209A and previous nursing courses, and to provide opportunities for maintaining and increasing competencies in nursing process and skills essential to therapeutic nursing interventions.

NUR 220 Nursing Administration in Long-Term Care Facilities 1 . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
Designed for RNs employed or interested in employment in long-term care facilities (LTCF). Fulfills three credits of the Oregon State Health Division requirements for nurse administrator in LTCF. Course will introduce aspects of aging and principles of management with practical application useful to the nursing home nurse administrator. Topics include the health care industry and nursing homes today; the role of the nursing process; assessment of management styles; communication skills; conducting staff meetings and conferences; and motivating staff.

NUR 221 Nursing Administration in Long-Term Care Facilities 2 . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
Designed for RNs interested in working in long-term care facilities (LTCF). Fulfills three credits of the Oregon Health Division requirements for nurse administrators in LTCF. It will address the major areas of administration useful for the nursing home administrator. Topics include health care legislation, ethics of long-term care; legal considerations; managing care of the LTCF resident; budgeting; monitoring the facility; labor relations; and regulations and standards for LTCF.

NUR 298 IS: ADN & PN . . . . . 1-3 credits
(Fall, Winter, and Spring Terms) . . . . . 2-6 lec/lab hrs/wk
Prerequisite: Admission to ADN or PN program. An independent study experience for the student who desires to pursue in-depth study in a variety of selected topics related to nursing. Students will initiate individual projects to further explore some specific interest, techniques or methods within the scope of nursing. The course is repeatable.

NUR 298 Pharmacology for Nurses . . . . . 3 credits
(Spring Term) . . . . . 3 class hrs/wk
Prerequisite: Open to nursing students, licensed practical nurses, and registered nurses. The course is designed to provide the student with the background knowledge necessary to understanding the actions and effects of drugs on the human body. Basic principles of pharmacology are discussed, and an emphasis is placed on drug prototypes in relation to the major classifications of drugs. The nurse's responsibility in the rational administration of drugs is discussed.

NUR 299B Physical Assessment for Nurses . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
Prerequisite: Registered nurse or enrolled in Associate Degree Nursing program. A basic foundation of knowledge and skills involved in the physical and psychological assessment of clients is provided. Emphasis will be on the applicatoin of skills which will include a health history, physical assessment utilizing inspection, palpation, percussion, and auscultation.

Respiratory Care

5.483 Medical Terminology 1 . . . . . 2 credits
(Fall Term) . . . . . 2 class hrs/wk
Prerequisite: Admission to the Respiratory Care program. A programmed course covering medical terminology, pronunciation, meaning and derivation.

RT 111 Fundamentals of Respiratory Care Lab . 1 credit
(Fall Term) . . . . . 3 lab hrs/wk
Prerequisite: Admission to the Respiratory Care program or consent of instructor. Corequisite: Fundamentals of Respiratory Care RT 114. Fundamental concepts and principles are applied to enhance a working knowledge with basic respiratory care equipment.

RT 114 Fundamentals of Respiratory Care . . . . 2 credits
(Fall Term) . . . . . 2 class hrs/wk
Prerequisite: Admission to the Respiratory Care program or consent of instructor. Corequisite: Fundamentals of Respiratory Care Lab RT 111. Designed to provide a thorough understanding of basic principles and concepts used in respiratory care. With major emphasis on physical principles, students are introduced to theories and devices used in the administration of medical gases, humidity and aerosol therapy, and containerization of gases. Students are introduced to basic descriptions of cardiopulmonary anatomy and physiology.

RT 123 Cardiopulmonary Physiology . . . . . 3 credits
(Winter Term) . . . . . 3 class hrs/wk
Prerequisite: Fundamentals of Respiratory Care RT 114 or consent of instructor. Emphasis is placed on cardiopulmonary physiology and its applications to respiratory care. Physiological functions are presented which include acid-base relationships, controlling mechanisms of ventilation, ventilation/perfusion relationships, neurological control, and hemo-dynamics of the cardiopulmonary system. Physiological imbalances and case studies are presented to enhance student understanding of clinical variables encountered in patient care.

RT 131 Respiratory Care Nursing Lab . . . . . 1 credit
(Winter Term) . . . . . 3 lab hrs/wk
Corequisite: Respiratory Care Nursing RT 133. An introduction to hospital equipment and resource materials for demonstrations and practice. Technique practices include body mechanics, isolation and handwashing, assessing vital signs, airway maintenance, and chest physiotherapy.

RT 133 Respiratory Care Nursing . . . . . 1 credit
(Winter Term) . . . . . 1 class hr/wk
Prerequisite: Admission to the Respiratory Care program or consent of instructor. Corequisite: Respiratory Care Nursing Lab RT 131. Presents the basic principles and essential nursing skills required for respiratory therapists to perform basic patient care safely and effectively. These skills include terminology, aseptic techniques, communication skills, body mechanics, patient positioning, and discussion of behavioral problems unique to patients with respiratory problems.

RT 141 Principles of Respiratory Care Lab . . . . 1 credit
(Spring Term) . . . . . 3 lab hrs/wk
Corequisite: Principles of Respiratory Care RT 144. Practice time is provided for pulmonary assessment techniques, breathing procedures, chest physiotherapy, medical charting, and medication delivery.

RT 144 Principles of Respiratory Care . . . . . 4 credits
(Spring Term) . . . . . 4 class hrs/wk
Prerequisite: Cardiopulmonary Physiology RT 123 or consent of instructor. Corequisite: Principles of Respiratory Care Lab RT 141. Lectures emphasize therapeutic modalities the student encounters in the clinical setting. The indications, contraindications, and hazards of gas therapy, aerosol therapy, chest physiotherapy, and basic medication delivery are presented, and significance is given to intermittent positive pressure/breathing and incentive spirometry.

RT 146 Introduction to Clinical Respiratory Care . 2 credits
(Spring Term) . . . . . 6 lab hrs/wk
Prerequisite: Admission to the Respiratory Care program or instructor consent. Corequisites: Principles of Respiratory Care RT 144, Principles of Respiratory Care Lab RT 141. This is an introductory course designed to orient the student to clinical respiratory care facilities. Emphasis is placed on acquainting the student with the clinical performance of basic therapeutic modalities employed in respiratory care. Instruction in and monitoring of infection control techniques is strongly emphasized.

RT 148 Advanced Placement Clinical Practice . 1-8 credits
(All Terms) . . . . . 3-24 lab hrs/wk
Prerequisites: Admission to the 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 223 Pulmonary Pathology . . . . . 3 credits
(Spring Term) . . . . . 3 class hrs/wk
Prerequisite: Must have completed fall and winter term Respiratory Care courses or consent of instructor. The study of the nature and cause of pulmonary diseases which involve changes in structure and function. The etiology, pathogenesis, clinical manifestations, laboratory data, and treatment for major pulmonary disease entities will be presented.

RT 233 Pharmacology . . . . . 3 credits
(Fall Term) . . . . . 3 class hrs/wk
Prerequisite: Cardiopulmonary Physiology RT 123 or consent of instructor. The study of drugs: their origin, nature, properties, and effects on living tissue. Emphasis on drugs which reflect changes on the cardiopulmonary and renal systems.

RT 236 Clinical Practice 1 . . . . . 8 credits
(Summer Term) . . . . . 40 lab hrs/wk
Prerequisites: Admission to the Respiratory Care program, completion of Introduction to Clinical Respiratory Care RT 146, or consent of instructor. This course is a continuation of Introduction to Clinical Respiratory Care with special emphasis on development of skills used in determining efficiency of therapeutic modalities in patient care situations. Continued emphasis is placed on development of professional attitudes and behaviors in clinical setting.

RT 241 Principles of Mechanical Ventilation Lab . 1 credit
(Fall Term) . . . . . 3 lab hrs/wk
Corequisite: Principles of Mechanical Ventilation RT 244. Em-

phasis 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, and chest physiotherapy techniques.

RT 244 Principles of Mechanical Ventilation . . . 4 credits
(Fall Term) . . . . . 4 class hrs/wk
Prerequisite: Principles of Respiratory Care RT 144 or consent of instructor. Corequisite: Principles of Mechanical Ventilation Lab RT 241. Emphasis will be on the mechanical function of equipment used in continuous ventilation of both adult and pediatric/neonatal critical care patients. Students will be provided with indications, contraindications, and hazards of continuous ventilation in addition to basic monitoring techniques. Significance is given to airway maintenance and non-invasive techniques of cardiac assessment.

RT 248 Clinical Practice 2 . . . . . 6 credits
(Fall Term) . . . . . 18 lab hrs/wk
Prerequisites: Admission to the Respiratory Care program, completion of Clinical Practice 1 RT 236, or consent of instructor. Corequisites: Principles of Mechanical Ventilation RT 244, Principles of Mechanical Ventilation Lab RT 241. A continuation of Clinical Practice 1 RT 236 with special emphasis on the continued development of skill in performance of therapeutic modalities. Familiarization with diagnostics and monitoring techniques and skills used in management of critical care patients will be provided.

RT 251 Pulmonary Diagnostics and Monitoring Lab . 1 credit
(Winter Term) . . . . . 3 lab hrs/wk
Corequisite: Pulmonary Diagnostics and Monitoring RT 254. Emphasis is placed on laboratory investigation and practice in endotracheal intubation and extubation techniques and associated airway care, pulmonary function testing techniques and interpretation of results, non-invasive cardiac assessment techniques including running and calculation of a twelve-lead electrocardiograph. Problems and case presentations are presented including calculations of physiologic shunt, physiologic deadspace, and deadspace to tidal volume ratios.

RT 254 Pulmonary Diagnostics and Monitoring . 2 credits
(Winter Term) . . . . . 2 class hrs/wk
Prerequisites: Admission to the Respiratory Care program, Principles of Mechanical Ventilation RT 244, or consent of instructor. Corequisite: Pulmonary Diagnostics and Monitoring Lab RT 251. Emphasis is placed on diagnostic and monitoring principles used in determining clinical evaluation of acute and chronic cardiopulmonary disease with special attention paid to monitoring of the critical care patient. Discussions include electrocardiography, hemodynamic monitoring, and advanced pulmonary function testing techniques.

RT 258 Clinical Practice 3 . . . . . 6 credits
(Winter Term) . . . . . 18 lab hrs/wk
Admission to the Respiratory Care program, completion of Clinical Practice 2 RT 248, or consent of instructor. Corequisites: Pulmonary Diagnostics and Monitoring RT 254, Pulmonary Diagnostics and Monitoring Lab RT 251. A continuation of Clinical Practice 2 RT 248 with special emphasis on diagnostic and monitoring techniques and continued development of skills in therapeutic modalities and management of adult critical care situations. Special assignments include surgery, neonatal, and pediatric respiratory care.

RT 262 Neonatal/Pediatric Respiratory Care . . . 2 credits
(Winter Term) . . . . . 2 class hrs/wk
Prerequisite: Principles of Mechanical Ventilation RT 244 or consent of instructor. Respiratory care of the neonate and pediatric patient is presented with special emphasis on physiology, pulmonary complications, and related intensive care procedures. Considerable time is given on neonatal transportation and assessment of the sick newborn and child.

RT 264 Rehabilitation and Organizational Development . . . . . 2 credits
(Spring Term) . . . . . 2 class hrs/wk
Prerequisite: Admission to the Respiratory Care program, Pulmonary Diagnostics and Monitoring RT 254 or consent of instructor. This course will emphasize therapeutic modalities and assessment techniques used in rehabilitation of cardiopulmonary patients. Discussions will also include respiratory care department organization, personnel management and cost containment techniques. Medico ethical and legal aspects of respiratory care will be the subject of group discussions.

RT 268 Clinical Practice 4 . . . . . 6 credits
(Spring Term) . . . . . 18 lab hrs/wk
Prerequisites; Admission to the Respiratory Care program, completion of Clinical Practice 3 RT 258, or consent of instructor. Corequisite: Rehabilitation and Organizational Development RT 264. A continuation of Clinical Practice 3 RT 258 with special emphasis on development of supervisory and department organizational skills and continued development of critical care and diagnostic skills.

RT 271 Respiratory Care Trends and Issues . . . 1 credit
(Spring Term) . . . . . 1 class hr/wk
Students are introduced to health care systems, professional and ethical issues related to respiratory care, and responsibilities in relation to employment, organizations, and changing trends. Emphasis is also placed on preparation for entry into the job market.

RT 298 IS: Respiratory Care . . . . . (variable)1-3 credits
(All Terms) . . . . . 2-6 lab hrs/wk
A non-paid variable credit course based on independent study contracted between an instructor and a student. The emphasis will be in areas of student tutoring or research-related projects which provide an opportunity for students to pursue in-depth study into an area previously covered in a survey or introductory course. The instructor will determine the validity of the project and credits earned. A student may enroll in one independent study course in a given term. Independent study may be repeated up to a maximum of 12 credits.

Early Childhood Education and Nanny Option Courses

7.101 Infants and Toddlers . . . . . 4 credits
(Fall, Winter, & Spring Terms) . . . . . 4 class hrs/wk
The course is designed to examine the growth and development of infants and toddlers in family or group settings. Care techniques related to dressing, diapering, feeding, and sleeping, as well as the modification of the environment for optimum development and safety, will be studied. Observation of infants and toddlers in the classroom, as well as lectures, textbook discussion, guest speakers, and videos, offer a varied presentation.

7.102 Child Care and Guidance . . . . . 3 credits
(Fall & Winter Terms) . . . . . 3 class hrs/wk
Acquaints student with various aspects in child care and guidance of preschool age children: discipline and self control, normal and abnormal behavior patterns, daily routines. Instruc-

tion on how to observe behavior will be offered through programmed packets, lectures, and discussions.

7.108 Outdoor Activities for Children . . . . . 2 credits
(Fall Term) . . . . . 2 class hrs/wk
Introduces student to methods and materials for guiding outdoor activities for young children – basic science information, types of playgrounds, value of play, playground supervision and safety. Designed specifically for workers with preschool and early primary-age children.

7.115 Creative Activities for Children . . . . . 3 credits
(Winter Term) . . . . . 3 class hrs/wk
Introduces students to creative activities suitable for preschool children — art, music, dramatics, rhythms, games, storytelling, fingerplays, carpentry, and water 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.

7.117 Early Childhood Curriculum 1 . . . . . 3 credits
(Spring Term) . . . . . 3 class hrs/wk
Prerequisite: Third term students or permission of instructor. Instruction and practice in planning daily and weekly program activities for early childhood centers. Emphasis on stimulating learning through use of a variety of methods and materials.

7.119 Early Childhood Curriculum 2 . . . . . 3 credits
(Fall Term) . . . . . 3 class hrs/wk
Prerequisite: Early Childhood Curriculum 1 7.117. Study and evaluation of various approaches to early childhood education including cognitive, language, early academic learning, and unit-based programs. Observation in a variety of full-day and half-day programs for children, ages 3 through 6. Practice in planning and teaching, using a variety of theoretical methods.

7.122 Administration of Child Care Centers . . . 4 credits
(Winter Term) . . . . . 4 class hrs/wk
Prerequisite: Fifth term student as an Early Childhood Education major or permission of the instructor. An overview of various problems involved in the establishment and operation of preschool programs, with an emphasis on full day programs. Overall program planning, organizational structure, budgeting, personnel management, and legal aspects of shared care. Operational codes, state and county agency requirements and state licensing rules are included.

7.124 Parent-School-Community Relations . . . . 3 credits
(Fall Term) . . . . . 3 class hrs/wk
This course is designed to help the student develop methods and procedures for fostering effective parent, school and community relations: development of methods and techniques in preparation for and carrying out of various types of parent conferences, development of a community resource file, understanding how community agencies can best serve parents and children in relation to school programs, and practical experience in communication skills with parents. Medical aspects of day care, including understanding and preventing the spread of infectious disease and management and prevention of accidents and injuries are also covered.

7.127 Infant and Toddler Environments . . . . . 3 credits
(Winter Term) . . . . . 3 class hrs/wk
The course is designed for prospective infant-toddler caregivers. It will include: (a) a brief overview of infant-toddler development; (b) how to staff a center appropriately; (c) how suitable materials and a carefully planned physical environment can enhance optimum development; (d) basic caregiving techniques; (e) how to plan activities; and (f) resources and references.

7.128 Early Childhood Practicum . . (variable) 1-12 credits
(Fall, Winter, & Spring Terms) . . . . 3 lab hrs/wk per credit
Prerequisite: Early Childhood Education or Nanny major and permission of the department. Early Childhood Practicum experience is designed to provide the student with actual experience in the supervision, guidance and care of young children. They are given the opportunity to observe appropriate curriculum and to plan and carry out age-appropriate curriculum activities.

7.130 The Nanny: An Overview . . . . . 1 credit
(Fall Term) . . . . . 1 class hr/wk
An introduction to the nanny as a profession. Focus is on the basic requirements to become a successful nanny. Includes a historical overview, domestic and international job opportunities, and strategies for dealing with isolation and homesickness.

7.131 Professional Nanny 1 . . . . . 2 credits
(Winter Term) . . . . . 2 class hrs/wk
Prerequisite: The Nanny: An Overview 7.130. The first of two courses designed to look in depth at the job of the professional nanny. Development of a nanny resource file. Daily routines, time management, and special skills needed in newborn care, special family circumstances such as death, divorce, stepparenting, and travel problems. Crime prevention and street-smart behavior are emphasized.

7.132 Professional Nanny 2 . . . . . 3 credits
(Spring Term) . . . . . 3 class hrs/wk
Prerequisites: The Nanny: An Overview 7.130 and Professional Nanny 1 7.131. The second of two courses designed to look in depth at the job of the professional nanny. Nanny special requirements, such as dress, etiquette, travel management, negotiating job contracts, resumes and interview skills, health and fitness for nanny and child, family relations, and life after being a nanny are examined.

7.134 Early Childhood Science Methods . . . . . 1 credit
(Fall Term) . . . . . 1 class hr/wk
Students study and develop various methods for creating science activities and learning experiences for young children. Normally taken along with Outdoor Activities for Children 7.108.

7.135 Food for Children . . . . . 3 credits
(Fall Term) . . . . . 2 class, 2 lec/lab hrs/wk
Food for Children is designed to provide skills for the nanny or anyone with children for planning, buying, and preparing nutritious, wholesome meals which will also entice children through their attractive display. Children's parties and cooking projects are also discussed and demonstrated.

7.136 Clothing Management: Nanny and Child . . 4 credits
(Spring Term) . . . . . 4 class hrs/wk
Clothing management skills for caregivers of children. Topics include clothing needs for children, quality construction, selection of ready-mades, fibers and fabrication, basic sewing skills for simple projects and repairs, clothing care and travel wardrobes.

FN 230 Child Nutrition . . . . . 3 credits
(Fall & Winter Term) . . . . . 3 class hrs/wk
This course teaches how to create an environment that encourages children to eat a variety of nutrient dense foods. Basic nutrition concepts are summarized. The food needs, habitats, and problems of infants, toddlers, preschoolers, and school-age children are discussed. Menu planning and nutrition education techniques are presented.

HDFS 226 Child Development . . . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
Study of the physical, social-emotional, and intellectual develop-

ment of the child, birth through six. Some emphasis on prenatal influences and modern scientific methods of treating the unborn. A survey of various child-study approaches. Instruction and experience in observing and recording the behavior of young children. Study of adult-child differences, value of play, and discipline.

HDFS 227/7.123 Children Under Stress . . . . . 3 credits
(Spring Term) . . . . . 3 class hrs/wk
Prerequisite: For Early Childhood Education majors: Child Development HDFS 226. For elective students: A background in human development, psychology, sociology, or a combination of all three is recommended. Children Under Stress is designed to acquaint the student with the social, economic, and cultural factors which contribute to a child's developmental experiences in such a way as to inhibit or enhance his/her best growth. Emphasis will be placed on the family, the educational system, and socio-cultural environments.

HDFS 228 The Exceptional Child . . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
The development, needs, and behavior of handicapped children during the preschool years. Generalizations and practical hints to help integrate handicapped children into the preschool program.

HDFS 229 Middle Childhood – Ages 6-12 . . . . . 3 credits
(Winter Term) . . . . . 3 class hrs/wk
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 250/7.121 The Developmental Kindergarten . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
Prerequisite: 4th term standing or consent of instructor. Study and evaluation of various approaches to a kindergarten program in the day care setting. Students will develop skills in planning and teaching a kindergarten curriculum and evaluating children's progress.

General Courses

HEc 101 Perspectives in Home Economics . . . . 1 credit
(Spring Term) . . . . . 1 class hrs/wk
Introduction to home economics as a dynamic profession, worldwide in scope, which prepares students to work with individuals and families in a wide variety of business, education, and human services related careers. Students identify goals and competencies which serve as a basis for academic and career decisions.

HEc 199 Trends in Home Economics . (variable) 1-4 credits
(See Term Schedule) . . . . . 1-4 class, 3-12 lab,
. . . . . or any appropriate combination
This course is a combination lecture and laboratory course which explores current trends in the home economics field; i.e., child development and guidance, family life, nutrition, housing and home furnishing, clothing and textiles, etc. The credit earned will vary from one to four. The area covered will change as the need for such information is evidenced by student request or instructor awareness of a trend in home economics.

Child and Family Studies Courses

7.103 Drama of Child Development . (variable) 1-5 credits
(See Term Schedule) . . . . . 1-5 class hrs/wk
The drama of development, a course covering ages birth through adolescence, approaches the study of child development from the perspective that children are complex in personality, intellect, and physique. These areas of development are examined separately, even as their interrelatedness is emphasized. Forces which influence growth and development are included: temperament, parent-child relationships, cultural conditions, environmental settings. Focus of the course is on healthy, normal children. Instruction is through the use of slide/tape video modules.

9.947 Living and Learning with Your Baby . . . . 1 credit
(See Term Schedule) . . . . . 2 lec/lab hrs/wk
This is an active participation class for parents and their infants (birth to beginning walkers). It provides an opportunity for parents to discuss parenting topics and to join in activities with their baby.

9.948 Living and Learning with Your Toddler . . 1 credit
(See Term Schedule) . . . . . 2 lec/lab hrs/wk
This is an active participation class for parents and their toddlers (walking to age 2½). It provides an opportunity for parents to discuss parenting topics and to help plan and join in activities with their toddler.

9.951 Living and Learning with Your Preschooler . 2 credits
(See Term Schedule) . . . . . 1 class, 2 lec/lab hrs/wk
This is a preschool cooperative designed for parents and their three, four, and five year old children. In the lab situation designed to meet the needs of preschool age children, parents have an opportunity to practice guidance and communication techniques, create appropriate activities, and design environments that foster growth and development. In seminars, parents have an opportunity to increase the knowledge of parenting topics. (May be taken for more than one term.)

HDFS 222 Partner Relationships . . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
This course focuses on interpersonal relationships in a changing society. Love, sexual standards, sexuality, expectations for partner relationships, and communication will be covered. The family life cycle, the various pressures and stresses (societal, personal and interpersonal) will be studied. Suitable for majors and nonmajors.

HDFS 226 Child Development, The Growing Years . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
Instruction through TV video modules. Students majoring in Early Childhood Education and Nanny Option programs are encouraged to take the lecture course to meet program requirements. Course content similar to regular HDFS 226 but not as indepth.

HDFS 230 Single Parent Experience . . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
This course explores single parental life styles and the adjustments encountered in child rearing, role clarification, and forming new relationships.

HDFS 233/7.126 Parenting . . . . . 3 credits
(Spring Term) . . . . . 3 class hrs/wk
Introduction to the many aspects of parenting including advantages and disadvantages, parenting roles, stages of parenthood, and special situations (single and stepparenting, extended families, and parenting exceptional children). The course format will include lectures, films, and small group discussions.

HDFS 298 Independent Study: Child Development . . . . . (variable) 1-3 credits
(See Term Schedule) . . . . . 1-3 hrs/wk
Independent study in child development will be for the purpose of 1) advancing knowledge in the field through special study and project completion, and 2) extending credit for students whose program requires the extra credit offered in child development. Projects will be selected from options provided by the instructor, in consultation with the student. (Approval of the instructor required.)

Foods and Nutrition Courses

0.503 Food for Weight Control . . . . . 2 credits
(See Term Schedule) . . . . . 1 class, 2 lec/lab hrs/wk
Food for Weight Control is designed to provide students with the information needed to plan a diet that is realistic, reasonable in cost, nutritious, good tasting, and effective for longterm weight control. Major areas of discussion will include basic nutrition, changing eating habits, meal planning, and food preparation techniques. Demonstrations will show ways to prepare foods lower in calories that can even be served to non-dieters.

0.875 Breads . . . . . 1 credit
(See Term Schedule) (half-term) . . 2.5 class, 2.5 lab hrs/wk
By a combination of lecture, demonstration, and actual preparation, participants learn to prepare a variety of yeast and quick breads. Rye, whole wheat, white, and sourdough breads and rolls will be prepared. Different types of quick breads, muffins, and crackers will also be made.

7.151 Introduction to Nutrition . . . . . 3 credits
(Spring Term) . . . . . 3 class hrs/wk
A study of the basic nutrients, sources, and body utilization to promote optimum health. Development of eating patterns and food selection are discussed. Provides a practical orientation to nutrition.

9.900 Nutrition, Safety, Sanitation, and Quality Assurance . . . . . 3 credits
(Winter Term) . . . . . 3 class hrs/wk
Prerequisite: Employment in an institutional food service department in which a registered dietitian will be available as preceptor. It is a survey course of several subjects: overview of the food service department; nutrition through the life cycles; food sources and utilization of nutrients; principles of diet therapy and modification diets for health care facilities; food sanitation and safety; and quality assurance.

9.901 Quantity Food Purchasing, Preparation and Equipment . . . . . 3 credits
(Spring Term) . . . . . 3 class hrs/wk
Prerequisite: Employment in an institutional food service department in which a registered dietitian will be available as a preceptor. The course covers quality control in institutional food service, emphasizing the principles of food preparation; recipe standardization; quantity food purchasing, preparation, specifications and storage; food merchandising and promotion.

9.902 Food Service Supervisory Techniques . . . 3 credits
(Fall Term) . . . . . 3 class hrs/wk
Prerequisite: Employment in an institutional food service department in which a registered dietitian will be available as preceptor. The course covers the many aspects of food service supervision: goals and objectives; organization of dietary departments; designing the work force; employee training methods; human relations and communication techniques, work improvement; and record keeping.

FN 110 Cooking for Health and Fitness . . . . . 3 credits
(Fall, Winter, & Spring Terms) . . . 2 class, 2 lec/lab hrs/wk
Study of the seven basic nutrition guidelines and demonstration of ways to prepare food that is healthy (moderate in calories, fat, sugar, and salt), easy and quick to prepare, and inexpensive as well as delicious.

FN 225 Nutrition . . . . . 4 credits
(Fall, Winter, & Spring Terms) . . . . . 4 class hrs/wk
A study of the nutrients, their sources, assimilation, functions, and requirements. Current national and international problems. Evaluation of nutrition information in the mass media.

FN 298 Independent Study: Foods . . . . . 1-3 credits
(See Term Schedule) . . . . . 1-3 hrs/wk
Contact the department for specific information about this course.

Home Economics

For classes formerly offered in Home Economics, see the following departments:

For Early Childhood Education and Nanny Option, see Health Occupations. For Culinary, Food and Service and Culinary Option, see Industrial Technology. For Fashon Merchandising and Interior Decorating, see Business. For other courses, see Health Occupations.

Human Development

The Human Development Department offers classes which help students with entering college, career and life planning, decision making, maintaining productive personal relationships, and coping with stress and depression. Personal awareness and growth are emphasized. Classes can be applied toward most college programs. Both transfer and nontransfer courses are included.

All classes listed below, with the exception of Dreikursian Principles of Parent-Child Relationships 1 and 2, are taught Pass/No Pass only.

0.771 Orientation to College . . . . . (variable) 1-2 credits
(All Terms) . . . . . 2 class hrs/wk
This course informs students about college services and procedures they will encounter at LCC.

1.608 Human Relations 1 . . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
Human Relations 1 is a course designed to help students improve the quality of their relationships through effective communication. Communication skills taught include paraphrasing, perception checking, behavior description, feeling description, and positive use of feedback. Through use of these skills, in the supportive atmosphere of the class, students gain knowledge of the impact their behaviors have on others. Learning in the course takes place through a combination of instruction and guided practice; therefore, students are expected to attend class and participate in group activities.

1.609 Human Relations 2 . . . . . (variable) 1-3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
Human Relations 2 focuses on specialized areas of communication and human development issues. Each section deals with a specific subject as noted in the schedule of classes.

HD 202 Life Transitions . . . . . (variable) 1-3 credits
(All Terms) . . . . . 3 class hrs/wk
This course is intended for persons involved in life changes who want to explore new directions and interests. Students will focus on self-exploration (values, interests, abilities) and development of life-planning skills through a process of analyzing predictable life transitions. Emphasis will be on developing and integrating skills in goal setting, decision making, and plan implementation.

HD 203 Introduction to Social Skills . (variable) 1-3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
This course is offered to students who are interested in a personal, experiential exploration of their level of social skill and who want to increase the quality of their social interaction. Students enrolled in this class have the opportunity to gain understanding, both of themselves and of their interaction with others within work settings, in social situations, and in intimate relationships. Students review their current level of social skills, assess their personal style in both calm and stress situations, and learn how to increase positive social interactions. Specific skills taught include interpersonal skills, sending and receiving verbal messages, somatic fantasizing, purpose statements, body awareness, and management skills. Students will develop a specific plan of action for enhancing social interaction and develop skills in conflict resolution.

HD 204 Eliminating Self-Defeating Behavior . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
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.

HD 205 Introduction to Assertive Behavior . . . . . (variable) 1-3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
This class is designed to assist students in developing self-management skills. The training will focus on the areas of: 1) work and school settings; 2) social and family situations; 3) close interpersonal relationships; 4) consumer situations. Assertion skills are taught in a two-stage process. The first stage is defining assertive behavior. This includes pinpointing and describing assertive and non-assertive behaviors. The second stage is learning how to behave assertively. This includes deciding when to be assertive and practicing these new behaviors.

HD 206 Coping Skills for Stress and Depression . . . . . (variable) 1-3 credits
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
The theories and practices of stress management and depression management are presented. Techniques of coping such as relaxation, visualization, imagery, meditation, exercise, nutrition, rational-emotive thinking, assertion, and time management are employed. Students are required to assess the impact of stress and depression on their well-being and to design a coping style that is preventive and promotes mental and physical well-being. The focus of this class is educational, not therapeutic.

HD 208 Career and Life Planning . . (variable) 1-3 credits
(All Terms) . . . . . 3 class hrs/wk
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?), the work world (How do I find what is available, and what do I need to do to pursue my goal?). Many students are able to develop a plan affecting their lives by the quarter's end.

HD 209 Complete Job Finder, The . . (variable) 1-3 credits
(See Term Schedule) . . . . . 1-3 class hrs/wk
This course develops skills in systematic job search techniques, resume writing, application processes, and interviewing techniques.

HD 211 Dreikursian Principles of Parent-Child Relationships 1 . . . . . (variable) 1-3 credits
(All Terms) . . . . . 3 class hrs/wk
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.

HD 212 Dreikursian Principles of Parent-Child Relationships 2 . . . . . (variable) 1-3 credits
(All Terms) . . . . . 3 class hrs/wk
Prerequisite: Dreikursian Principles of Parent-Child Relationships I HD 211. Students engage in specialized study from the Adlerian/Dreikursian point of view. The 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.

Supervised Field Experience

A special section of Supervised Field Experience FE 207/1.300 is designed for students who have narrowed their interests down to a few careers and want to receive credit for investigating these careers and working toward a decision. Students individually design a term proposal for a wide variety of activities—ranging from talking to people currently working in jobs of interest to participating in actual work settings. This class is designed to assist students in completing the process of career choice which is begun in Career and Life Planning HD 208. Students register for 2 to 12 credits, one of which is a one-credit seminar. See the beginning of the course description section of the catalog for a course description of SFE.

Industrial Technology Programs

Industrial Technology Programs provides students with the opportunity to explore and develop skills in the tools, materials, processes, and organization of modern industry. The department oversees a wide variety of educational activities including industrial exploration and cabinetmaking courses and offers programs in Construction Technology, Welding Technology, Culinary, Food Service and Hospitality, and selected landscape classes. Students learn through an active, hands-on approach. Both the course content and level of expectation for student performance are based on industry needs as recommended by the program advisory committees.

In addition, students may develop avocational interests. While not everyone will follow a technical career, all people will be involved to some degree with industry and technology. Not only is the need for technical skills and knowledge evident in many occupations but it is also evident in many avocations and in the purchase and maintenance of products of a technical nature.

Pre-Vocational Courses

Industrial exploration classes are offered for women and men who want to investigate a variety of occupations before selecting a training program. No previous technical experience or knowledge is necessary. Students are introduced to the basic skills and concepts in each area through lab experience and hands-on projects.

Note: The department strongly recommends these classes for all incoming students who plan to select a vocational major and lack previous exposure or experience in these areas. Each class is offered on an as-needed basis. Contact the department for schedule of classes.

3.169 Introduction to Construction . (variable) 1-2 credits
(See Schedule) . . . . . 4 lec/lab hrs/wk
This prevocational course will introduce the students to basic concepts, terms, tools, materials, and methods used in wood frame construction, including energy efficient construction and passive solar design. This course is for individuals with little or no previous experience.

3.170 Basic House Wiring and Minor Repairs . . 2 credits
(See Schedule) . . . . . 4 lec/lab hrs/wk
This course is designed to familiarize the student with basic electrical concepts as well as the physical components of home electrical systems. A majority of the class time will be spent in a workshop situation, handling and observing materials and equipment and constructing wiring projects. The course does not require any previous knowledge or skill in electricity and will attempt to make each student feel comfortable with acquiring a new skill.

3.171 Basic Plumbing and Minor Repairs . . . . 2 credits
(See Schedule) . . . . . 4 lec/lab hrs/wk
A hands-on introduction to simple plumbing theory and practices through planning and completion of minor repairs. Exposure to tools, safety, materials, codes, and plumbing career opportunities is offered for those with little or no previous experience.

3.172 Introduction to Electronics . . (variable) 1-2 credits
(See Schedule) . . . . . 4 lec/lab hrs/wk
Introduction to electrical concepts and terms used by electronics technicians and electricians. Hands-on projects offer practice on equipment, simple repairs, and soldering techniques. Designed for those without any previous experience.

3.173 Introduction to Machine Shop . . . . . 2 credits
(See Schedule) . . . . . 4 lec/lab hrs/wk
Introduction through hands-on experience to the art of shaping metal using various machine tools including lathe, drill press, grinder, and vertical band saw. Necessary aptitudes and abilities to be a machinist are studied. Designed for those with no previous experience.

3.174 Auto Tech for Beginners . . . . . 2 credits
(See Schedule) . . . . . 4 lec/lab hrs/wk
Introduction to basic automotive maintenance and repair procedures through hands-on experience, from tune-ups to brakes and overhauls. Current career information will also be offered. Designed for those with no previous experience.

3.175 Computer Aided Drafting/Design . . . . . 1 credit
(See Schedule) . . . . . 2 lec/lab hrs/wk
This course will present an overview of computer drafting/design as an enhancement and tool useful in a variety of different professions. Students with no prior experience will have an opportunity to explore career options, perform simple programming, and function as problem solvers through basic hands-on projects utilizing the Apple and IBM microcomputers.

3.176 Essentials of Drafting . . . . . 1 credit
(See Schedule) . . . . . 2 lec/lab hrs/wk
Introduction to drafting processes, equipment, and careers through hands-on experience by planning, drawing, and building a small project. Designed for those with no previous experience.

3.177 Woodshop Fundamentals . . . . . 1 credit
(See Schedule) . . . . . 2 lec/lab hrs/wk
Introduction to typical woodshop equipment, methods, terms, story rod and blueprints necessary to build a useful project. Emphasis on career information and related jobs is also offered. Designed for those with no previous experience.

3.178 Welding for Beginners . . . . . 1 credit
(See Schedule) . . . . . 2 lec/lab hrs/wk
Fundamental principles of MIG, TIG, arc, and gas welding offered through hands-on experience by completing a simple class project. Job and career information is also shared. Designed especially for those with little or no previous experience.

3.179 Careers/Trends in Robotics . . . . . 1 credit
(See Schedule) . . . . . 2 lec/lab hrs/wk
An overview of the current issues involved in the use of robots in the labor force, its effects on new careers, and identification of necessary schooling and training for these new skills. Hands-on experience is stressed through actual programming and manipulating a small robot. Designed for those with no previous experience.

3.180 Industrial/Technical Career Survey . . . . . 1 credit
(See Schedule) . . . . . 2 lec/lab hrs/wk
Survey of nontraditional careers for women and industrial/technical careers for men including current information about apprenticeship and related skilled trades training. Also emphasized are communication skills essential for on-the-job survival and positive conflict resolution. Designed for those exploring new or second careers.

3.181 Beginning Blueprint Reading . . . . . 1 credit
(See Schedule) . . . . . 2 lec/lab hrs/wk
Introduction to reading building cartographic blueprints, terms, and language, and use of plans to construct a scale model. Information on careers and training is also emphasized.

3.182 Meet a Microcomputer . . . . . 1 credit
(See Schedule) . . . . . 2 lec/lab hrs/wk
Introduction to computer basics, including hardware, software, terms, and keyboarding. Practice with LOGO, word processing, data base management and electronic spreadsheet are emphasized. Methods to evaluate software and use of BASIC commands are taught. Designed for those without any previous experience.

3.183 Introduction to Bricklaying . . . . . 1 credit
(See Schedule) . . . . . 2 lec/lab hrs/wk
Students without any prior experience will be able to sample the typical basic skills and aptitudes necessary in a career as a bricklayer through the performance of realistic, hands-on work tasks. Other topics such as apprenticeship requirements, local and statewide job outlook, unions, earning potential, and information on related careers in the trowel trades will also be emphasized. Designed for those without any previous experience.

Cabinet and Furniture Making Courses

Cabinetmakers build, install, and repair cabinets, fixtures, and furniture for homes and businesses. The job of cabinetmaking has been affected by automation, with increased assembly-line operation. However, the smaller shops depend on a cabinetmaker to be able to build an item from drawing board to completion. Work is usually inside, and there is risk of injury from machinery. Employment projections for the next few years are fair.

3.192, 3.193, 3.194 Cabinet and Furniture Making 1, 2, 3 . . . . . (variable) 1-5 credits
(All Terms) . . . . . 2 class, 6 lab hrs/wk
Cabinet and Furniture Making 1, 2, and 3 cover the basic skills in cabinet layout, joinery, and assembly. Each term, the class completes a set of kitchen cabinets. This is an assigned project class, with all materials furnished. Emphasis is on safety, quality, and effective procedures. Students may enter at the beginning of any term. Cabinet and Furniture Making 2 and 3 give students an opportunity to work on more complex projects and to improve the skills, competencies, and effective procedures begun in section 1.

3.196 Woodworking . . . . . (variable) 1-3 credits
(All Terms) . . . . . 2 class, 4 lab hrs/wk
This is an individual project class where students are required to furnish their own lumber and plywood. Students design, machine, and assemble their own projects with the aid of the instructor. Emphasis is on safety and effective procedures. Students may enter at the beginning of any term.

Construction Technology Courses

3.107 Independent Study: Construction Estimating . . . . . 1-3 credits
(See Schedule)
Prerequisite: Blueprint Reading 1 3.910. This course will provide an in-depth study of techniques used to estimate construction materials and costs for residential and small commercial structures. Students will evaluate systems used by material suppliers and contractors and will investigate the application of computer (data handling) technology to estimating problems. Students will be required to submit independent study projects identified by the course instructor.

3.111 Construction Orientation & Environment . . . . . (variable) 1-2 credits
(Fall Term) . . . . . 2 lec/lab hrs/wk
The Construction Environment course is an introduction to the construction industry. Management/labor problems, social, economic, and environmental influences affecting the construction industry will be discussed in this class. In addition, material will be presented covering the work in the construction field and vocational, technical, and professional opportunities open to construction graduates.

3.113 Construction Planning 1 . . . . . 4 credits
(Fall Term) . . . . . 4 class hrs/wk
Prerequisites: Blueprint Reading 1 3.910 and 2 3.911, or equivalent experience. Construction Planning 1 will combine estimating problems and specifications of building projects. The student will do material takeoffs from plans and develop building specifications.

3.114 Construction Planning 2 . . . . . 4 credits
(Winter Term) . . . . . 4 class hrs/wk
Prerequisites: Blueprint Reading 1 3.910 and 2 3.911, or equivalent experience. Construction Planning 2 will provide the students with a review of Construction Planning 1. An actual project will include takeoffs, specifications, estimating labor, overhead costs, and profit. The student will prepare a construction bid for a small building project.

3.115 Construction Planning 3 . . . . . 4 credits
(Spring Term) . . . . . 4 class hrs/wk
Prerequisites: Blueprint Reading 1 3.910, 2 3.911, and Construction Codes 6.122, or equivalent experience. Construction Planning 3 will review material covered in Construction Planning 1 and 2. The preparation of material and labor costs, time schedules and material expediting of an actual building project are the main parts of this course.

3.116 Construction Estimating . . . . . 4 credits
(See Schedule) . . . . . 4 class hrs/wk
Prerequisites: Blueprint Reading 1 3.910 and 2 3.911. The construction estimating course provides opportunities for advanced, in-depth study of techniques used in estimating construction material, labor, and costs for residential and commercial structures. Students evaluate estimating systems used by contractors, material suppliers, and consultants and complete estimating projects.

3.118 Building Construction . . . . . 15 credits
(Fall, Winter, & Spring Terms) . . . 2 class, 6 lec/lab hrs/wk per each 5 credits
Up to 5 credits may be taken each term by majors in the Construction Technology program. The course provides principles, techniques, and project work for students interested in the knowledge and skills required to plan, design, construct, and remodel building structures. The instruction deals with a variety of elements and topics related to the materials and methods used in the construction of buildings to include planning the undeveloped site, footing, foundation work, framing, and interior and exterior finishing. Energy efficient concepts are included in the project. This course through the project provides an orientation to electrical, mechanical, and plumbing systems. In general, these systems are subcontracted to area building contractors. With department approval this class is repeatable for credit.

3.119 Building Construction Surveying . . . . . 3 credits
(Fall Term) . . . . . 2 class, 3 lab hrs/wk
Prerequisites: Mathematics 1 4.200, 2 4.202, and 3 4.204. A beginning course in surveying concepts and techniques with application to building construction. It covers 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.

3.120 Housing Rehabilitation . . . . . 2-6 credits
(See Schedule) . . . . . 2 class, 4-8 lec/lab hrs/wk
A maximum of 5 credits each term may be taken by majors in the Construction Technology program either as a substitute for Building Construction 3.118 or for Cooperative Work Experience. The course provides principles, techniques, and project work for students wanting to gain or improve knowledge and skills in housing rehabilitation (additions, alterations, repairs). It covers all phases of home improvement including evaluating, estimating, planning and doing the work. "How to" techniques are emphasized in classroom and project site activities.

3.910 Blueprint Reading 1 . . . . . 3 credits
(See Schedule) . . . . . 5 class hrs/wk
Provides skills in understanding blueprints. Emphasizes fundamentals of blueprint reading, including development of skills in understanding basic lines, views, dimensions, symbols, and notations. Recognition of detail in job prints related to construction and fabrication.

3.911 Blueprint Reading 2 . . . . . 3 credits
(See Schedule) . . . . . 5 class hrs/wk
Prerequisite: Blueprint Reading 1 3.910. 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.

6.122 Construction Codes . . . . . 2 credits
(Winter Term) . . . . . 2 class hrs/wk
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.

6.322 Active Solar Systems . . . . . 3 credits
(Spring Term) . . . . . 3 class hrs/wk
Prerequisite: Solar Energy Systems 6.325. This course is a survey of current types of active solar systems. Emphasis will be on residential uses particularly relevant to Oregon. Marketing of solar systems, as well as large scale technical uses of solar will also be discussed.

6.325 Solar Energy Systems . . . . . 3 credits
(Fall Term) . . . . . 3 class hrs/wk
This course of instruction will develop background knowledge relating to solar terminology; the physical laws of radiation; motions of the earth-sun system; radiation measurement and insolation. Solar rights, building codes, solar tax credits, and use incentives will be covered. The course will introduce active, passive, and hybrid solar systems. Students will learn site analysis utilizing the sun chart.

6.329 Passive Solar Techniques in Local Construction . . . . . 3 credits
(Spring Term) . . . . . 3 class hrs/wk
This course will be a lecture presentation series to enable the student to understand the passive solar techniques utilized in the Pacific Northwest. Emphasis will be on presentation by known local builders who have applied passive systems in their home construction. Weekly lectures will present slides of completed projects; application techniques; energy loss and solar gain considerations; sizing of mass and glazing; and special problems.

Landscape Development Courses

8.130 Landscape Plant Identification 1 . . . . . 3 credits
(See Term Schedule) . . . . . 1 class, 3 field hrs/wk
Students learn to identify and name approximately 120 ornamental plants, most of which are deciduous trees (maples, oaks, etc.). Topics discussed include each plant's native habitat, its potential uses in artificial landscapes, and cultural practices and pest/disease problems associated with that plant. This course includes local and regional field trips.

8.131 Landscape Plant Identification 2 . . . . . 3 credits
(See Term Schedule) . . . . . 1 class, 3 field hrs/wk
Students learn to identify and name approximately 120 evergreen ornamental plants. About half of the plants are needle-leaf evergreens (pines, spruces, etc.), and half are broad-leafed evergreens (viburnums, daphne, etc.). Topics discussed include each plant's native habitat, its potential uses in artificial landscapes, and cultural practices and pest/disease problems associated with that plant. This course includes local and regional field trips.

8.132 Landscape Plant Identification 3 . . . . . 3 credits
(See Term Schedule) . . . . . 1 class, 3 field hrs/wk
Landscape Plant Identification 3 is the study of flowering plant materials. Examples of plants covered include rhododendrons, daphne, lilacs, azaleas, and camellias. The course traces their development in plant environment and landscape design. Subject matter includes techniques and methods in identifying these plants, their growing habits, required soil conditions, and exposure limitations. Emphasis is placed on plants common to the mid-Willamette Valley area. The course is a field class.

Welding Technology First Year Courses

3.910 Blueprint Reading 1 . . . . . 3 credits
(Winter Term) . . . . . 5 class hrs/wk
Provides skills in understanding blueprints. Emphasizes fundamentals of blueprint reading, including development of skills in understanding basic lines, views, dimensions, symbols, and notations. Recognition of detail in job prints related to construction and fabrication.

3.911 Blueprint Reading 2 . . . . . 3 credits
(Spring Term) . . . . . 5 class hrs/wk
Prerequisite: Blueprint Reading 1 3.910. Advanced study related to needs of the individual in the understanding and interpretation of blueprints for special features of design, fabrication, construction, and assembly.

3.921 Arc Welding 1 . . . . . (variable) 1-4 credits
(All Terms) . . . . . 2-6 lecture/lab hrs/wk
Provides skills in electric arc welding. Upon successful completion of this course, the student will be able to understand and practice safe work methods in the welding shop and weld in all positions (flat, horizontal, overhead, and vertical) using the metallic arc process.

3.922 Arc Welding 2 . . . . . (variable) 1-4 credits
(All Terms) . . . . . 2-6 lecture/lab hrs/wk
Prerequisite: Arc Welding 1 3.921 or performance test and written examination. Provides skills in electric arc welding. Emphasizing materials, it will provide training in the selection of electrodes and their use on metals of varying thicknesses, and continued training oxyacetylene cutting, using both manual and semi-automatic equipment. Successful completion of this course will enable the student to weld 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.

3.931 Gas Processes 1 . . . . . (variable) 1-4 credits
(All Terms) . . . . . 2-6 lec/lab hrs/wk
Provides skills in gas welding processes. Emphasizing all position welding, provides training in the basic skills of oxyacetylene welding. Students will be instructed in shop safety and how to plan the best use of materials and equipment. Each student will be instructed in the management of his/her time and talent.

3.932 Gas Processes 2 . . . . . (variable) 1-4 credits
(All Terms) . . . . . 2-6 lecture/lab hrs/wk
Prerequisite: Gas Processes 1 3.931 or performance test and written examination. Provides skills in gas welding processes. Successful completion of the course will enable the student to weld, braze, silver solder, fit and join pipe, mild steel, weld stainless steel and aluminum using the GTAW process.

3.938 Shop Fabrication Practices . . . . . 10 credits
(Fall, Winter, & Spring Terms) . . . . . 16 class hrs/wk
Prerequisites: Arc Welding 1 3.921, 2 3.922; Gas Processes 1 3.931, 2 3.932; Blueprint Reading 1 3.910, 2 3.911, or consent of instructor. Provides training in shop drawing, layout, and fabrication processes. Successful completion of this course will enable the student to use shop drawings to layout, cut, fit, and weld mild steel pipe and beams using various pieces of cutting and welding equipment. Instruction will include shop safety and how to plan the best use of material and equipment. Welding is with GMAW (MIG) both solid and cored wires.

Welding Technology Second Year Courses

3.908 Senior Welding Projects 1 . . . . . 4 credits
(See Schedule) . . . . . 2 class, 4 lab hrs/wk
A lab course in project development. There will be layout, cutting and metal preparation from shop drawings, and welding in skilled-type procedures of industry. Also includes transfer of plans on paper to "all dimensional" metal parts for fabrication and welding.

3.909 Senior Welding Projects 2 . . . . . 4 credits
(See Schedule) . . . . . 2 class, 4 lab hrs/wk
Prerequisite: Senior Welding Projects 1. A lab course in continued, advanced layout procedures, prefabrication, assembly processes, correct uses and routing of human resources and equipment.

3.928 Estimating For Welders . . . . . 3 credits
(Spring Term) . . . . . 5 lecture/lab hrs/wk
Prerequisite: A knowledge of blueprint reading is desirable but not required. Principles of interpreting material quantities (takeoff), application of labor and overhead or fixed cost, extensions, methods of price quotations, cost summary, and elements of bidding procedure will be developed.

3.939 Welding Lab . . . . . 1-6 credits
(All Terms) . . . . . 2-12 lab hrs/wk
Prerequisites and/or corequisites: Only available to students who have taken or are registered in the Arc Welding, Gas Processes, and Advanced Welding Practices sequence. Provides optional opportunity for additional time in the welding lab.
Note: Not a projects class.

3.942 Advanced Gas Tungsten Arc Welding . . . 3 credits
(Winter Term) . . . . . 6 lab hrs/wk
Prerequisite: Completion of Gas Processes 2 3.932, or instructor approval. Corequisite: Gas Tungsten Arc Welding Theory 3.952. One-term course provides skills in advanced gas tungsten arc welding (GTAW) of carbon steel plate and pipe. Students will be instructed in proper care, set-up and use of GTAW equipment. Preparing welding test specimen and performing weld tests is included in this course. In the last portion of the term, an Oregon State Welding Certification (qualification) test will be made available to students, but it is optional and is not required to successfully complete this course.

3.943 Advanced Wire Drive Welding . . . . . 3 credits
(Winter Term) . . . . . 6 lab hrs/wk
Prerequisite: Completion of Shop Fabrication Practices 3.938

or instructor approval. Corequisite: Wire Drive Welding Theory 3.953. One-term course provides skills in advanced gas metal arc welding (GMAW) of carbon steel plate and pipe. 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. In the last portion of the term, an Oregon State Welding Certification (qualification) test will be made available to students. It is optional and is not required to successfully complete this course.

3.946 Advanced Shielded Metal Arc Welding 1 . . 4 credits
(Winter Term) . . . . . 8 lab hrs/wk
Prerequisite: Arc Welding 2 3.922 or instructor approval. Corequisite: Shielded Metal Arc Welding Theory 1 3.947. Provides skills in pipe and pressure vessel welding of mild steel, and testing procedures to meet codes and A.S.M.E. codes on welds, identifying areas of failure in the heat-affected zones of welded mild steel.

3.948 Advanced Shielded Metal Arc Welding 2 . . 4 credits
(Spring Term) . . . . . 8 lab hrs/wk
Prerequisite: Advanced Shielded Metal Arc Welding 1 3.946. Corequisite: Shielded Metal Arc Welding Theory 2 3.949. Will make x-ray quality welds on plate and pipe, using low-hydrogen and stainless steel electrodes. In the last portion of the term, an Oregon State welding certification (qualification) test will be made available to students, but it is optional and is not required to successfully complete this course.

3.947 Shielded Metal Arc Welding Theory 1 . . . 3 credits
(Fall Term) . . . . . 3 class hrs/wk
Corequisite: Advanced Shielded Metal Arc Welding 1 3.946. An in-depth study of state certified pipe welding procedures on mild steel, and of A.S.M.E. structural steel codes. Includes studies of weld metal failure and the heat-affected zone in the welding of mild steel.

3.949 Shielded Metal Arc Welding Theory 2 . . . 3 credits
(Spring Term) . . . . . 3 class hrs/wk
Corequisite: Advanced Shielded Metal Arc Welding 2 3.948. Lectures and demonstrations of methods of examining and critiquing welds and processes. Includes low-hydrogen and stainless steel weldments, but is not limited to these exclusively.

3.951 Applied Metallurgy . . . . . (variable) 1-4 credits
(Winter Term) . . . . . 2 class, 4 lab hrs/wk
Provides an awareness of metallurgical reactions and problems in welded and structural metals. Includes identification and determination of the weldability of various metals; examining the effects of temperature changes on structural shape and fabricated frames and machinery; performing various metalworking processes.

3.952 Gas Tungsten Arc Welding Theory . . . . . 1 credit
(Winter Term) . . . . . 1 class hr/wk
Corequisite: Advanced Gas Tungsten Arc Welding 3.942. This is a lecture and research class to supplement Advanced Gas Tungsten Arc Welding 3.942. It includes subject material related to the welding process and its industrial applications.

3.953 Wire Drive Welding Theory . . . . . 2 credits
(Winter Term) . . . . . 2 class hrs/wk
Corequisite: Advanced Wire Drive Welding 3.943. This is a lecture and research class to supplement Advanced Wire Drive Welding 3.943. It includes subject material related to the different wire drive welding processes used in industry.

3.955 Auto Body Welding . . . . . 2 credits
(Fall, Winter, & Spring Terms) . . . . . 4 lec/lab hrs/wk
This course will provide instruction in the use of oxyacetylene and gas metal arc welding equipment. Materials to be welded will be limited to 20 gauge sheetmetal, typical auto body steel. The GMAW process will utilize .023" solid steel and .030 silicon bronze wires.

Culinary, Food Service, and Hospitality
Culinary Option Courses

0.870.1 Soups and Stews . . . . . 1 credit
(See Term Schedule) (half-term) . . . . 2 class, 2 lab hrs/wk
Basic soup and stew preparation skills will be presented. A variety of soups and stews will be prepared to demonstrate their nutritional, economical, and enjoyment value.

7.147 Menu Planning and Promotion . . . . . 3 credits
(Spring Term) . . . . . 3 class hrs/wk
Enables the student to realize that menu planning is an indispensable management tool in every phase of the food service operation. Emphasis will be given to menu planning, menu analysis, and pricing. The use and limitations of various promotional forms such as advertising, merchandising, sales promotion and in-house selling will be discussed.

7.163 Catering . . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
Catering provides a detailed approach to managing and operating a successful catering business. It includes procedures for organizing functions, legal requirements and problem solving skills which provide customers with excellent food, beverages, service and equipment.

7.170 Food Preparation 1 . . . . . 5 credits
(Fall Term) . . . . . 3 class, 4 lec/lab hrs/wk
Presents the basic skills, principles, and techniques used in the preparation of foods in volume feeding situations, such as restaurants and institutional food service operations. Emphasis will be placed on the vocabulary of cooking, processing, menu terms, food quality standards, equipment use, and methods of preparation in common use in today's food service industry.

7.171 Food Preparation 2 . . . . . 5 credits
(Winter Term) . . . . . 3 class, 4 lec/lab hrs/wk
Prerequisite: Food Preparation 1 or instructor permission. A continuation of Food Preparation 1 7.170. Emphasis is placed on meat cookery, salads, beverages, garnishes, and eggs and breakfast cookery.

7.172 Food Preparation 3 . . . . . 5 credits
(Spring Term) . . . . . 3 class, 4 lec/lab hrs/wk
Prerequisite: Food Preparation 2 or instructor permission. A continuation of Food Preparation 2 7.171. Emphasis is placed on poultry, yeast and quick breads, cakes, puddings, and buffet planning and preparation.

7.177 Food and Beverage Controls . . . . . 5 credits
(Fall Term) . . . . . 5 class hrs/wk
The various types of food and beverage controls used in the food service industry are examined and explained with an emphasis on their practical application.

7.178 Equipment Layout & Interior Design . . . . 3 credits
(Winter Term) . . . . . 3 class hrs/wk
The course examines food service layouts according to work simplification principles, flow-of-work concepts, and appropriateness of building materials and equipment. Interior design principles related to a food service establishment will be discussed and applied.

7.179 Buffets and Banquets . . . . . 1 credit
(Fall, Winter, & Spring Terms) . . . . 6 class, 18 lab hrs/term
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, doing approximately two special events per term. May be repeated for a total of six credits.

7.183 Purchasing and Records Analysis . . . . . 4 credits
(Winter Term) . . . . . 4 class hrs/wk
Prerequisites: Food and Beverage Controls 7.177, Accounting 1 2.110 or its equivalent. Study of the various methods and terms used in purchasing products in the food service industry, including analyzing records needed in the management process.

7.184 Restaurant Lab (Renaissance Room) . . . . 5 credits
(Fall, Winter, & Spring Terms) . . . . . 15 class hrs/wk
Prerequisite: Departmental permission. The Renaissance Room 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, nutrition, menu planning, and a progressive attitude toward food preparation and service. Students will learn all aspects of restaurant work by rotation through at least 15 different job positions. This course may be repeated for up to 15 credits.

7.185 Food Service Fundamentals . . . . . 3 credits
(Fall Term) . . . . . 3 class hrs/wk
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.

7.186 Dining Room Supervision and Service . . . 3 credits
(Winter Term) . . . . . 3 class hrs/wk
The student will learn the fundamentals of dining room supervision, designation of responsibilities, organization, and customer relations. Introduces students to the management of people in the food service and hospitality industry. Students will learn the basic setup and operation of a fully equipped bar. Concentration will be on wines, liquors, and special drinks. Emphasis will be placed on international food and beverage vocabulary.

7.189 Tourism and the Hospitality Industry . . . . 3 credits
(Fall Term) . . . . . 3 class hrs/wk
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.

7.192 Financial and Operational Analysis in the Food Service Industry . . . . . 3 credits
(Spring Term) . . . . . 3 class hrs/wk
Prerequisites: Food and Beverage Controls 7.177 and Purchasing and Records Analysis 7.183. Analysis process for implementing the various methods of food and beverage controls, purchasing and records analysis in the management of food service operations.

7.193 Bakery 1 . . . . . 3 credits
(Fall Term) . . . . . 2 class, 2 lec/lab hrs/wk
The course will provide the student with entry-level employment skills for the baking or food service industry. Techniques and skills related to the quantity production of bakery, deli, and dessert items will be stressed.

7.194 Bakery 2 . . . . . 3 credits
(Winter Term) . . . . . 1 class, 6 lab hrs/wk
The course will provide the student with entry-level employment skills for the baking or food service industry. Techniques and skills related to the quantity production of bakery, deli, and dessert items will be stressed.

7.195 Bakery 3 . . . . . 3 credits
(Spring Term) . . . . . 1 class, 6 lab hrs/wk
The course will provide the student with entry-level employment skills for the baking or food service industry. Techniques and skills related to the quantity production of bakery, deli, and dessert items will be stressed.

7.290 Classical Cuisine and Service 1 . . . . . 3 credits
(Fall Term) . . . . . 2 class, 2 lec/lab hrs/wk
Prerequisite: Completion of the first year of the Culinary, Food Service and Hospitality program or previous experience in the food service industry, or experienced home cooks who would like to increase their skills. This course covers advanced cooking and baking techniques used in dinner restaurants. 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.

7.291 Classical Cuisine and Service 2 . . . . . 3 credits
(Winter Term) . . . . . 2 class, 2 lec/lab hrs/wk
Prerequisite: Completion of the first year of the Culinary, Food Service and Hospitality program or previous experience in the food service industry, or experienced home cooks who would like to increase their skills. Advanced cooking and baking techniques used in dinner restaurants. 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.

7.292 Classical Cuisine and Service 3 . . . . . 3 credits
(Spring Term) . . . . . 2 class, 2 lec/lab hrs/wk
Prerequisite: Completion of the first year of the Culinary, Food Service and Hospitality program or previous experience in the food service industry, or experienced home cooks who would like to increase their skills. Advanced cooking and baking techniques used in dinner restaurants. 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 and a buffet for the public.

Apprenticeship Training

Training for registered apprentices is offered through LCC's Industrial Technology Programs in accordance with Oregon's Department of Education apprenticeship regulations and the Oregon State Apprenticeship Council. Classes cover technical areas of the trades and are intended to complement skills learned on the job.

Apprenticeship programs include training in the many apprenticeable trades. A typical sampling would include: Electricians, Power Lineman, Industrial Electrician, Millwright, Plumber, Sheetmetal, Trowel Trades, Power Plant Operators, Roofers.

Information on how to become an apprentice can be obtained from the Oregon Bureau of Labor & Industry, Apprenticeship Department, 165 E. Seventh, Eugene, or phone 686-7623.

LCC also offers an associate of science degree to trade journeymen for their apprenticeship training by skill emphasis. Journeymen may receive up to 45 credits for their on-the-job experience and 27 credits for the related apprenticeship training. The remaining 18 credits in general education courses, required for the degree, must be taken at Lane Community College.

Information concerning general education requirements is available from LCC's Counseling Department or the apprenticeship program staff, phone 747-4501, ext. 2843.

Library

Explore the world of information. Learn how to find what you need from the library.

Course

LIB 127 Use of the Library . . . . . 3 credits
(All Terms) . . . . . 3 class hrs/wk
Use of the library is an open entry/open exit class designed to provide training and practice in using library resources effectively. Students will learn research strategy and bibliographic form. Hands-on activity helps students overcome "library anxiety."

Mass Communication

The Mass Communication Department provides students with a working knowledge and practical experience in the field of communications. Two associate of applied science degree programs are offered: Broadcasting/Visual Design and Production and Radio Broadcasting. A one-year certificate is an option for students who wish to enter the job market as quickly as possible. On-campus, hands-on experience is possible through the LCC Torch, a weekly news publication; KLCC-TV, which provides news programs for cable television; and KLCC-FM.

Radio, Broadcasting/Visual Design and Production Courses

Equipment and facilities are provided for students to complete classroom projects and assignments. Students who audit a course do not pay the special course fees or complete classroom assignments. Therefore, students auditing a course are not eligible to use the equipment and facilities.

3.401 Audio Production . . . . . 4 credits
(All Terms) . . . . . 3 class, 3 lab hrs/wk
Fundamentals of audio production for radio and television. Includes microphones, turn-tables, audio tape, recording equipment, editing, mixing consoles, single and dual track recording, and the production of commercials and public service announcements.

3.404 Electronic News Gathering . . . . . 4 credits
(Spring Term) . . . . . 3 class, 3 lab hrs/wk
Prerequisites: Audio Production 3.401, Video Production 1 FA 151, and Writing for Film/Television/Radio 3.442. Writing, reporting, and producing for television news. Includes writing for tape/film, use of wire services, and interviews.

3.430 Electronic Studio Production . . . . . 5 credits
(All Terms) . . . . . 2 class, 6 lec/lab hrs/wk
This course provides a study of the theory and practice of the skills used by personnel in a television production studio. The jobs studied include camera operator, lighting technician, floor director, technical director, audio operator, character generator operator, shader and loader. The emphasis is on camera, lighting, and floor directing, the entry-level positions in most studio production facilities.

3.434 Media and the Law . . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
Nontransfer course in media and the law. Class covers libel, privacy, copyright, obscenity, free press-fair trial, access to government information, public access to mass media, FCC regulation of broadcasting, regulation of advertising, mass media anti-trust laws, licensing and taxation. This course is designed to help students acquire a self-protective knowlege of the basic laws and regulations governing press and broadcasting today and to help them develop a better understanding of the judicial process. Presents historical and current developments in rules, laws, regulations and self-regulation.

3.436 Announcing and Narration . . . . . 3 credits
(Winter & Spring Terms) . . . . . 2 class, 3 lab hrs/wk
Prerequisites: Audio Production 3.401 and Voice and Articulation Sp 110 or audition. This course presents information and practice in announcing news and commercial continuity. The intent is to give students an opportunity to learn the skills necessary for positions in announcing and narration. Specifically, it covers news and commercial copy along with a wide range of other scripts. It also covers characterization, pronunciation, diction, mic techniques, and proper emphasis while voicing for interpretation of ideas.

3.437 Production Unit . . . . . (variable) 1-3 credits
(Fall, Winter, & Spring Terms) . . . . . 2-6 lec/lab hrs/wk
Prerequisites: Electronic Studio Production 3.430, Video Producton 1 FA 151, Audio Production 3.401. This course gives students an opportunity to practice skills in camera operating, production technical directing, production audio operating, sound recording and mixing, lighting, floor directing, shooting and editing video, assisting with directing and producing. Repeatable for up to 12 credits.

3.438 Visualization for Media . . . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
Prerequisite: Beginning Photography ART 161; may be taken as corequisite. This course provides students with an opportunity to learn the theory of pictorial continuity as it relates to film and video production and gives them practical experiences in putting these theories into practice using simple media production tools.

3.439 Creating/Selling Advertising for Broadcasting . . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
Prerequisite: Writing for Film/Television/Radio 3.442. This course provides detailed information about the creation and selling of advertising, public service announcements and program promotion for broadcast media, including open and closed circuit and cable.

3.442 Writing for Film/Television/Radio . . . . . 3 credits
(All Terms) . . . . . 2 class, 2 lec/lab hrs/wk
Prerequisites: English Composition Wr 121 and one production course in student's major field. Writing for film, video tape, TV, graphics and sound for use in advertising, documentary, dramatic, and instructional materials. Nonprint media writing.

3.444 Slide/Tape Production . . . . . 3 credits
(All Terms) . . . . . 2 class, 2 lec/lab hrs/wk
Prerequisites: Audio Production 3.401 and Beginning Photography ART 161/2.207. Teaches students how to use the skills of photography, audio production, graphics and script writing to plan, produce and present slide/tape programs. Emphasis is also given to analyzing audiences, budgeting and meeting client needs.

3.447 Media Production: Entertainment . . . . . 3 credits
(Winter Term) . . . . . 3 class hrs/wk
Prerequisites: Electronic Studio Production 3.430, Visualization for Media 3.438, Audio Production 3.401, Video Production 1 FA 151, Slide/Tape Production 3.444, and Writing for Film/Television/Radio 3.442. A study of the formats and techniques used

in media entertainment production. Matching media resources to the mood and pacing of musical and dramatic presentations. Students complete production projects outside of class.

3.449 Computerized Video Editing . . . . . 3 credits
(Fall & Winter Terms) . . . . . 2 class, 2 lec/lab hrs/wk
Prerequisites: Video Production 1 FA 151, Electronic Studio Production 3.430, and one other moving image production course. Basic course in computerized video editing. To teach students the theory and practice of SMPTE time code edit systems including edit list management and off-line and on-line editing techniques.

3.451 Corporate Media . . . . . 3 credits
(Fall & Spring Terms) . . . . . 3 class hrs/wk
This course is designed to introduce students to the field of corporate media, giving particular emphasis to the uses of corporate video, the skills required, and the application of those skills to the special needs of the corporate setting.

3.452 Advanced Electronic Studio Production . . 3 credits
(Spring Term) . . . . . 6 lec/lab hrs/wk
Prerequisites: Electronic Studio Production 3.430, Visualization for Media 3.438, keyboarding skill of at least 20 wpm. This course provides continuing instruction and practice in the television studio production jobs of camera operator, lighting technician, floor director, production technical director, audio operator, character generator operator, loader, and shader. The theory and practical skills of television studio directing are introducted and practiced.

3.453 Advanced Computerized Video Editing . . 3 credits
(Spring Term) . . . . . 2 class, 2 lec/lab hrs/wk
Prerequisite: Computerized Video Editing 3.449. This course is designed to give students advanced computerizerd video editing skills. Students will learn to use a character/graphics generator with freeze frame, the special function keys of the computerized video edit controller, audio sweetening for video with an 8-track audio recorder and an auto audio dissolver.

3.457 Advanced Audio Production . . . . . 4 credits
(Winter & Spring Terms) . . . . . 2 class, 4 lec/lab hrs/wk
Prerequisite: Audio Production 3.401. Advanced course in audio production. Includes setting up and recording in a studio and on location, mixing, special microphone techniques, equalizing, and practical experience in recording and editing sound projects.

ART 161 Beginning Photography . . . . . 3 credits
(All Terms) . . . . . 3 class hrs/wk
Introduction, history, and fundamentals of photography. Basic skills of taking effective black and white photographs, developing film, making enlargements. Emphasis on design and composition.

ART 162 Photography . . . . . 3 credits
(All Terms) . . . . . 3 class hrs/wk
Prerequisite: Beginning Photography ART 161/2.207. Color theory and practice, and introduction to large format camera. Pursuit of advanced camera and laboratory techniques. Experimental photography, lens and filter selection.

ART 164 Commercial Photography . . . . . 3 credits
(Spring Term) . . . . . 3 class hrs/wk
This course is an introduction to the practice of commercial photography in the areas of portrait, production, technical and industrial photography. Students work on a variety of practical production assignments and learn the advantages and disadvantages of various types of cameras, lenses, film stocks, and related production equipment. The course also provides a basic understanding of elementary business practices associated with running a commercial photography business.

FA 151 Video Production 1 . . . . . 4 credits
(Winter & Spring Terms) . . . . . 3 class, 3 lab hrs/wk
Prerequisite: Beginning Photography ART 161/2.207. Corequisite: Visualization for Media 3.438. A brief introduction to the invention of television and the steps leading to the development of portable video capabilities. Practical experiences using the equipment and processes involved in location video production and editing.

FA 152 Video Production 2 . . . . . 4 credits
(Fall Term) . . . . . 4 class hrs/wk
Prerequisite: Visualization for Media 3.438 and Video Production 1 FA 151. Designed to give students advanced video production skills. Hands-on experience in shooting and editing techniques, pre-production planning, and the preparation of video materials to meet the needs of clients.

FA 251/3.408 Film Production 1 . . . . . 4 credits
(Fall & Spring Terms) . . . . . 2 class, 4 lec/lab hrs/wk
Prerequisite: Beginning Photography ART 161/2.207. Corequisite Visualization for Media 3.438. Fundamentals of Shooting/Editing 16mm Film – Black/white and color; nonsync sound.

FA 252 Film Production 2 . . . . . 4 credits
(Winter Term) . . . . . 3 class, 3 lab hrs/wk
Prerequisites: Beginning Photography ART 161/2.207, Film Production 1 FA 251/3.408, and Visualization for Media 3.438. Shooting and editing 16mm color film. Single system sync sound.

FA 254 Fundamentals of Lighting . . . . . 3 credits
(Fall & Winter Terms) . . . . . 3 class hrs/wk
Prerequisite: Beginning Photography ART 161/2.207. This course will give the student a basic introduction to the various types of lighting and their uses as applied to the areas of photography, film, and video production through lectures, demonstrations, practical exercises, and assignments.

FA 259 Nonfiction Film and Television . . . . . 3 credits
(Winter Term) . . . . . 3 class hrs/wk
This is a basic course in the history/theory of nonfiction film, video, and television. The course will primarily cover the documentary, training, information and news forms of nonfiction film, video, and television.

FA 260 Fundamentals of Media . . . . . 3 credits
(Fall & Spring Terms) . . . . . 3 class hrs/wk
General survey of radio and television broadcasting, newscasting, film, video and audio regulation, including history, growth, social aspects, policies, standards of criticism, and distribution systems.

FA 262 Introduction to Screenwriting . . . . . 3 credits
(Spring Term) . . . . . 3 class hrs/wk
This is a basic course designed to teach the structure and language of screenwriting. Also included are the techniques of writing dialogue, the process of creating and developing characters, the methods of introducing and resolving conflict, and some information about how to sell scripts.

FA 298 Independent Study: Film Arts . . . . . 3 credits
(All Terms)
Prerequisites: Students must have completed all the program electives in a given area in the Broadcasting/Visual Design and Production program before being eligible to take FA 298. An independent study which provides a credit opportunity for students to do television production primarily using the studios or intended for distribution on cable.

J 134 Photojournalism . . . . . 3 credits
(Winter Term) . . . . . 3 class hrs/wk
Prerequisite: Beginning Photography ART 161. This course gives the student a better understanding of the historical background and traditions of documentary photography and photojournalism. The pros and cons of various types of cameras, lenses, film stocks, and developers best suited for documentary photography and photojournalism are explained.

Journalism Courses

Journalism is literature for a mass audience produced under pressure. Therefore LCC journalism classes revolve around practical situations which help students identify their talents and weaknesses in pressure situations. The course descriptions below identify the skills developed by participation in the various classes. Journalism students may also work on the Torch, the student newspaper, and can obtain other journalism skills through photography courses and publication design offered by the Mass Communication Departmnent.

2.211 Publication Design and Production 2 . . . . 2 credits
(Spring Term) . . . . . 3 class hrs/wk
Prerequisite: Publication Design and Production 1 3.443. In the first phase of this course, students continue study and work with inexpensive materials and basic paste-up techniques used in preparing copy and art work for offset printing. To learn established principles and gain experience, students then complete practical assignments in type selection, copy fitting, headline writing and photo cropping, PMT camera operation, and typesetting. Finally, students apply these skills and information in designing fliers, posters, and pamphlets for publication. This is not a college transfer course.

3.443 Publication Design and Production 1 . . . . 3 credits
(All Terms) . . . . . 3 class hrs/wk
Introduces layout and pasteup principles commonly used in preparing newsletters, flyers, advertisements, letterheads, and pamphlets for offset printing. Class members edit rough copy, estimate copy length, and prepare "dummies"; they order typeset overlays and complete the camera-ready material. Students have some access to video display terminals, PMT camera, and portable light tables.

J 205 Public Relations . . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
Public Relations is a study of the management function which evaluates public attitudes, identifies the policies and procedures of an individual or an organization with the public interest, and plans and executes a program of action to earn public understanding and acceptance.

J 215 Newswriting Lab . . . . . 1 credit
(All Terms) . . . . . 1 lab hr/wk
Taken concurrently with J 216 and J 217. Critique of class news stories for content, structure, style (including punctuation). Discussion of problems involved in news gathering, researching, ethics, and writing efficiency.

J 216 Newswriting 1 . . . . . 2 credits
(Fall & Winter Terms) . . . . . 2 class hrs/wk
Corequisite: Newswriting Lab J 215. Study and practice of newsgathering, 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 217 Newswriting 2 . . . . . 2 credits
(Spring Term) . . . . . 2 class hrs/wk
Prerequisite: Newswriting 1 J 216. Corequisite: Newswriting Lab J 215. Continued study of reporting techniques. Emphasis on feature story concept development, research, organization, and marketing. Students write feature stories intended for local publications – both newspapers and magazines.

J 218 News Editing . . . . . 2 credits
(See Term Schedule) . . . . . 2 class hrs/wk
Prerequisites: Newswriting 1 J 216, Newswriting Lab J 215, and Publication Design and Production 1 3.443. Taken in sequence with Publication Design and Production 1, this course extends the student's design and paste-up experience to include newsletters, newspapers, and magazines, and offers the student the opportunity to work with typesetting equipment and a PMT (Photomechanical Transfer) camera.

Mathematics

Both transfer and nontransfer courses are offered by the Mathematics Department. Electronic calculators and computers are available for student use. The Math Resource Center has many audio and video aids available and offers individualized instruction.

Modes of Instruction

Two principal modes of instruction are offered by the Mathematics Department: individualized instruction and group instruction.

Individualized instruction in the Math Resource Center (MRC) offers open-entry/open-exit classes, self-paced study, personalized tutorial assistance, flexible scheduling and variable credit in some courses, and a supplemental video cassette library. Math 20, 50, and 55; Dosage Computation Math; Beginning, Elementary, Intermediate, and College Algebra; and Trigonometry are offered by individualized instruction. Individualized instruction for College Algebra and Trigonometry is offered in time slots when lecture classes traditionally do not fill.

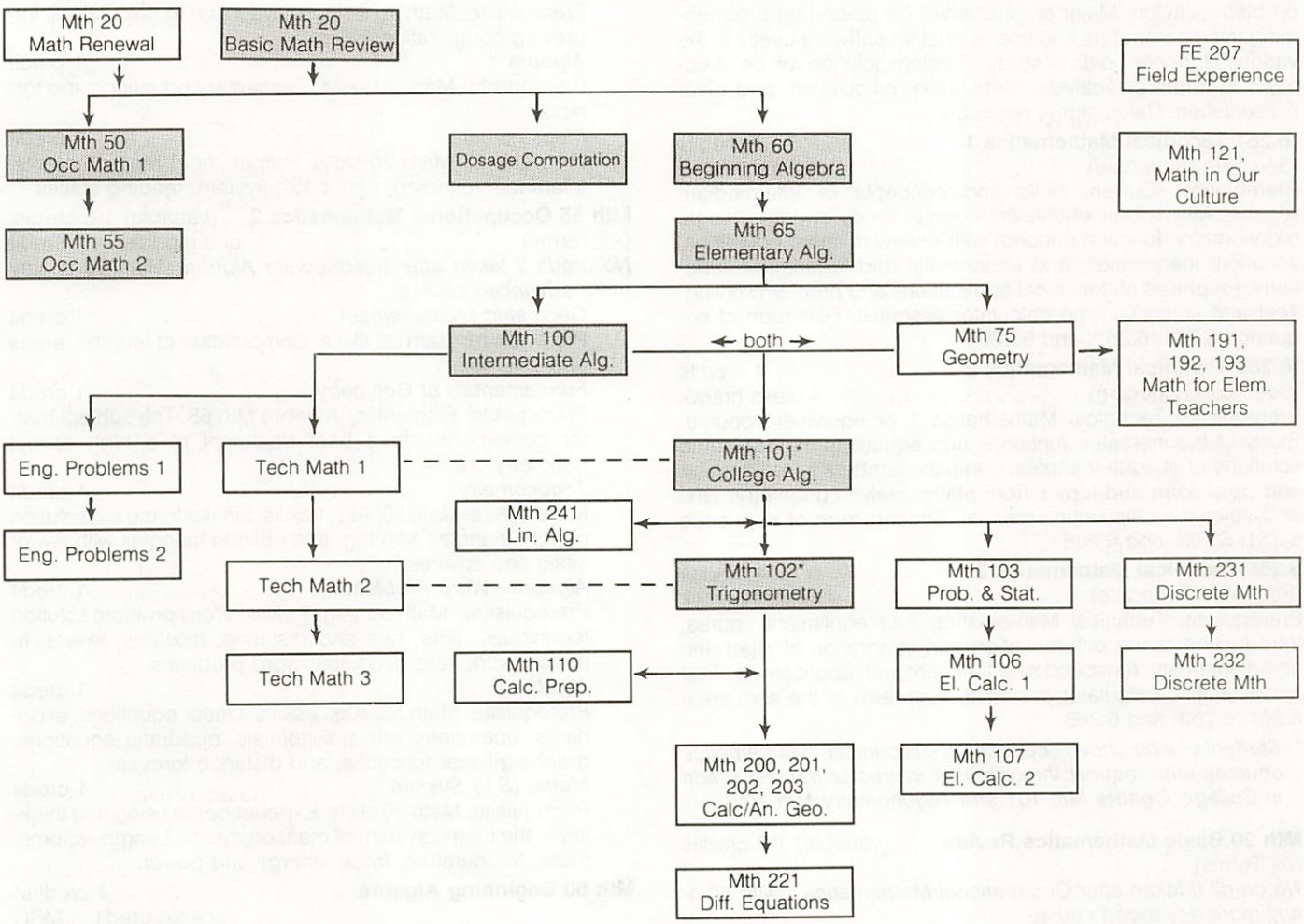
These courses also are available in the group mode in conventional classrooms except for Math 50 and 55. Math Renewal Mth 20, taught through group instruction, is equivalent to Basic Mathematics Review Mth 20. Course descriptions and the Class Schedule indicate when group classes are offered.

Sequence of Mathematics Courses

The sequence in which mathematics courses are taken is very important. The chart on the following page illustrates the relationship between courses, the most elementary courses appearing at the top. Students begin and end at some point determined by their previous mathematics experiences and the requirements of their programs. A chart is also available from the department that shows the beginning course a student should take in relation to the level and quality of work completed in high school mathematics.

Sequence of Mathematics Courses

Shaded classes are those offered in the Math Resource Center.



* Individualized instruction for Mth 101 & 102 is under review and may not be available when the student registers.

Mathematics Courses

Placement Tests/Pretests

A number of math courses require a placement test before registration. Taking a placement test will assure the student that he or she is in the proper course. Review sheets are available to remind students of previously learned material. Review sheets ("Math Stepping Stones") may be obtained at the Bookstore and in the Mathematics Department for a nominal charge.

Pretests are given at the Testing and Assessment Office.

0.593 Learning Skills Laboratory . . . . . 1-3 credits
(All Terms, Space Available Basis)
Assists students by offering instruction in a broad range of learning skills. Students will work with an instructor or tutor on a one-to-one basis. *Limited Enrollment.*

5.606 Dosage Computation Math . . . . . 1 credit
(All Terms)
Prerequisite: Arithmetic skills of Basic Mathematics Review Mth 20. Calculation of medical dosages for members of the health professions. Use of a calculator optional. Grade of "A" is required for nursing programs.

6.135 Engineering Problems 1 . . . . . 2 credits
(See Term Schedule) . . . . . 2 class hrs/wk
Prerequisite: Occupational Mathematics 2 Mth 55 or be able to demonstrate equivalent mathematical knowledge. This course is designed to meet the calculating needs of the technician in electronics, technical drafting, and energy management. Engineering methods and related problem solving will be considered. Primary emphasis, however, will be placed on the use of both manual and programmable calculators. A standard scientific calculator is required.

6.136 Engineering Problems 2 . . . . . 2 credits
(See Term Schedule) . . . . . 2 class hrs/wk
Prerequisite: Occupational Mathematics 2 Mth 55 or be able to demonstrate equivalent knowledge. This course will continue with an emphasis on electronic computing devices and related problem solution. Major emphasis will be placed on programming microcomputers and use of existing software useful in the various students' fields of study. Problem solution will be structured in terms of analysis, formulation, calculation, and clear presentation. Calculator is desirable.

***6.261 Technical Mathematics 1** . . . . . 4 credits
(See Term Schedule) . . . . . 4 class hrs/wk
Prerequisite: Current skills and concepts of Intermediate Algebra Mth 100 or equivalent course. Study of right triangle trigonometry, function concept with review of linear equations, variation, inequalities, and exponential and logarithmic functions. Emphasis on technical applications and problem solving. Text and scientific type calculator essential. First term of sequence 6.261, 6.262, and 6.266.

***6.262 Technical Mathematics 2** . . . . . 4 credits
(See Term Schedule) . . . . . 4 class hrs/wk
Prerequisite: Technical Mathematics 1 or equivalent course. Study of trigonometric functions and equations, trigonometric solutions of oblique triangles, complex numbers in rectangular and polar form and topics from plane analytic geometry. Text and scientific calculator essential. Second term of sequence 6.261, 6.262, and 6.266.

6.266 Technical Mathematics 3 . . . . . 4 credits
(See Term Schedule) . . . . . 4 class hrs/wk
Prerequisite: Technical Mathematics 2 or equivalent course. Introduction to the differentiation and integration of algebraic and elementary transcendental functions with applications. Text and scientific calculator essential. Last term in the sequence 6.261, 6.262, and 6.266.

* *Students who have completed Technical Mathematics courses may request through their instructor transfer credit in College Algebra Mth 101 and Trigonometry Mth 102.*

Mth 20 Basic Mathematics Review (variable) 1-3 credits
(All Terms)
No credit if taken after Occupational Mathematics 1 Mth 50 or any more advanced course.

Whole Numbers and Fractions . . . . . 1 credit
Concepts and arithmetic operations.

Decimals . . . . . 1 credit
Arithmetic operations plus exponents and roots.

Ratio, Percent, Measurement . . . . . 1 credit
Applications of arithmetic operations.

Mth 20 Math Renewal . . . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
No credit if taken after Occupational Mathematics 1 Mth 50 or any more advanced course.
Specifically for women and others with either a fear of math or a need to renew math skills for career mobility. Review of operations of whole numbers, fractions, decimals, percent, ratio, proportion, estimation and measurement. Will investigate career opportunities open to people with math skills. Major emphasis will be to provide comfort and competence with mathematics and develop problem-solving skills. Calculator usage.

Mth 50 Occupational Mathematics 1 . (variable) 1-3 credits
(All Terms)
No credit if taken after Elementary Algebra Mth 65 or any more advanced course.

Computation . . . . . 1 credit
Prerequisite: Math 20 skills. Introduction to calculators; improving computational skills.

Algebra 1 . . . . . 1 credit
Prerequisite: Math 20 skills. Elementary equations and formulas.

Measurement . . . . . 1 credit
Prerequisite: Math 20 skills. Properties of measurements, tolerance, rounding, metric (SI) system, reading scales.

Mth 55 Occupational Mathematics 2 . (variable) 1-6 credits
(All Terms) . . . . . one module = 1 credit
No credit if taken after Intermediate Algebra Mth 100 or any more advanced course.

Geometric Measurement . . . . . 1 credit
Prerequisite: Math 20 skills. Computation of lengths, areas and volumes.

Fundamentals of Geometry . . . . . 1 credit
Prerequisite: Elementary Algebra Mth 65. The subject matter corresponds to a brief treatment of a high school geometry course.

Trigonometry . . . . . 1 credit
Prerequisite: Math 50, Alg. 1 skills. Similar triangles, solution of right triangles with trig. and oblique triangles with law of sines and cosines.

Algebra—Word Problems . . . . . 1 credit
Prerequisites: Math 50, Alg. 1 skills. Word problem solution techniques: time, rate and distance, mixtures, levers, finance, work, and geometric word problems.

Algebra 2 . . . . . 1 credit
Prerequisite: Math 50, Alg. 1 skills. Linear equations, exponents, operations with polynomials, quadratic equations, graphing linear functions, and distance formula.

Metric (S.I.) System . . . . . 1 credit
Prerequisite: Math 20 skills. Experiences in using and thinking in the metric system of measurements. Length, volume, mass, temperature, force, energy and power.

Mth 60 Beginning Algebra . . . . . 4 credits*
*Variable credit in MRC
(All Terms) . . . . . 4 class hrs/wk
No credit if taken after Elementary Algebra Mth 65, Intermediate Algebra Mth 100, College Algebra Mth 101, or Trigonometry Mth 102.
Prerequisite: Mth 20 or equivalent or placement test through the Testing and Assessment Office. Beginning term of a one-year sequence in algebra; review of numbers and operations of arithmetic, signed numbers, exponents, equations, polynomials, systems, graphs. Prepares student for Elementary Algebra Mth 65. Uses tutorial materials in a resource center or traditional classroom setting.

Mth 65 Elementary Algebra . . . . . 4 credits*
*Variable credit in MRC
(All Terms) . . . . . 4 class hrs/wk
No credit if taken after Intermediate Algebra Mth 100, College Algebra Mth 101, or Trigonometry Mth 102.
Prerequisite: Beginning Algebra Mth 60 or equivalent course or placement test through the Testing and Assessment Office. Second term of a one-year sequence in algebra; fractional equ-

ations, radical equations, quadratic equations, linear equations, systems, inequalities. Prepares student for Geometry Mth 75 and Intermediate Algebra Mth 100. Uses tutorial materials in a resource center or traditional classroom setting.

Mth 75 Geometry . . . . . 4 credits
(See Term Schedule) . . . . . 4 class hrs/wk
Prerequisite: Elementary Algebra Mth 65 or equivalent course or placement test through the Testing and Assessment Office. Intermediate Algebra Mth 100 may be taken concurrently with Mth 75. 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 proof will be stressed. Geometry is a prerequisite for Mth 101, 102, 191, and 200.

Mth 100 Intermediate Algebra . . . . . 4 credits
(All Terms) . . . . . 4 class hrs/wk
No credit if taken after College Algebra Mth 101 or Trigonometry Mth 102.
Prerequisite: Elementary Algebra Mth 65 or equivalent course. Third term of a one-year sequence in algebra; function concept, polynomials, rational equations, exponents, quadratic functions, introduction to conic sections, exponential and logarithmic functions, inequalities. May be taken concurrently with Geometry Mth 75 to prepare students for College Algebra Mth 101. Uses tutorial materials in a resource center or traditional classroom setting. Scientific type calculator required.

Mth 101 College Algebra . . . . . 4 credits
(All Terms) . . . . . 4 class hrs/wk
Students, except those who have passed Mth 100 with a grade of "C" or better within the past year, must take a pretest through the Testing and Assessment Office to determine readiness before registering for College Algebra.
Prerequisites: Geometry Mth 75, Intermediate Algebra Mth 100 or equivalent courses. College Algebra covers the study of algebraic functions plus exponential and logarithmic functions in the context of the algebra of functions and their inverses. Other topics include systems of equations (matrix methods), binomial theorem, and an introduction to sequences and series.

Mth 102 Trigonometry . . . . . 4 credits
(All Terms) . . . . . 4 class hrs/wk
Students must take a pretest through the Testing and Assessment Office to determine readiness in geometry before registering for Trigonometry. Exceptions are those students who have passed Mth 75 within the past year with a grade of "C" or better.
Prerequisites: Geometry Mth 75 and College Algebra Mth 101 or equivalent courses. This is a one-term course preparatory to Calculus with Analytic Geometry. The topics covered include relationships among angles and sides in triangles, radian measure, trigonometric functions, circular functions, identities, solution of trigonometric equations, and applications. The course also includes a treatment of conic sections.

***Mth 103 Introduction to Probability and Statistics** . 4 credits
(Fall, Winter, & Spring Terms) . . . . . 4 class hrs/wk
Prerequisite: College Algebra Mth 101. Basic theory and application to statistics and probability; distributions, measurements of central tendency and variability; basic concepts of statistical inference, and of hypothesis testing, chi-square, linear regression and analysis of variance. This is a course in the sequence 106, 107, 103. Calculator required.

***Introduction to Probability and Statistics Mth 103, Elementary Calculus 1 Mth 106, and Elementary Calculus 2 Mth 107 if all taken at Lane Community College will satisfy:**
1. **The University of Oregon Business School requirements of Mth 207, 208, 209.**
2. **The University of Oregon general graduation requirements for a science cluster.**
3. **It is suggested that students take the courses in this order: 106, 107, 103.**

***Mth 106 Elementary Calculus 1** . . . . . 4 credits
(All Terms) . . . . . 4 class hrs/wk
Prerequisite: College Algebra Mth 101 or equivalent course. Differential calculus (without trigonometry) for business and social sciences. Review of algebraic techniques, limits, continuity, derivatives and their applications. Exponential and logarithmic functions, their derivatives and applications, and introductory mathematics of finance. This is a course in the sequence 106, 107, 103.

***Mth 107 Elementary Calculus 2** . . . . . 4 credits
(Fall, Winter, & Spring Terms) . . . . . 4 class hrs/wk
Prerequisite: Elementary Calculus 1. Integral calculus (without trigonometry) for business and social sciences. Integration and applications for single variable functions, techniques of integration, partial differentiation for multivariate functions, linear programming, and matrix algebra. This is a course in the sequence 106, 107, 103.

Mth 191 Mathematics for Elementary Teachers 3 credits
(Fall & Winter Terms) . . . . . 2 class, 2 lec/lab hrs/wk
Students must take a pretest through the Testing and Assessment Office if their coursework in algebra and geometry is more than one year old. A study list is available at the Testing Office.
Prerequisites: One and one-half years of high school algebra or Intermediate Algebra Mth 100 with a grade of "C" or better, and one year of high school geometry or Geometry Mth 75 with a grade of "C" or better. Mathematics for Elementary Teachers, first term of a sequence: topics include problem-solving methods, set theory, the system of whole numbers, basic operations, systems of numeration, introductory number theory, integers, and introduction to calculators and computers related to mathematics usage. First term of a three-term sequence.

Mth 192 Mathematics for Elementary Teachers . 3 credits
(Winter & Spring Terms) . . . . . 2 class, 2 lec/lab hrs/wk
Prerequisites: Mathematics for Elementary Teachers Mth 191 and Geometry with a grade of "C" or better. Second term of a three-term sequence for elementary teachers. Continued application of problem-solving methods, calculators, and computers to rational numbers and geometry: topics include fractions, decimals, percents, ratios, and informal geometry.

Mth 193 Mathematics for Elementary Teachers . 3 credits
(Spring Term) . . . . . 2 class, 2 lec/lab hrs/wk
Prerequisites: Mathematics for Elementary Teachers Mth 192. Third term of a three-term sequence for elementary teachers. Topics include probability, statistics, additional geometry topics and measurement. Students will do a term project on geometry.

Mth 199 Math Trends . . . . . (variable) 1-4 credits
(See Term Schedule)
This course is a combination of lecture and lab on current issues and trends in mathematics, especially dealing with new and

developing technology and concepts of computers. The course will consist of one credit modules, some being prerequisites for others. See Class Schedule for specific topics.

Mth 200, 201, 202, 203 Calculus With Analytic Geometry . . . . . 4 credits
4 class hrs/wk

Standard sequence for students in mathematics, science, and engineering. Calculator required.

Students must take a pretest through the Testing and Assessment Office to determine readiness before registering for Mth 200.

Math 200: (Fall, Winter, & Spring Terms)
Prerequisites: Geometry Mth 75, College Algebra Mth 101, and Trigonometry Mth 102. This course uses the concept of function extensively in developing the notions of limit, derivative, and a portion of analytic geometry. Several applications of the derivative are considered. The first of a 4-term sequence.

Math 201: (Fall, Winter, & Spring Terms)
Prerequisite: Mth 200 with a grade of "C" or better. Antiderivatives. Definition of, and theorems related to, the definite integral. Applications of the definite integral. Inverse trigonometric functions, exponential, and logarithmic functions.

Math 202: (Fall, Winter, & Spring Terms)
Prerequisite: Mth 201 with a grade of "C" or better. Techniques of integration, conic sections, polar coordinates, and infinite series.

Math 203: (See Class Schedule)
Prerequisite: Mth 202 with a grade of "C" or better. Vectors in two and three dimensions, vector functions, functions of two or more variables, partial derivatives, gradient, multiple integration.

Mth 221 Applied Differential Equations . . . . . 4 credits
(See Term Schedule) . . . . . 4 class hrs/wk

Scientific calculator required.
Prerequisite: Calculus with Analytic Geometry Mth 202. This course covers methods of solving first and second order ordinary differential equations. Emphasis is on solutions by elementary methods, convergent power series, Laplace transforms, and numerical methods, with applications to physical and engineering science.

Mth 231 Discrete Mathematics . . . . . 4 credits
(See Term Schedule) . . . . . 4 class hrs/wk

Prerequisite: College Algebra Mth 101 or equivalent course. Sets and operations on sets, propositional logic, mathematical induction. Functions, sequences and recursive definitions. Elementary matrix operations. Introduction to graphs.

Mth 232 Discrete Mathematics . . . . . 4 credits
(See Term Schedule) . . . . . 4 class hrs/wk

Prerequisite: Discrete Mathematics Mth 231. Combinatorics, elementary counting techniques; relations and order relations, partially ordered sets, adjacency matrices; graphs and directed graphs.

Mth 241 Introduction to Linear Algebra . . . . . 4 credits
(See Term Schedule) . . . . . 4 class hrs/wk

Prerequisites: College Algebra Mth 101 or consent of the instructor. Systems of linear equations, vectors in a geometric setting, real vector spaces, matrices and operations on matrices, equivalence of matrices, linear transformation and matrices, determinants, inverse of a matrix. Calculator required.

Mechanics

The goal of the Mechanics Department is to provide comprehensive high-quality entry-level vocational training, upgrading of job skills, and personal development and enrichment.

The Mechanics Department offers the following programs: Agricultural and Industrial Equipment Technology, Auto Body and Fender Technology, Automotive Technology, Diesel Technology, Aviation Maintenance Technician, and Manufacturing Technology.

Grading Policy The minimum grading system for all courses in the Mechanics Department is 100-90 = A; 89-80 = B; 79-70 = C; 69-60 = D; 59-0 = F. A student must attain a "C" or better to satisfactorily complete a course in the Mechanics Department. Programs/courses requiring a higher standard will indicate the standard in the course syllabus.

Courses

3.128 Trends in Automotive Technology . . . . . (variable) 1-3 credits
(See Term Schedule) . 1-3 class or 2-6 lec/lab or 3-9 lab hrs/wk
or any appropriate combination

This course will give the student an opportunity to explore current trends in Automotive Technology. Examples of general topics of study are equipment and/or components, systems, employment and industry predictions, service management, and parts operation.

3.129 Trends in Diesel Technology . (variable) 1-3 credits
(See Term Schedule) . . . . . 1-3 class hrs/wk

This course will give the student an opportunity to explore current trends in Diesel Technology. Examples of general topics of study are equipment and/or components, systems, employment and industry predictions, service management, and parts operation.

3.136 Basic Electricity . . . . . 2 credits
(See Term Schedule) . . . . . 4 class hrs/wk

Corequisite: Auto-Diesel 3 Electricity 3.134. The fundamental principles of electricity as applied to automotive and heavy equipment mechanics industries. The actions of electricity in direct current systems will be explored in lecture, demonstrations, student individual research, and audio-visual aids.

3.137 Basic Hydraulics . . . . . 2 credits
(See Term Schedule) . . . . . 4 class hrs/wk

Corequisite: Auto-Diesel 2 Applied Fluids 3.132. This course consists of the fundamental principles of fluid power hydraulics as applied to automotive, heavy equipment, farm machinery, manufacturing technology, aviation maintenance, automation, robotics, construction, and any other mobile or stationary equipment in industries.

3.140 Chassis . . . . . (variable) 1-12 credits
(See Term Schedule) . . . . . 24 lecture/lab hrs/wk

Theory and laboratory experiences in suspension systems, steering geometry and alignment, brakes, wheel balancing, and miscellaneous components.

3.141 Power Trains . . . . . (variable) 1-12 credits
(See Term Schedule) . . . . . 24 lecture/lab hrs/wk

This is the study of operating principles, design, and construction of automotive and light truck components. Included are clutches, transmissions, rear axle assemblies, gear reductions, various types of power train applications, and basic air-conditioning. The lab work will consist of actual tear down and assembly of power train components.

3.142 Automatic Transmissions . . . (variable) 1-12 credits (See Term Schedule) . . . . . 24 lecture/lab hrs/wk
This course covers the methods and uses of hydraulics as applied to various types of equipment including power steering, automatic transmissions, and braking systems. Basic principles of construction and design, testing, and repairing hydraulic components will be covered by classroom and lab studies and work.

3.143 Electrical Systems . . . . . (variable) 1-12 credits (See Term Schedule) . . . . . 24 lecture/lab hrs/wk
This course consists of fundamental principles of electricity as used by the auto and heavy duty mechanic. The construction and function of all types of electrical components used in automotive equipment are studied in detail with the aid of demonstrations, cutaways, and mockups. Students will diagnose minor problems in lighting, charging, starting, indicating, ignition systems, and electronic engine controls. Students will diagnose problems using wiring diagrams and test instruments.

3.144 Tune-Up and Fuels . . . . . (variable) 1-12 credits (See Term Schedule) . . . . . 24 lecture/lab hrs/wk
This course includes: A study of the principles of carburetion, fuel systems, emission control systems, and fuels that apply to automotive engines; and laboratory experiences in the techniques and procedures for overhaul and/or service of carburetors, fuel system components, and emission controls. Diagnosis and testing procedures involving carburetors, fuel injection, fuel systems, and emission control systems are covered using standard automotive test instruments.

3.145 Engines . . . . . (variable) 1-12 credits (See Term Schedule) . . . . . 24 lecture/lab hrs/wk
The design, function, and operation of internal combustion engines. Lab work includes complete disassembly, inspection, repair, reassembly, and test of automotive engines.

3.235 Automotive Painting . . . . . (variable) 36 credits (Fall, Winter, & Spring Terms) . . . . . 24 lecture/lab hrs/wk

3.237 Auto Metal Work . . . . . (variable) 72 credits (Fall, Winter, & Spring Terms) . . . . . 24 lecture/lab hrs/wk
Prerequisite for Auto Metal Work: Gas Processes 1 3.931 (may be taken concurrently with first term).This course is occupational preparatory. It covers technical information and the development of skills through laboratory assignments. Students learn to demonstrate daily shop safety habits, to handle the practical application of skills to repair modern automobiles, and to understand the principles, systems, and theories used by auto body and auto paint shops.

Technical information is offered through the use of individualized learning packages and supportive media. Learning packages may include learning activities, objectives, information sheets, work sheets, and/or a variety of performance, verbal, and written tests which enable students to accomplish each objective.

Laboratory assignments enable students to apply the principles, theories, and systems of automotive painting and auto metal work to each objective.

General Information Automotive Painting and Auto Metal Work are variable credit, open-entry/open-exit courses and are nonsequential. It is suggested that a new student not schedule over 12 credits for the first term. A student must have the approval of the instructor to schedule less than 12 credits per term.

Students are required to attend class for the full scheduled block of time each day. During this block of time, no interruption for other classes will be authorized.

The instructor may authorize entry midterm as space becomes available. It is then the student's responsibility to follow through with the proper registration procedures. If entering midterm, estimate a one-credit value for each remaining week of the term.

The length of the course is determined by the individual student's progress. Students can advance at their own rate by proving competency. Prior experience may give the student an advantage; however, the student without background is not penalized.

Upon satisfactory completion of 36 credits, the student will have completed Automotive Painting. The normal schedule for completion of Automotive Painting is three terms.

Upon satisfactory completion of 36 credits, the student will have completed one year of Auto Metal Work. (In lieu of Automotive Painting, a maximum of an additional 36 credits in Auto Metal Work may be earned for the second year of the Auto Body and Fender Technology program.) The normal schedule for completion of one year of Auto Metal Work is three terms.

3.236 Trends in Auto Body and Fender Technology . . . . . (variable) 1-3 credits (See Term Schedule) . . . . . 1-3 class hrs/wk
This course will give the student an opportunity to explore current trends in Auto Body and Fender Technology. Examples of general topics of study are safety, equipment and/or tools, materials and/or finishes, employment and industry predictions, service management, and parts operation.

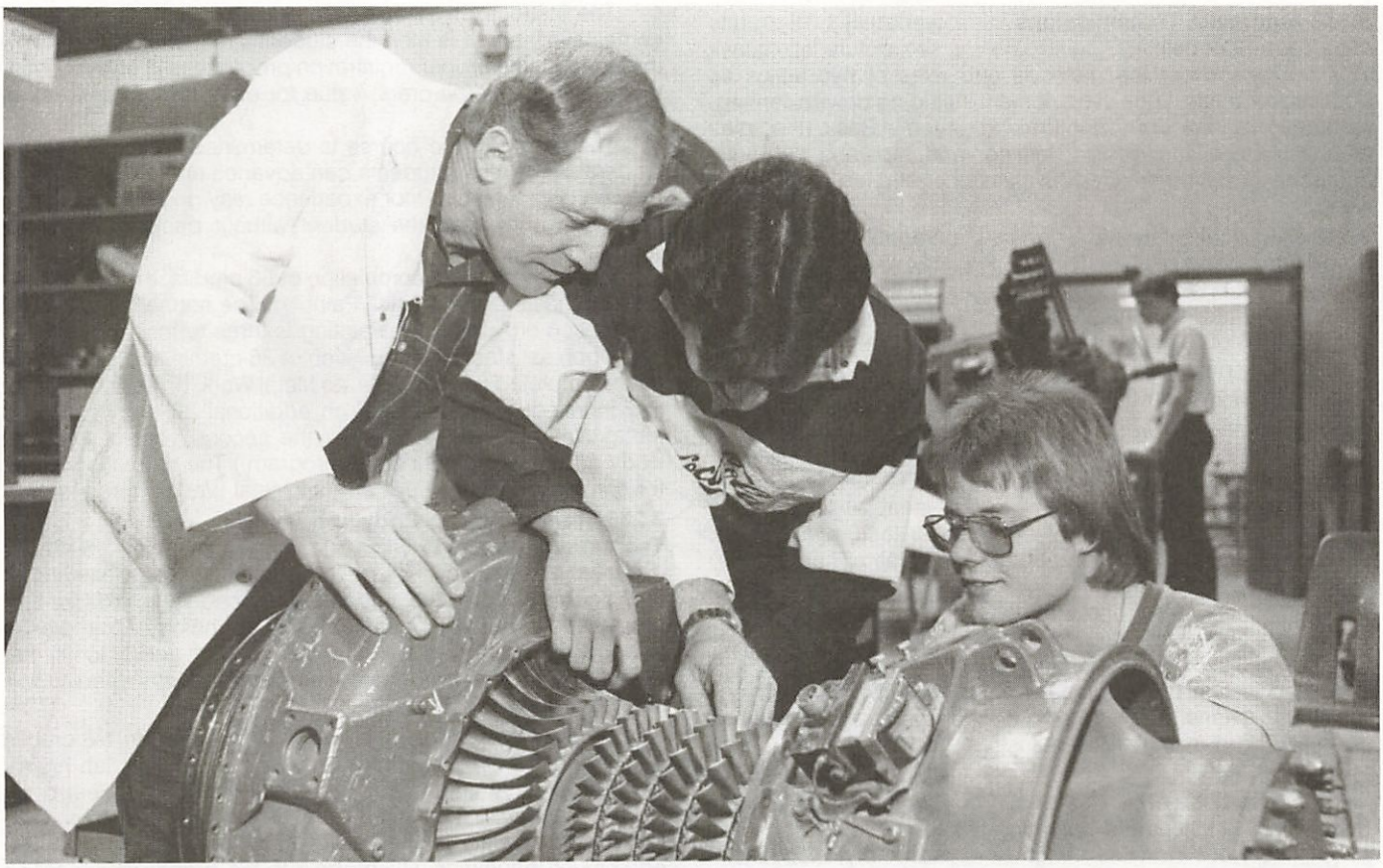
3.279 General Aviation . . . . . (variable) 1-6 credits (Fall, Winter, & Spring Terms) . . . . . 12 lec/lab hrs/wk
This course is an introduction to the professional career of an aircraft mechanic. It consists of basic aircraft and maintenance terminology, safety in the use of hand and power tools and equipment, principles which apply to the proper maintenance procedures for the inspection and repair of airframe and powerplant components and systems, and the use of service manuals, technical publications, test and measuring equipment.

3.280 Airframe . . . . . (variable) 24 credits (Fall, Winter, & Spring Terms) . . . . . 12 lec/lab hrs/section

3.281 Powerplant . . . . . (variable) 24 credits (Fall, Winter,& Spring Terms) . . . . . 12 lec/lab hrs/section
This course covers technical information and laboratory projects necessary for the practical application and understanding of theories, principles, and concepts of either airframe structures, systems, and components or powerplant maintenance, systems, and components. A student must have instructor approval to schedule less than 12 credits per term in either Airframe or Powerplant. Airframe consists of 24 credits (576 lecture/lab hours) and Powerplant consists of 24 credits (576 lecture/lab hours). Credits are issued on the basis of satisfactory completion of subareas within the courses.

3.282 Airframe Return to Service . . (variable) 1-6 credits (See Term Schedule) . . . . . 12 lec/lab hrs/wk
Prerequisite: General 1 3.284, 2 3.285, 3 3.286, 4 3.287, 5 3.288, and Occupational Mathematics 1 Mth 50. This course covers technical information and provides practical application of theories, principles, and concepts of airframe structures, systems, and components.

3.283 Powerplant Return to Service . (variable) 1-6 credits (See Term Schedule) . . . . . 12 lec/lab hrs/wk
Prerequisite: General 1 3.284, 2 3.285, 3 3.286, 4 3.287, 5 3.288, and Occupational Mathematics 1 Mth 50. This course covers technical information and provides practical application of theories, principles, and concepts of powerplant systems and components.



3.284 General 1 . . . . . (variable) 1-6 credits
(See Term Schedule) . . . . . 12 lec/lab hrs/wk
Prerequisite: Occupational Mathematics 1 Mth 50 (may be taken concurrently). This course covers technical information and laboratory projects necessary for the practical application and understanding of theories, principles, and concepts of basic electricity and aircraft drawings.

3.285 General 2 . . . . . (variable) 1-6 credits
(See Term Schedule) . . . . . 12 lec/lab hrs/wk
This course covers technical information and laboratory projects necessary for practical application and understanding of theories, principles, and concepts of airframe and engine inspection, materials and processes, maintenance forms and records, publications, and mechanics privileges.

3.286 General 3 . . . . . (variable) 1-6 credits
(See Term Schedule) . . . . . 12 lec/lab hrs/wk
Prerequisite: General 1 3.284 (may be taken concurrently). This course covers technical information and laboratory projects necessary for the practical application and understanding of theories, principles, and concepts of aircraft and engine electrical systems and components.

3.287 General 4 . . . . . (variable) 1-6 credits
(See Term Schedule) . . . . . 12 lec/lab hrs/wk
This course covers technical information and laboratory projects necessary for the practical application and understanding of theories, principles, and concepts of aircraft and engine fuel, instrument, and fire protection systems, fluid lines and fittings, and basic physics.

3.288 General 5 . . . . . (variable) 1-6 credits
(See Term Schedule) . . . . . 12 lec/lab hrs/wk
This course covers technical information and laboratory projects necessary for the practical application and understanding of theories, principles, and concepts of cleaning and corrosion control, ground operation and servicing, and weight and balance.

3.289 Helicopter Maintenance . . . . (variable) 1-3 credits
(See Term Schedule) . . . . . 6 lec/lab hrs/wk
This course consists of technical information and hands-on experience on 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, inspection, operational checks, and helicopter components.

3.290 Trends in Aviation Maintenance . (variable) 1-3 credits
(See Term Schedule) . . . . . 1-3 class hrs/wk
This course will give the student an opportunity to explore current trends in Aviation Maintenance. Examples of general topics of study are equipment and/or components, systems, employment and industry predictions, parts operation, forms, publications, and regulations.

3.302 Diesel Technology . . . . . (variable) 72 credits
(Fall, Winter, & Spring Terms) . . . . . 24 lec/lab hrs/wk per each 12 credits
This course covers technical information and shop projects necessary for the practical application and understanding of theories and principles used in the operation, diagnosing, testing,and repair of "on" and "off" highway diesel equipment.

Diesel Technology consists of six specific subject areas, each area is worth 12 credits. The six subject areas are: diesel electrical systems, diesel and auxiliary fuel systems, diesel engines and engine overhaul, heavy equipment applied fluids, heavy equipment chassis and power trains, and diesel braking systems.

Diesel Technology 3.302 is an open-entry/open-exit variable credit course. It is suggested that a student schedule 12 credits (24 lec/lab hrs/wk) of Diesel Technology per term. (A student must have the approval of the instructor to schedule less than 12 credits per term). It is recommended that six terms be the target maximum for completion of Diesel Technology; 12 credits per term. Upon satisfactory completion of 72 credits (24 lec/lab hrs/wk), the student has completed the course.

3.398 Trends in Manufacturing Technology . . . . . (variable) 1-3 credits
(See Term Schedule) . . . . . 1-3 class hrs/wk
This course will give the student an opportunity to explore current trends in Manufacturing Technology. Examples of general topics of study are equipment and/or parts, basic metals and material identification, employment and industry predictions, and tools.

3.399 Manufacturing Technology . . (variable) *72 credits
(Fall, Winter, & Spring Terms) . . . . . *1728 lec/lab hrs
Covers technical information and shop projects necessary for the practical application and understanding of theories and principles used in the machining of ferrous and non-ferrous materials. A graduate from this program may enter a job in industry at the second-year level of a four-year machinist apprenticeship program.

* Manufacturing Technology 3.399 is an open-entry/open-exit variable credit course. It is suggested that a student NOT schedule less than 10 credits (20 lec/lab hrs/wk) of Manufacturing Technology per term. (A student must have the approval of the instructor to schedule less than 10 credits per term.) It is recommended that six terms be the target maximum for completion of Manufacturing Technology, 12 credits/term (24 lec/lab hours per week). Upon satisfactory completion of 72 credits (1728 lec/lab hours), the student has completed the course.

8.155 Agricultural and Industrial Equipment Technology . . . . . (variable) *72 credits
(Fall, Winter, & Spring Terms) . . . . . 24 lec/lab hrs/wk
This course covers technical information and shop projects necessary for the practical application and understanding of theories and principles used in the operation, diagnosing, testing, and repair of agricultural and industrial equipment. Examples of equipment a student may be prepared to work with are: tractors (gas and diesel), power trains (manual and hydraulic), tillage equipment, planting equipment, and harvesting equipment with various small air-cooled power units.

*Agricultural and Industrial Equipment Technology 8.155 is an open-entry/open-exit variable credit course. It is suggested that a student NOT schedule less than 10 credits (20 lec/lab hrs/wk) of Agricultural and Industrial Equipment Technology per term. (A student must have the approval of the instructor to schedule less than 10 credits per term.) It is recommended that six terms be the target maximum for completion of Agricultural and Industrial Equipment Technology, 12 credits per term (24 lec/lab hrs/wk). Upon satisfactory completion of 72 credits (1728 lec/lab hours), the student has completed the course.

8.156 Trends in Agricultural and Industrial Equipment Technology . . . . . (variable) 1-3 credits
(See Term Schedule) . . . . . 1-3 class hrs/wk
This course will give the student an opportunity to explore current trends in Agricultural and Industrial Equipment Technology. Examples of general topics of study are equipment and/or components, systems, employment and industry predictions, service management, and parts operation.

Performing Arts

The Performing Arts Department offers courses of study and performance experience in music, theatre, performance, technical theatre, and dance. This learning prepares the student for work, for more advanced studies elsewhere, and for personal creative expression. These courses and experiences are also useful and enjoyable for students majoring in other fields: all persons make use of basic performance skills in their everyday work and social activities.

Theatre Courses

The following theatre arts courses may be used, by non-theatre majors, to meet Arts and Letters group and "cluster" requirements at the University of Oregon: Survey of Theatre TA 111, 112, and 113. Any of the theatre courses will transfer as elective credits to the University of Oregon and other Oregon colleges and universities.

TA 111, 112, 113 Survey of Theatre Arts . . . . . 3 credits
(Fall, Winter, Spring) . . . . . 3 class hrs/wk
A non-performance course designed from the point of view of the audience member. Students learn what to look for in theatrical productions and acquire some tools for evaluating them. While this is more an appreciation course than a history course, the material may be approached historically as well as generically. *May be used to meet Arts and Letters group and cluster requirements at the University of Oregon.*

TA 126 Movement for the Acting Student . . . . . 1 credit
(Fall, Winter, Spring) . . . . . 3 class hrs/wk
This course is designed to make students more aware of the physical-visual aspects of drama, and to improve the students' expression through movement.

TA 127 Voice Training for Acting Students . . . . 3 credits
(Fall, Winter, Spring) . . . . . 3 class hrs/wk
This is a one-term course designed to develop the entire vocal process as it relates to the needs of the actor. TA 127 is valuable also to anyone wanting to develop a more interesting voice and thus better vocal communication. The course includes voice production, diction, some stage dialects, and will be taught through the use of vocal exercises and selected readings.

TA 128 Pantomime . . . . . 2 credits
(Fall, Winter, or Spring) . . . . . 1 class, 2 lec/lab hrs/wk
The course will be primarily concerned with the development of pantomimic skills and techniques, particularly as they relate to the building of sketches. Some history and exposure to mime may also be included. Pantomime is an essential course for the acting student.

TA 129 Dance for Musical Theatre . . . . . 2 credits
(Fall, Winter, Spring) . . . . . 1.5 class, 1.5 lab hrs/wk
Participants will learn to appreciate choreography and staging as it applies to specific musicals, which represent a segment of dramatic literature. The course includes live, in-class perfor-

mances of choreographed or staged songs and dances from various stage musicals or filmed musicals. In addition, participants will appear in a final musical "review" of these songs and dances.

TA 161 Fundamentals of Technical Theatre 1: Stagecraft . . . . . 3 credits
(Fall Term) . . . . . 1 class, 2 lec/lab, 3 lab hrs/wk
A course designed to give the student knowledge of and practice in the most common construction techniques and materials used in building stage scenery and properties. It will also help to give practical knowledge for related fields such as television production.

TA 162 Fundamentals of Technical Theatre 2: Stage Lighting . . . . . 3 credits
(Winter Term) . . . . . 1 class, 2 lec/lab, 3 lab hrs/wk
A course designed to give the student practical experience with the equipment and techniques employed in theatrical lighting. The course introduces basic design concepts, as well as fundamental technical data, and provides information applicable to related fields such as architectural illumination and concert lighting.

TA 163 Fundamentals of Technical Theatre 3: Scenic Artistry . . . . . 3 credits
(Spring Term) . . . . . 1 class, 2 lec/lab, 3 lab hrs/wk
A course designed to give students practical experience with the materials and techniques employed by the scenic artist. The course teaches the basic scene-painting skills and 3-dimensional texturing and sculpting methods used in professional theatre.

TA 180 Theatre Rehearsal and Performance . . . . . (variable) 1-3 credits
(All Terms) . . . . . 3-9 lab hrs/wk
Prerequisite: Consent of the instructor. Corequisite: Technical Theatre Workshop TA 265 or consent of instructor. Designed to reflect practical application of classroom theory; may be taken by any participant in a music or drama production of this department which is scheduled for a public performance as determined by the department head. The course may be repeated for a maximum of nine credits.

TA 190 Projects in Theatre . . . . . (variable) 1-3 credits
(All Terms) . . . . . 6 lab hrs/wk
Prerequisite: Two terms of 200-level Acting OR equivalent experience AND instructor consent. An independent study experience designed to allow the student with prior acting/directing experience in stage and/or film work to initiate individual projects, with instructor approval, which will enable him/her to express further some specific theatre or theatre-related interest, method, or project. Repeatable.

TA 205, 206, 207 Studies in Theatre . (variable) 1-3 credits
(Fall, Winter, Spring) . . . . . 3 class hrs/wk
Studies in Theatre is designed to meet current needs and interests of students. The course covers, in general, various aspects of theatrical production and history, and may be one, two, or three terms long. Examples of recent subjects covered are twentieth-century plays, playwriting, and stage management. Open to all students. See current Class Schedule for specific course topics.

TA 229 Oral Interpretation of Literature . . . . . 3 credits
(Fall, Winter, or Spring) . . . . . 3 class hrs/wk
This course offers students instruction and practice in the oral presentation of various types of written literature, including prose, poetry, and drama. The course may include work in story-telling and readers theatre. Especially recommended for students of theatre and literature and for those intending to be teachers,the course is also of value to anyone who reads aloud to children, or to anyone else.

TA 230, 231, 232 Acting 1 (Beginning) . . . . . 3 credits
(Fall, Winter, Spring) . . . . . 3 class hrs/wk
Study of the methods, techniques, and theory of acting as an art form. Performance of laboratory exercises and excerpts from plays are the basic teaching approaches. The course is designed for any level of ability; no prior acting experience is required. Individual instruction is provided. The course is for transfer, career, or vocational students.

TA 244, 245, 246 Acting 2 . . . . . 3 credits
(Fall, Winter, Spring) . . . . . 6 lec/lab hrs/wk
Prerequisite: Acting 1 (Beginning) or equivalent experience. A second-year class that concentrates on the problems of characterization. Students perform from contemporary and classical theatre literature. Each course in the sequence may be repeated for a maximum of nine credits.

TA 261 Costume Workshop . . . . . 3 credits
(All Terms) . . . . . 2 class, 3 lab hrs/wk
This course introduces the student to the process of developing theatrical costumes from the concept of the designer to the construction of actual garments. The student will get an opportunity to help construct costumes for an actual LCC Theatre production.

TA 265 Technical Theatre Workshop . (variable) 3 credits
(Fall, Winter, Spring) . . . . . 6 class hrs/wk
This is a laboratory course in which students prepare the scenic backgrounds for theatre productions. They receive training and practical experience in construction, painting, lighting, and stage management, using the current Performing Arts Department productions as a laboratory. The content and specialized nature of the problem changes from quarter to quarter and from year to year as different types and styles of productions are mounted. Course may be repeated for a maximum of 9 credits.

TA 270 Stage Makeup . . . . . 3 credits
(Fall, Winter) . . . . . 2 class, 2 lab hrs/wk
Stage Makeup covers the history, purpose, and especially the technique of application of theatrical makeup. Students study the use of makeup in various theatrical media, with emphasis on stage performers.

TA 280 Theatre Rehearsal and Performance . . . . . (variable) 1-3 credits
(All Terms) . . . . . 3-9 lab hrs/wk
Prerequisite: Consent of the instructor. Corequisite: Technical Theatre Workshop TA 265 or consent of instructor. Designed to reflect practical application of classroom theory; may be taken by any participant in a music or drama production of the Performing Arts Department which is scheduled for a public performance. The course may be repeated for a maximum of nine credits.

Music Courses

Note: The following music courses may be used to meet the Arts and Letters group requirements at the University of Oregon: Music Fundamentals Mus 101; Introduction to Music and Its Literature Mus 201, 202, 203; Music History Mus 261, 262, 263; Introduction to Jazz History Mus 205.

Moreover, the following courses may also be used by ***non-music majors*** to meet the University of Oregon Arts and Letters "cluster" requirement: Introduction to Music and Its Literature Mus 201, 202, 203; Music History Mus 261, 262, 263.

MuP 100 Individual Lessons . . . . . 1-2 credits
(Any Term) *Extra fee* . . . . . ½ class, 4½ lab hrs/wk
Prerequisite: Pre-registration in Performing Arts Office. Individual instruction in technical and stylistic aspects of solo performance for non-majors. Each term students enroll for one half-hour (½) lesson each week in their major instrument. Instruction is offered in the following: voice, piano, organ, harpsichord, recorder, flute, oboe, clarinet, saxophone, bassoon, violin, trumpet, French horn, trombone, baritone horn, tuba, string bass, cello, viola, electric bass guitar, jazz guitar, classical guitar, and percussion. No more than six hours credit may be earned in MuP 100 singularly or combined.

Individual Lessons (First-year level) . . . . . 2 credits
(Any Term) *Extra fee* . . . . . ½ class, 4½ lab hrs/wk
Prerequisites: Successful completion of 171-192 level audition; declared music major; pre-registration in Performing Arts Office. Individual instruction in technical and stylistic aspects of solo performance. Each term students enroll for one half-hour (½) lesson each week. Regular practice outside of lessons is expected (consult with instructor regarding expectations). Instruction is offered in the following: piano, MuP 171; harpsichord, MuP 172; organ, MuP 173; voice, MuP 174; violin, MuP 175, viola, MuP 176; cello, MuP 177; bass, MuP 178; guitar, MuP 180; flute, MuP 181; oboe, MuP 182; clarinet, MuP 183; saxophone, MuP 184; bassoon, MuP 185; trumpet, MuP 186; French horn, MuP 187; trombone, MuP 188; baritone horn, MuP 189; tuba, MuP 190; percussion MuP 191; electric bass, MuP 192; recorder, MuP 192.**

Individual Lessons (Second-year level) . . . . . 2 credits
(Any Term) *Extra fee* . . . . . ½ class 4½ lab hrs/wk
Prerequisites: Successful completion of 271-292 level audition; declared music major; pre-registration in Performing Arts Office. Individual instruction in technical and stylistic aspects of solo performance. Each term students enroll for one half-hour (½) lesson each week. Regular practice outside of lessons is expected (consult with instructor regarding expectations). Instruction is offered in the following: piano, MuP 271; harpsichord, MuP 272; organ, MuP 273; voice, MuP 274; violin, MuP 275; viola, MuP 276; cello, MuP 277; bass, MuP 278; guitar, MuP 280; flute, MuP 281; oboe, MuP 282; clarinet, MuP 283; saxophone, MuP 284; bassoon, MuP 285; trumpet, MuP 286; French horn, MuP 287; trombone, MuP 288; baritone horn, MuP 289; tuba, MuP 290; percussion, MuP 291; electric bass, MuP 292; recorder, MuP 292.**

MuP 214 General Ensemble . . . . . 2 credits
(Fall, Winter, Spring) . . . . . 1 class, 2 lec/lab hrs/wk
Prerequisite: Prior music reading experience. General Ensemble is a course for varying combinations of vocal or instrumental students seeking small ensemble experience not covered in existing ensemble courses.

MuP 220 Gospel Choir . . . . . 2 credits
(See Schedule) . . . . . 1 class, 2 lec/lab hrs/wk
A study and performance of Black-American sacred music from the early spirituals to today's contemporary gospel sound. Emphasis will be placed on the group and personal expression which historically characterized the wellsprings of this music which is native to the United States. Special attention will be given to procedural and aesthetic qualities.

Mus 101 Music Fundamentals . . . . . 3 credits
(Any Term) . . . . . 3 class hrs/wk
Prerequisite: No previous training is necessary; only an interest in music. This course provides the student an opportunity to develop a working knowledge of the elements of music. Students learn to read, write, analyze, and compose music. Students will find it helpful to take Group Piano Mus 131 and/or Sight-Reading and Ear Training Mus 114 at the same time.

Mus 108 Studio Singer . . . . . 2 credits
(Winter) . . . . . 1 class, 2 lec/lab hrs/wk
This course is for the singer who can read music and has a serious interest in recording commercial music in a professional recording studio. Students learn what to expect in a recording session, how to work with the producer and engineer, and how to produce their best work in the least amount of time. The class is held in a recording studio where students will record vocals on professionally produced soundtracks. The singer learns by doing.

Mus 111, 112, 113 Music Theory 1 . . . . . 4 credits
(Fall, Winter, Spring, or
Winter, Spring Terms) . . . . . 3 class, 2 lec/lab hrs/wk
Prerequisite: Music Fundamentals Mus 101 or equivalent. Corequisite: Sight Reading and Ear Training Mus 114, 115, or 116. Must be taken in sequence. Thorough review of the fundamentals of music and more: notation and calligraphy, melody, harmony, rhythm, and ear training. Students having little or no piano background should take Group Piano for a better understanding of the keyboard.

Mus 114, 115, 116 Sightreading and Ear Training . . . . . 2 credits/term
(Fall, Winter, Spring or
Winter, Spring Terms) . . . . . 2 class, 1 lab hr/wk
In Mus 114 students study basic concepts in rhythmic principles and tonal relationships (solfeggio) in intervals and chords. In Mus 115 and 116 students study more complex rhythmic patterns, minor scales, modes, triad inversions, and harmonic progressions. *This course is a corequisite of Music Theory 1*; students taking Music Fundamentals Mus 101 also will find it ***helpful*** to take Mus 114.

Mus 117 Electronic Music 1: An Introduction . . 3 credits
(Fall & Winter Terms) . . . . . 3 class, 1 lab hr/wk
Prerequisite: Music Fundamentals Mus 101 recommended. This course provides the student with an opportunity to study the history and current trends in electronic music. Students will learn to use and program analog synthesizers, phase-distortion synthesizers, and digital sequencers. Sequencing and multitrack recording techniques are presented, as well as an introduction to MIDI. Students are assigned lab time during which they complete specific lab assignments.

Mus 118 Electronic Music 2: Digital FM Synthesis . 3 credits
(Winter & Spring Terms) . . . . . 3 class, 1 lab hr/wk
Prerequisite: Satisfactory completion of Electronic Music 1: An Introduction Mus 117. This is the second of a three-term sequence of courses exploring electronic music. Advanced analog synthesis is discussed and demonstrated. In addition, an introduction to FM and additive synthesis is presented. Practical uses of MIDI are covered as they relate to digital sequencers, digital drum machines, MIDI synthesizers, and multi-track recording. Electronic music artists' works will be studied. Students are assigned one hour of lab time per week during which they will complete specific lab assignments.

Mus 119 Electronic Music 3: Digital Sampling . . 3 credits
(Fall & Spring Terms) . . . . . 3 class, 1 lab hr/wk
Prerequisites: Satisfactory completion of Electronic Music 1: An Introduction Mus 117 and Electronic Music 2: Digital FM Synthesis Mus 118. This is the third of a sequence of three courses offered for the student with serious interest in electronic music. Emphasis is given to advanced FM synthesis, digital sound sampling, advanced sequencing systems, and complex MIDI networks. Students will complete creative projects using the full resources of the lab. Students are assigned one hour of lab time per week during which they will complete lab assignments.

Mus 131 Group Piano . . . . . 2 credits
(Any Term) . . . . . 1 class, 2 lec/lab hrs/wk
This course is for students who are interested in learning to play piano or continuing their keyboard studies. There are sections for people who have no experience reading music and for people who do. The course provides group instruction covering principles of piano playing and may be repeated for credit. Up to six credits may be transferred. No prerequisites.

Mus 134 Group Voice . . . . . 2 credits
(Any Term) . . . . . 1 class, 2 lec/lab hrs/wk
This class is designed to help students develop their voices for singing. They will be instructed 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. 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.

Mus 137 Group Guitar . . . . . 2 credits
(Any Term) . . . . . 1 class, 2 lec/lab hrs/wk
Prequisite: The student must have access to an acoustical guitar. Group Guitar provides a basic orientation to guitar techniques that encompass accompaniment and solo skills in a variety of styles. Music reading is available to those interested and is optional. Projects are given in relation to each student's individual needs and interests.

Mus 138 Group Guitar . . . . . 2 credits
(Any Term) . . . . . 1 class, 2 lec/lab hrs/wk
Prerequisite: Must have completed Group Guitar Mus 137. This course offers an intermediate-level orientation to guitar techniques that will encompass accompaniment and solo skills in a variety of styles. Intermediate level standard music reading will be covered. Projects will be given in relation to each student's individual needs and interests.

Mus 161 Jazz Improvisation: Instrumental . . . . 2 credits
(Winter or Spring Terms) . . . . . 1 class, 2 lec/lab hrs/wk
A study of the harmonic, melodic, and rhythmic resources of jazz to help the student understand and develop improvisational skills. Members of the class improvise regularly.

Mus 201, 202, 203 Introduction to Music and Its Literature . . . . . 3 credits
(Fall, Winter, Spring) . . . . . 3 class hrs/wk
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 205 Introduction to Jazz History . . . . . 3 credits
(Winter Term) . . . . . 3 class hrs/wk
A survey of jazz and its principal players, through listening, reading, and discussion, from its origins to the present.

Mus 206 Contemporary Directions in Music: Eugene Symphony . . . . . 2 credits
(Fall, Winter) . . . . . 2 class hrs/wk
Participants will enjoy illustrated talks on the lives and works of the composers represented in the Eugene Symphony Classical Series concerts; live, in-class performances of music excerpts; and discussions with conductors, musicians, and composers. In addition, participants will attend final concert rehearsals (at regular class meeting times) and have access to a limited number of free tickets to the concerts themselves.

Mus 211, 212, 213 Music Theory 2 . . . . . 4 credits
(Fall, Winter, Spring) . . . . . 3 class, 2 lec/lab hrs/wk
Prerequisite: Music Theory 1 or permission of the instructor. This course is a continuation of Music Theory 1 Mus 111, 112, 113 with further studies of the disciplines of composing, analyzing, performing, and improvising original and published music of different style periods. Emphasis is on terminology and music concepts from the Renaissance to the present-day. Practical keyboard skills also are emphasized.

Mus 230 Group Jazz Piano . . . . . 2 credits
(See Schedule) . . . . . 1 class, 2 lec/lab hrs/wk
Prerequisites: Two terms of Group Piano and one term of Music Fundamentals or Music Theory 1, or equivalent experience. This course provides students with group instruction in piano that covers the principles of jazz rhythm, melody, and harmony.

Mus 261, 262, 263 Music History . . . . . 3 credits
(Fall, Winter, Spring) . . . . . 3 class hrs wk
Prerequisites: Two terms of Music Theory or equivalent. Students may enter any term. Music History is a survey of the music, lives, and times of the composers and music that influenced the course of Western music. Fall: Basic stylistic concepts, antique through early baroque periods. Winter: The late baroque and classical periods. Spring: Romantic through twentieth century. Requirements: reading and research, guided listening, and analysis.

Mus 264 History of Rock Music 1 . . . . . 3 credits
(Fall, Winter) . . . . . 3 class hrs/wk
This course is designed to provide the students with a thorough overview of the history of rock music from 1950 through 1965. Students will listen to and discuss the music in the context of the cultural and political events of the time.

Mus 265 History of Rock Music 2 . . . . . 3 credits
(Spring) . . . . . 3 class hrs/wk
This course is designed to provide the students with a thorough overview of the history of rock music from 1965-1982. Students will listen to and discuss the music in the context of the cultural and political events of the time.

Mus 294A String Ensemble . . . . . 2 credits
(Any Term) . . . . . 1 class, 2 lec/lab hrs/wk
This course provides an opportunity for string players to explore the literature for string quartet, string quintet, and piano quintet in rehearsal and performance.*

Mus 294B Woodwind Ensemble . . . . . 2 credits
(Any Term) . . . . . 1 class, 2 lec/lab hrs/wk
Prerequisite: Prior music reading experience. Study, rehearsal, and performance of chamber music literature for various combinations of woodwinds.*

Mus 294D Percussion Ensemble . . . . . 2 credits
(Any Term) . . . . . 1 class, 2 lec/lab hrs/wk
This course provides an opportunity for percussion students, at all levels of proficiency, to explore and perform percussion ensemble literature, most of which is contemporary.

Mus 295A Symphonic Band . . . . . 2 credits
(Any Term) . . . . . 1 class, 2 lec/lab hrs/wk
Symphonic Band provides an opportunity for woodwind, brass, and percussion students to study, rehearse, and perform all types of concert band literature.*

Mus 295E Jazz Ensemble . . . . . 2 credits
(Any Term) . . . . . 1 class, 2 lec/lab hrs/wk
Prerequisites: Audition and concurrent enrollment in Symphonic Band (for wind players). 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.*

Mus 296B Chamber Orchestra . . . . . 2 credits
(Any Term) . . . . . 1 class, 2 lec/lab hrs/wk
This course is designed to meet the needs of string players (violin, viola, cello, and bass) in chamber orchestra literature. Some literature will involve woodwinds and brass. The class will meet three hours a week for three terms.*

Mus 297A Chorus . . . . . 2 credits
(Any Term) . . . . . 1 class, 2 lec/lab hrs/wk
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 literature of various periods and styles in preparation for at lest one public performance each term. Students who do not know how to read music are given special help.*

Mus 297B Chamber Choir (Vocal) . . . . . 2 credits
(Any Term) . . . . . 1 class, 2 lec/lab hrs/wk
Prerequisite: Consent of the instructor. This is a select vocal ensemble which rehearses and performs choral chamber music from the medieval period to the present.

Mus 297C Vocal Jazz Ensemble . . . . . 2 credits
(Any Term) . . . . . 1 class, 2 lec/lab hrs/wk
Prerequisites: Audition: Student must have the ability to learn music on his/her own, be at rehearsal prepared, on time, and have an enthusiasm for the music. Read, rehearse, and perform music of the vocal jazz idiom including swing, blues, Latin, and ballad styles.*

Mus 298 Independent Study – Music . . . . . 1-3 credits
(Any Term) . . . . . 3-9 lab hrs/wk
Independent Study – Music allows students to pursue learning goals beyond the scope of offered courses. The method of study will be independent work, work with others, or research.

* May be repeated for a maximum of 12 credits.
** No more than 12 hours credit may be earned in MuP 171-191 and MuP 271-291 singly or combined.

Dance Courses

D 160 Dance Performance . . . . . 2 credits
(Winter, Spring) . . . . . 3 lec/lab, 3 lab hrs/wk
Prerequisite: Introduction to Choreography D 260, consent of instructor. Corequisite: Modern Dance Intermediate. D 281. This course offers the dance student the experience of being a member of a dance company. The course will have a rehearsal atmosphere in which the students will learn choreography designed for the stage. Students will be involved in the creative process and all production aspects for the preparation of each performance. They will also participate in all scheduled performances.

D 175 Tap Dance, Beg . . . . . 1 credit
(See Schedule) . . . . . 3 lab hrs/wk
This course introduces students to the fundamentals of tap dance technique including basic steps, phrases, and routines.

D 181 Modern Dance Beginning . . . . . 1 credit
(Fall, Winter, Spring) . . . . . 3 class hrs/wk
Fundamentals of dance techniques, both axial and locomotor. Varied systems for organizing movement vocabulary will be introduced and developed. Focus is placed on creative potential of dance through structured movement sequences, improvisation, and composition.

D 185 Ballet Beginning . . . . . 1 credit
(Fall, Winter, Spring) . . . . . 3 class hrs/wk
A basic course in ballet techniques and terminology with an emphasis on barre work and beginning center floor combinations.

D 188 Jazz Dance Beginning . . . . . 1 credit
(Fall, Winter, Spring) . . . . . 3 class hrs/wk
A dance class focusing on varied styles of jazz dance from lyrical jazz to sharp percussion jazz to modern jazz. Emphasis is placed on the expressivity of the movement as well as technique and line.

D 191 Dance Laboratory Beginning . . . . . 1 credit
(See Schedule) . . . . . 3 lab hrs/wk
This course introduces the techniques of ballet, modern, and jazz dance and establishes an understanding of each idiom, thereby giving the beginning student a broader knowledge of dance in general.

D 192 Dance Laboratory Intermediate . . . . . 1 credit
(See Schedule) . . . . . 3 lab hrs/wk
Prerequisite: Students must complete courses in the intermediate level of at least two dance idioms or beginning level courses in all three idioms: ballet, modern, and jazz. This course develops versatility in the intermediate dance student through technical and performance training in the three idioms.

D 193 Dance Laboratory Advanced . . . . . 1 credit
(See Schedule) . . . . . 3 lab hrs/wk
Prerequisite: Students must complete two terms of intermediate levels in at least two of the dance idioms: ballet, modern, and jazz. This course challenges the advanced student through the presentation of multiple and varied phrases in ballet, modern, and jazz dance. The emphasis is placed on motor learning and memory retention in the fast-paced productivity of an advanced class.

D 260 Introduction to Choreography . . . . . 3 credits
(Fall, Winter, Spring) . . . . . 2 class, 2 lec/lab hrs/wk
Prerequisite: Modern Dance Beginning. D 181. Corequisite: Modern Dance Intermediate. D 281. This is a composition/choreography class. The students will learn the tools for building dances. Through improvisation, evaluation, selection and refinement, they will create dance phrases. From these basic forms they will study the construction elements of manipulation and aesthetic principles of composition. Students will create and develop at least one solo dance.

D 281 Modern Dance Intermediate . . . . . 1 credit
(Fall, Winter, Spring) . . . . . 3 class hrs/wk
Fundamentals of dance techniques, both axial and locomotor. Varied systems for organizing movement vocabulary will be introduced and developed. Focus is placed on creative potential of dance through structured movement sequences, improvisation, and composition.

D 285 Ballet Intermediate . . . . . 1 credit
(Fall, Winter, Spring) . . . . . 3 class hrs/wk
This course is designed for the student who has completed basic ballet techniques and terminology. This course progresses into more skilled barre and center floor combinations.

D 288 Jazz Dance Intermediate . . . . . 1 credit
(Fall, Winter, Spring) . . . . . 3 class hrs/wk
A dance class focusing on varied styles of jazz dance from lyrical jazz to sharp percussive jazz to modern jazz. Emphasis is placed on the expressivity of the movement as well as technique and line.

D 290 Jazz Dance Advanced . . . . . 1 credit
(Fall, Winter, Spring) . . . . . 3 class hrs/wk
Prerequisite: Jazz Dance Intermediate or permission of instructor. This course extends the experience of the intermediate jazz dance class to include advanced content areas in both movement, technique, composition, and performance.

* **See the Health and Physical Education Course Descriptions for other Dance Courses.**

Science

The Science Department offers courses in chemistry, earth sciences, life sciences, physics, general science, and engineering. The department offers a wide range of lower division, college transfer courses designed to meet science requirements for baccalaureate degrees.

In addition, the department offers a number of courses in engineering technologies as well as the first two years of courses for most of the professional engineering specialties.

The Science Building, located on the southeast corner of the campus, contains well-equipped laboratories and lecture rooms. Support facilities include a greenhouse, a climate control room, a learning resource laboratory staffed with science tutors, and an instrument room. Field sites are located at Heceta Head and at Siltcoos Station on the Oregon coast.

Pre-Engineering Courses

Engr 211 Statics . . . . . 4 credits
(Fall Term) . . . . . 4 class hrs/wk
Prerequisite: Calculus with Analytic Geometry Mth 200; General Physics with Calculus Ph 211 recommended; Corequisite: Calculus with Analytic Geometry Mth 201 or consent of instructor. A vectorial approach to the principles of statics of particles and rigid bodies. Composition, resolution and equilibrium of coplanar and non-coplanar force systems; two dimensional trusses and frames; centroids and moments of inertia of plane areas; coulomb friction; and the distribution of shear and bending moments in simple beams.

Engr 212 Dynamics . . . . . 4 credits
(Spring Term) . . . . . 4 class hrs/wk
Prerequisites: Statics Engr 211, Calculus with Analytic Geometry Mth 200 and Mth 201; General Physics with Calculus Ph 211 recommended. A fundamental dynamics course of particles and rigid bodies. Topics include kinematics and kinetics of particles and rigid bodies; Newton's second law of motion; rectilinear and curvilinear motion; linear and angular momentum; principles of work and energy; impulse and momentum; D'Alembert's Principle.

Engr 213 Strength of Materials . . . . . 4 credits
(Winter Term) . . . . . 4 class hrs/wk
Prerequisites: Statics Engr 211, Calculus with Analytic Geometry Mth 200 and Mth 201. Theory of stress and strain, shear, bending, torsion and combined stresses; temperature induced stresses, and elements of indeterminate analysis. Topics include axially loaded members, thin walled pressure vessels, torsional and flexural loading, failure theory and column buckling.

Engr 221 Electrical Fundamentals 1 . . . . . 4 credits
(Spring Term) . . . . . 3 class, 3 lab hrs/wk
Prerequisite: General Physics with Calculus Ph 211; Corequisite: General Physics with Calculus Ph 212. This is an electrical foundation course and is part of the second year of the pre-engineering program. It will familiarize the student with principles of circuit analysis, circuit components, phasors, and steady state responses, and the use of electrical measuring equipment.

Engr 222 Electrical Fundamentals 2 . . . . . 4 credits
(See Schedule) . . . . . 3 class, 3 lab hrs/wk
Prerequisite: Electrical Fundamentals 1 Engr 221. This is a required course for all Electrical Engineering transfer students and the second course in a three-course sequence on electrical fundamentals. The transform approach to analyzing and synthesizing time dependent functions and systems will be developed.

GE 101 Engineering Orientation . . . . . 3 credits
(Fall Term) . . . . . 2 class, 2 lab hrs/wk
Prerequisite: College Algebra Mth 101. The role of handheld calculators/computers in the analysis of different models: ionic, symbolic, deterministic and stochastic. Structured programming charts used in most analysis.

GE 115 Engineering Graphics . . . . . 3 credits
(See Schedule) . . . . . 6 lec/lab hrs/wk
Prerequisite: Trigonometry Mth 102. Fundamental principles of engineering language including three dimensional spatial analysis and representation.

GE 116 Engineering Graphics . . . . . 3 credits
(See Schedule) . . . . . 6 lec/lab hrs/wk
Prerequisite: Engineering Graphics GE 115. The role of computer graphics in its application to engineering. Given a database, what operators apply to both the image and to the manufacture of the object.

Forestry Technology

Two-Year Associate of Applied Science Degree

The Forestry Technology program is currently being revised. Students should contact the Science Department counselor for information and program details.

Chemistry Courses

Ch 101 Elementary Chemistry 1* . . . . . 5 credits
(All Terms) . . . . . 3 class, 4 lec/lab hrs/wk
Elementary Chemistry 1 offers an introduction to some beginning terms, symbols, concepts, problem-solving, and laboratory techniques for inorganic chemistry. That means learning about the elements in general (Periodic Table), how they interact, and how to work with the various symbols, models, and mathematical relationships customarily used in chemistry.

For the student who learns enough to earn a passing grade, this course is intended to provide a basis for continuing into Elementary Chemistry 2 (Ch 102). Ch 101 also is a very good preliminary course for those who need the General Chemistry sequence but would like to start at a somewhat more elementary level. This is the beginning of a three-course sequence which meets basic science requirements and helps students planning for various health occupations. This sequence does *not* serve as a prerequisite for second-year chemistry courses such as Organic Chemistry numbered 200's or 300's.

This course *does* require that the student be proficient in arithmetic and beginning algebra. Inadequate math proficiency is the most frequent cause of failure. The student should have completed one year of high school algebra and feel confident at that level of math, or should have completed at least Beginning Algebra at LCC before enrolling in CH 101.

Ch 102 Elementary Chemistry 2* . . . . . 4 credits
(Winter Term) . . . . . 3 class, 3 lab hrs/wk
Elementary Chemistry 2 offers an introduction to some beginning terms, concepts and laboratory techniques for organic or carbon chemistry. Topics include the unique nature of carbon bonding and the functional groups of organic compounds. For the student who learns enough to earn a passing grade, this course is intended to provide a basis for continuing into Elementary Chemistry 3 (Ch 103).

Ch 103 Elementary Chemistry 3* . . . . . 3 credits
(Spring Term) . . . . . 2 class, 2 lec/lab hrs/wk
Elementary Chemistry 3 offers an introduction to some beginning terms, concepts and laboratory techniques for biological chemistry (biochemistry). The topics include the structures of carbohydrates, fats, proteins, enzymes, and nucleic acids, as well as some aspects of their functions in living systems.

** Must be taken in sequence.*

Ch 104, Ch 105, Ch 106 General Chemistry 1,2,3
. . . . . 5 credits each
(Ch 104, 106 Fall; Ch 104, 105 Winter;
Ch 105, 106 Spring; all three in
sequence Summer) . . . . . 3 lecture, 1 quiz-recitation, 1 3-hr lab per/wk

This is the science major's college transfer chemistry sequence. It prepares students for further work in chemistry, biology, physics, many engineering fields, pre-medicine, some allied health fields, and offers a basic understanding of some of the everyday chemical interactions in the environment. The sequence includes fundamental chemical topics of atomic structure and bonding, chemical reactions and calculations, physical aspects such as gaseous state relationships, homogenous mixture properties, and thermodynamics, along with chemical kinetics and equilibrium, acid-base interactions, and redox chemistry, and a brief coverage of nuclear chemistry. Laboratory activities are designed to acquaint the student with standard laboratory procedures and to illustrate concepts discussed in lecture.

Taking chemistry at LCC gives students the advantage of relatively small lecture and laboratory sections, about 24 persons each, where they can readily get personal assistance from the professor in charge.

These General Chemistry courses are transferable to any other institution of higher education as first-year science major credits and as prerequisites to second-year chemistry courses. Some schools use 200 numbers for these courses.

Ch 104 General Chemistry 1: Prerequisites: Intermediate Algebra Mth 100 or equivalent. This is the first term of a three-term sequence (Ch 104, 105, 106). This sequence is a prerequisite for advanced chemistry courses and satisfies the beginning chemistry requirements for majors in the physical and biological sciences and for health science students. It is equivalent to Ch 104 of the U of O and Ch 201 at OSU. Topics covered usually include atomic structure, stoichiometry, chemical nomenclature, thermochemistry and chemical bonds. No chemistry background is assumed, but competence in math (algebra) is required for success in this course. Often a student finds it necessary to withdraw from chemistry due to an insufficient background in math.

Ch 105 General Chemistry 2: Prerequisite: Ch 104 with grade of "C" or better. This is the second term in a three-term sequence. The topics covered usually include gas laws, phase changes, solutions, and chemical thermodynamics.

Ch 106 General Chemistry 3: This is the final course of the General Chemistry sequence. It builds on the foundation of basic topics learned in Ch 104 and 105. The topics covered usually include equilibrium and kinetics, acid base chemistry, oxidation reactions, and nuclear chemistry.

Organic Chemistry (variable) 3-5 credits
Ch 226 (Fall Term) . . . . . 2 lecture, 2 lec/lab, 6 lab hrs/wk
Ch 227 (Winter Term) . . . 2 lecture, 2 lec/lab, 6 lab hrs/wk
Ch 228 (Spring Term) . . . . . 3 lecture hrs/wk
Prerequisite: General Chemistry Ch 106 with grade of C or better. Lecture and lecture/lab only, 3 credits; lecture plus lecture/lab plus lab, 5 credits. There is no provision for taking lab only.
The three-term sequence is intended for science majors and health science students. (Chemistry majors may need to add a lab course in their junior year. See your advisor.) It is a systematic coverage of aliphatic and aromatic chemistry. A survey of selected biologically important compounds is included during part of Ch 228. 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 organic reactions. In some of the later labs, compounds of general interest are synthesized (oils of wintergreen and cinnamon, aspirin, an insect repellent, and an anesthetic). Most of the compounds prepared in lab are analyzed by infrared spectroscopy. The low student/instructor ratio allows considerable personal assistance.

Engineering Technology Courses

Engt 110 Elementary Statics . . . . . 3 credits
(See Schedule) . . . . . 2 class, 2 lec/lab hrs/wk
Elementary Statics is a study of the external effects of balanced forces acting on physical bodies. The course emphasizes the application of the principles of mechanics to the solution of engineering problems.

Engt 120 Elementary Strength of Materials . . . . 3 credits
(See Schedule) . . . . . 2 class, 2 lec/lab hrs/wk
Prerequisite: Elementary Statics Engt 110. Study of stress, strain, shear, bending, torsion, and combined stresses. Materials such as timber, steel, and concrete will be studied. Students will learn to size requirements and become familiar with the response of these materials under stress.

Engt 160 Engineering Materials . . . . . 3 credits
(See Schedule) . . . . . 2 class, 2 lec/lab hrs/wk
Prerequisite: Elementary Chemistry 1 Ch 101. Corequisite: College Algebra Mth 101 or Technical Mathematics 1 6.261. A study of the chemical and physical properties of the major materials used in industry. Emphasis is on structure, properties, and corrosion of materials used in engineering applications. The three major categories covered are polymers, metals, and ceramics.

Engt 161 Engineering Materials . . . . . 3 credits
(See Schedule) . . . . . 2 class, 2 lec/lab hrs/wk
Prerequisite: Engineering Materials Engt 160. A continuation of the study of the chemical and physical properties of the major materials used in industry. This quarter will concentrate on polymeric materials, their molecular structures, structural applications and resistance to decomposition.

Health Occupations Support Courses

Bi 121 Elementary Human Anatomy & Physiology 1 . . . . . 4 credits
(Fall, Winter & Summer Terms) . . . . . 3 class, 3 lab hrs/wk
Prerequisite: One quarter of Elementary Chemistry 1 Ch 101 or one year of high school chemistry within the previous five years. A course in medical terminology is recommended. A medically oriented study of the human body, beginning with the single cell and continuing through the skin, skeletal, muscular, and nervous systems. Lab and lectures are combined.

Bi 122 Elementary Human Anatomy & Physiology 2 . . . . . 4 credits
(Fall, Winter & Spring Terms) . . . . . 3 class, 3 lab hrs/wk
Prerequisite: Passing grade in Bi 121. Circulatory, respiratory, digestive, excretory, endocrine, and reproductive systems are treated. Emphasis on integrative control mechanisms.

Bi 123 Elementary Microbiology . . . . . 4 credits
(Winter & Spring Terms) . . . . . 3 class, 3 lab hrs/wk
A medically oriented survey of the bacteria, viruses, and other microorganisms which affect human health. Disease processes, communicable diseases, immunology, sterilization, and disinfection are emphasized. Previous courses in anatomy and physiology are strongly recommended.

Bi 240 General Pathology 1 . . . . . 2 credits
(See Schedule) . . . . . 2 class hrs/wk
Prerequisites: Elementary Human Anatomy and Physiology 1 Bi 121 and 2 Bi 122. A survey of common diseases, disease processes, and the body's reaction to them. Designed for students destined for health-service careers. Topics include body defenses, auto-immune diseases, hereditary, skeletal, muscular, nervous system, and neoplastic diseases.

Bi 241 General Pathology 2 . . . . . 2 credits
(See Schedule) . . . . . 2 class hrs/wk
Prerequisites: Elementary Human Anatomy and Physiology 1 Bi 121 and 2 Bi 122. A continuation of General Pathology 1 Bi 240, which is not a prerequisite. Topics include: sensual and perceptive errors, diseases of the endocrine, circulatory, cardiovascular, respiratory, digestive, and urinary systems, and blood dyscrasias.

Life Science Courses

The LCC Science Department offers a variety of Life Science courses. Each course offers quality instruction in small-sized classes. ***All courses*** are ***fully transferable*** to most colleges or universities. Students may choose courses from General Biology (Bi 101, 102, 103), General Botany (Bot 201, 202, 203), or General Zoology (Z 201, 202, 203) to fulfill science cluster, group, or sequence requirements. General Botany and General Zoology may also be taken for science major requirements in such fields as Wildlife and Fishery Management, Forestry, and some Health and Biology related disciplines.

Every college and university has specific science requirements for each major, so a review of the institution's catalog is essential in helping students decide their course selections. If assistance is needed in selecting the correct life science courses, students should check with a staff member in the Science Department or the LCC Counseling Department.

Bi 101, 102, 103 General Biology . . . . . 4 credits each
(See Schedule) . . . . . 3 class, 3 lab hrs/wk
General Biology (Bi 101, 102, 103) is a life science sequence that transfers as a science requirement for non-science majors. General biology is taught in several term-long emphasis-courses. Three such courses provide a year sequence of general biology. For ***each quarter*** of general biology, several emphasis courses are available. Students may choose ***one*** emphasis course per quarter that meets their specific transfer need or interest. These special emphasis classes were developed in response to student requests.

Each special emphasis-class assumes no previous training in biology or in the special subject matter taught in that class. All classes include general principles and provide General Biology credit. A ***sequence*** of three (3) classes (Bi 101, 102, 103) satisfies a "cluster" science requirement at the U of O and qualifies as a science sequence or group at other four year insitiutions. A brochure providing course descriptions, quarters and times offered, and instructors' names for the emphasis-classes is available each quarter in both the Science Department and LCC Counseling Department. Some majors (Health and P.E., Computer Sciences, General Science Education and others at the University of Oregon) require a very ***specific emphasis class.*** Students should check their transfer institution's catalog to help select the courses that satisfy their major requirements.

Table of Emphasis Classes in the General Biology Sequence (Bi 101, 102, 103) Select one from each column to complete the General Biology sequence. Not all classes are offered each quarter. Some classes are offered only on alternate years. Check the schedule of classes.

Bi 101	Bi 102	Bi 103
Forest Ecology	Cell Biology	Animal Biology
Molecular Basis	Human Biology	Birds of Oregon
Seashore Ecology	Marine Biology	Edible and Poisonous Plants
Survey of Biology	Survey of Biology	Field Botany
		Human Genetics
		Medical Botony
		Survey of Biology

Bot 201, 202, 203 General Botany . . . . . 4 credits each
(See Schedule) . . . . . 3 lecture, 3 lab hrs/wk
A general course for both majors and non-majors. General Botany provides a survey of the plant kingdom. Specific topics in botany include descriptions of cell structure and function, concepts of genetics and development, explorations in anatomy and physiology, and study in plant ecology. Students may enter any term.

Z 201, 202, 203 General Zoology . . . . . 4 credits each
(See Schedule) . . . . . 3 lecture, 3 lab hrs/wk
General Zoology is designed for those desiring a broad introduction to animal science. It satisfies the science sequence for LCC's AA degree and fulfills similar requirements of four-year institutions. It is required in the Fisheries and Wildlife program at OSU and is one of the biology options in many other professional programs. Zoology has no prerequisites and may be taken in any sequence. Topics in zoology include the chemical nature of life, cell structure and physiology, animal classifications, genetics and evolution, vertebrate anatomy and physiology, and animal distribution and ecology.

Physical Science Courses

G 101 General Geology . . . . . 4 credits
(Fall Term) . . . . . 3 class, 3 lab hrs/wk

A study of the structure and composition of the earth, minerals, igneous and metamorphic rocks. Plate tectonics, volcanism and earthquake activity are interrelated to give an overview of the earth's dynamic processes.

G 102 General Geology . . . . . 4 credits
(Winter Term) . . . . . 3 class, 3 lab hrs/wk
This course centers on the dynamic processes that sculpter the surface of the earth: weathering processes, agents of erosion, streams, ground water, glaciers, deserts, wind, and oceans. Topographic and geologic maps are also used.

G 103 General Geology . . . . . 4 credits
(Spring Term) . . . . . 3 class, 3 lab hrs/wk
A study of the early history of the earth and geologic time scale. Sedimentation, sedimentary environment, fossils and fossilization are discussed along with the stratigraphic history of North America. The beginnings of life are traced through the evolution of plants, vertebrates and vertebrate animals.

G 201 Geology . . . . . 4 credits
(Fall Term) . . . . . 3 class, 3 lab hrs/wk
The formation and identification of minerals and basic rock groups are covered in detail. Other topics include volcanic activity, plate theory, and earthquakes. Such processes are carefully described with films and slides. Students should have some background in the basics of the physical sciences.

G 202 Geology . . . . . 4 credits
(Winter Term) . . . . . 3 class, 3 lab hrs/wk
The process of gradation is covered in detail. This includes weathering, landslides, stream and glacial erosion, plus coastal and other forms of landscape-making phenomena. Examination of the process is accomplished with the aid of slides, air photos, and maps of these landforms. Students are assumed to have had some background in the basics of the physical sciences.

G 203 Geology . . . . . 4 credits
(Spring Term) . . . . . 3 class, 3 lab hrs/wk
The development of life and its change through the time periods of the earth's history as related by the fossil record and the effect of plate tectonics on this record. Students are assumed to have a background in the basics of the physical sciences.

GS 104, 105, 106 Physical Science . . . . . 4 credits each
(GS 104 Fall; GS 105 Winter;
GS 106 Spring) . . . . . 3 class, 3 lab hrs/wk
An introduction to elementary topics in chemistry and physics. GS 104 covers matter and electricity; GS 105 covers heat, the energy of motion and the chemistry of life; and GS 106 covers the nature of light and sound. Nonsequential.

GS 107 Meteorology . . . . . 4 credits
(See Schedule) . . . . . 3 class, 3 lab hrs/wk
An introduction to structure of the atmosphere, measurement parameters of the atmosphere, and primary analysis of air structure including clouds, stability, winds, air masses, and fronts. Weather discussions primarily related to winter, western Oregon situations.

GS 109 Fundamentals of Meteorology . . . . . 1 credit
(See Schedule) . . . . . 1 class hr/wk
A descriptive treatment of selected weather phenomena. Includes winds, air masses, fronts, cloud formations, and precipitation. Offered in videotape.

GS 111 Introduction to Geology of Oregon . . . . 4 credits
(Summer Term) . . . . . 4 class, 1 lab hr/wk
A two-week course, seven days of which will be in the field. The first week will consist of orientation and presentation of vocabulary and concepts to be encountered in the field. The field portion will be taught in the McKenzie Pass, Bend, Crater Lake area. In addition, two one-half-credit individualized-learning packages must be completed. Four hours total credit. The class will camp out in the above areas. The general objectives are to give the student a practical, firsthand look at the geology, and to acquaint him/her with basic geological terms, landforms, rock types, and geological history of the areas visited. Night observations will be made of the heavens pointing out appropriate phenomena such as meteors, phases of moon, planets, and apparent motions of stars. Students will provide their own equipment and food.

GS 112 Introduction to Geology of Oregon . . . . 4 credits
(Summer Term) . . . . . 4 class, 1 lab hr/wk
A two-week course, seven days of which will be in the field. The first week will consist of orientation and presentation of vocabulary and concepts to be encountered in the field. The field portion will be conducted as a back pack (or a series of day hikes) in the Three Sisters Wilderness and/or Wallowa Mountains. In addition, two one-half-hour-credit individualized-learning packages must be completed, four hours total credit. The class will camp out for a one-week period in the areas mentioned. The general objectives are to give the student a practical, firsthand look at the geology, to acquaint the student with basic geological terms, landforms, rock types, and the geological history of the area visited. Night observations will be made of the heavens pointing out appropriate phenomena such as meteors, phases of moon, apparent motions of stars and planets. Students will provide their own equipment and food.

GS 117 General Science for Teachers . . . . . 4 credits
(Fall Term) . . . . . 3 class, 3 lab hrs/wk
Basic concepts of *physical science* (physics, chemistry, earth science, astronomy) will be taught in an integrated fashion, emphasizing principles and methods of science.

GS 118 General Science for Teachers . . . . . 4 credits
(Winter Term) . . . . . 3 class, 3 lab hrs/wk
This term of *biological science* covers characteristics of life and diversity of life, with emphasis on local organisms.

GS 119 General Science for Teachers . . . . . 4 credits
(Spring Term) . . . . . 3 class, 3 lab hrs/wk
This course is designed to introduce students to *environmental science* with emphasis on the technical and social issues regarding global resources. Contemporary areas of concern will be integrated with information from the disciplines of biology, physical science and social science.

GS 121 Astronomy . . . . . 4 credits
(Spring Term) . . . . . 4 class, 2 lab hrs/wk
GS 121 is a presentation of such topics as early ideas in astronomy and descriptions of comets, moons, planets, the sun, star galaxies, and new ideas in astronomy such as black holes, pulsars and quasars.

GS 139 Earth Science . . . . . 4 credits
(Fall Term) . . . . . 4 class, 2 lab hrs/wk
GS 139 is a descriptive presentation of such topics as continental drift, oceanography, volcanism, earthquake activity, rocks, minerals, and geology of Oregon. Other general areas that are covered are historical and environmental geology.

Physics Courses

4.300 Principles of Technology 1 . . . . . 4 credits
(Fall Term) . . . . . 3 class, 3 lab hrs/wk
Prerequisite: Occupational Mathematics 1 Mth 50 or equivalent.
An introductory course in practical physics covering matter, measurements, mechanics, and machines. Laboratory time is provided for demonstrations and experiments to help clarify the

principles and procedures covered in class.

4.302 Principles of Technology 2 . . . . . 4 credits
(Spring, Summer Terms) . . . . . 3 class, 3 lab hrs/wk
Prerequisite: Occupational Mathematics 1 Mth 50 or equivalent. An introductory course in practical physics covering heat, light, and sound. Laboratory time is provided for demonstrations and experiments to help clarify the principles and procedures covered in class.

4.303 Principles of Technology 3 . . . . . 4 credits
(Spring Term) . . . . . 3 class, 3 lab hrs/wk
Prerequisite: Principles of Technology 2. The third quarter in the sequence provides students with practical knowledge of scientific principles involved with transducers,vibrations and waves, time constants, and radiation. Practical hands-on experience with devices common to many technologies is offered in the lab.

6.302 Instrumentation and Controls . . . . . 4 credits
(See Schedule) . . . . . 3 class, 2 lab hrs/wk
Basics of instrumentation; application, maintenance, and calibration of specific instruments essential to water purification and wastewater treatment systems are emphasized. Includes mechanical, electrical, hydraulic, and pneumatic sensing equipment; and indicating, recording, and control equipment. Typical performance characteristics, limitations, accuracy, and use of specific instruments in various industrial processes complete this instruction.

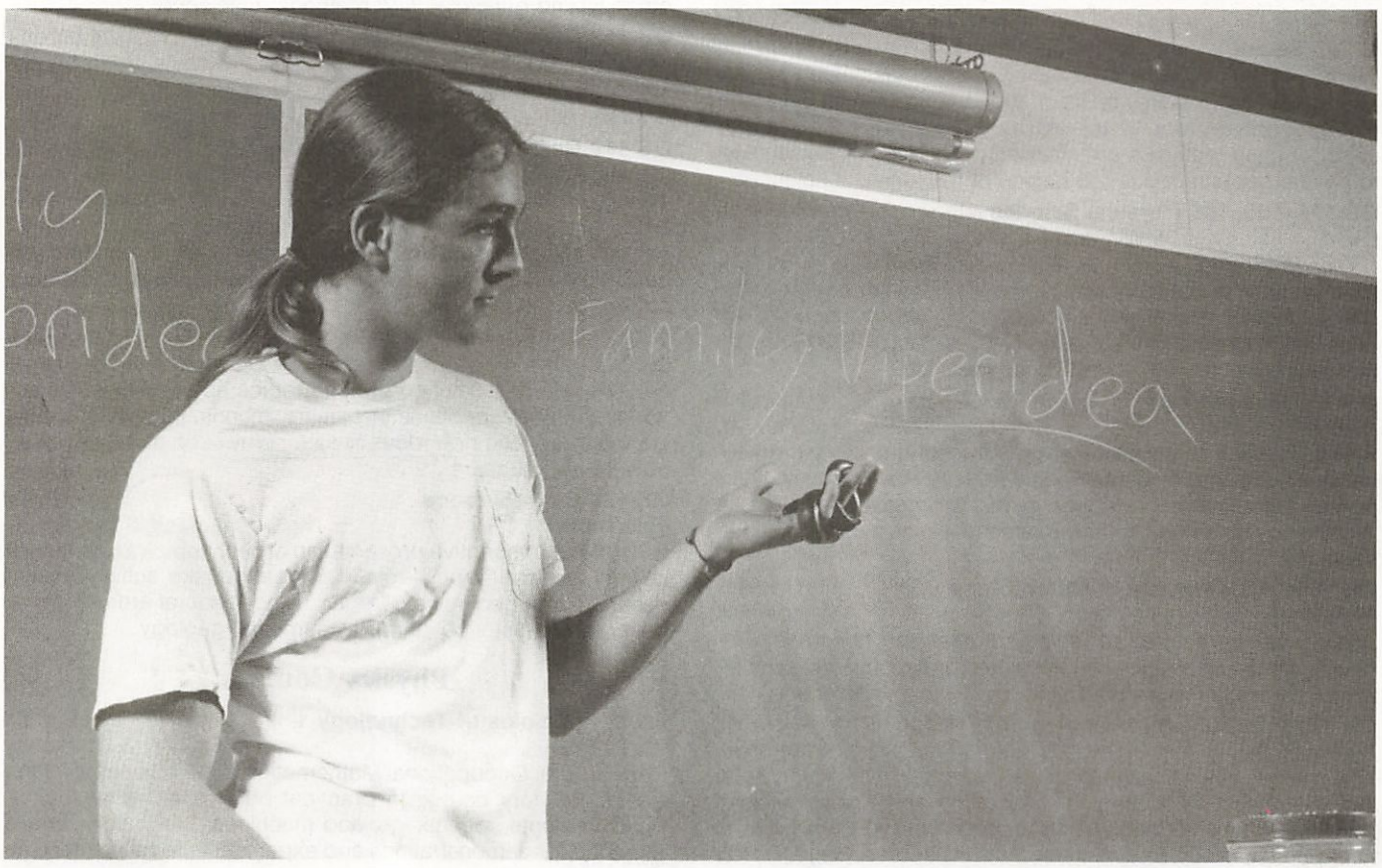
6.112 Hydraulics . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
Prerequisite: Math 2 or instructor's permission. Properties of fluids, principles of hydrostatic pressure including Pascal's Law, Archimede's Principle, measurement by manometer, the measurement of fluid properties. The relationship of hydrostatic pressure and center of gravity and the effect of hydrostatic pressure exerted against plane surfaces. Determining H.P., selecting pump size and frictional losses due to pipe material and velocity. Efficiency.

Ph 101/6.330 Fundamentals of Physics . . . . . 4 credits
(Fall Term) . . . . . 2 class, 4 lec/lab hrs/wk
Prerequisites: One year of high school algebra. Nature and limitations of technology and science; measurement and data analysis, atomic and electron theory, motion, mechanical energy, thermal energy application.

Ph 102/6.331 Fundamentals of Physics . . . . . 4 credits
(Winter Term) . . . . . 2 class, 4 lec/lab hrs/wk
Prerequisites: Fundamentals of Physics Ph 101/6.330. Electrical energy; wave and sound energy; electromagnetic energy applications.

Ph 103/6.332 Fundamentals of Physics . . . . . 4 credits
(Spring Term) . . . . . 2 class, 4 lec/lab hrs/wk
Prerequisites: Fundamentals of Physics Ph 102/6.331. Radioactivity, ionizing, radiation, nuclear energy, chemical bonding, chemical reactions, energy of combustion, air pollution large scale electric energy production and its environmental impact.

Ph 201, 202, 203 General Physics . . . . . 4 credits each
(Ph 201 Fall; Ph 202 Winter;
Ph 203 Spring) . . . . . 6 lec/lab, 1 recitation hr/wk
Prerequisite: College algebra. Recommended: knowledge of the use of exponents. The study of energy and physical mea-



surement including the fundamental principles of mechanics, wave theory, electricity, electronics, and relativity. Courses need not be taken in sequence.

Ph 211, 212, 213 General Physics with Calculus . 4 credits
(Ph 211 Winter; Ph 212 Spring; Ph 213 Fall) . . . 6 lec/lab, 1 recitation hr/wk
Prerequisite or corequisite: Ph 211, Mth 200; Ph 212, Mth 201; Ph 213, Mth 202. For engineering and physics majors. Course materials include study of vectors, mechanics, dynamics, an analog to sound, heat, fluids, and oscillations, an introduction to electricity and magnetism. A previous physics course is recommended but not required.

Other Science Courses

FE 207/1.300 Supervised Field Experience . . 1-12 credits
(All Terms) . . . . . 3-45 hrs/wk
Supervised Field Experience is available in life and physical sciences, and engineering. See the beginning of the course description section of the catalog for the SFE course description.

GS 100 Orientation to Science . . . . (variable) 1-4 credits
(See Schedule) . . . . . 3 class, 3 lab hrs/wk
The basic concepts and principles of scientific understanding in physical and natural sciences will be presented to orient students who lack basic skills and confidence to pursue other science classes. This will be accomplished through field trips, guest speakers, laboratory, lecture and discussion.

GS 114 Natural History of Baja California . . . . . 6 credits
(See Schedule) . . . . . 144 lec/lab hrs/term
A field class on-site in MEXICO on the Baja Peninsula. Applications for the class are submitted fall term. Class is done during Christmas vacation. A student project is done on-site and completed by the end of winter term. Class activities include a desert study and skin diving in the tropical Sea of Cortez.

GS 136 Project Universe . . . . . (variable) 3-4 credits
(Fall Term) . . . . . 3 class, 3 lab hrs/wk
A comprehensive introduction to the ever changing science of astronomy. The unique capabilities of television are used to introduce the origin, characteristics, and evolution of the solar systems, the stars, the galaxies, and the universe. Special laboratory exercises designed for completion at home are included.

GS 140 Planet Earth . . . . . (variable) 3-4 credits
(Winter Term) . . . . . 3 class, 3 lab hrs/wk
Planet Earth is an introductory study of the earth. This telecourse emphasizes the current ideas concerning our planet's interior, oceans, continents, mountains, volcanoes, atmosphere, climate, sun, energy and mineral resources. It also gives a survey of the scientific advances that have led to these ideas.

GS 147 Oceanus: The Marine Environment . . . . . (variable) 3-4 credits
(Spring Term) . . . . . 3 class, 3 lab hrs/wk
This is an introductory course in oceanography and marine biology. It provides an overview of the basic physical, chemical, and biological processes that occur in the world's oceans. Topics presented include life in the intertidal zone, plate tectonics, marine mammals, pollution of the marine environment, and many others. Special laboratory exercises that can be done independently are included.

GS 199 Current Topics in Science . . (variable) 1-4 credits
(Taught on Demand) . . . . . 1-4 class or 3-12 lab hrs/wk
GS 199 considers various topics in science of current interest and relevancy. GS 199 is an open format course varying in content and form and reflecting the ever-changing science needs of today's student. See current Class Schedule for courses offered under Current Topics in Science.

Independent Study(variable) . . . . . 1-3 credits
Prerequisite: Current or previous enrollment in proper science course; consent of instructor. Credits based on independent study contract between student and instructor. Students will design and initiate individual projects which provide an opportunity to pursue in-depth research of a specific interest not covered in the course.

Available in Energy Management Technician, Chemistry, Biology, General Science, Physical Science, and Physics.

Social Science

The Social Science Department offers courses about people, their social and cultural heritage, and their behavior. These subjects are basic to success in any profession or vocation, and they contribute to the quality of our lives.

Social Science classes can be applied toward baccalaureate majors in American studies, anthropology, community service, economics, education, general social science, geography, history, law, law enforcement, corrections, philosophy, political science, psychology, public administration, religious studies, and sociology. The department offers two vocational programs: Criminal Justice and Fire Prevention Technology.

Cooperative Work Experience

The credit course name for Cooperative Work Experience is Supervised Field Experience (SFE). The SFE course description can be found at the beginning of this section of the catalog.

Cooperative Work Experience provides a combination of classroom study and work experience in careers related to anthropology, community service, history, political science, sociology, psychology, education, student government, and criminal justice.

The heart of the program is a working field placement in an agency or institution. College credits titled Supervised Field Experience and a grade are given for the CWE assignment. Working in these vocations will aid the student in integrating theory and practice. The student can then more rationally choose a career. It also may provide an "inside track" to future employment.

Supervision will be provided by college faculty and by qualified staff at the agency or institution. Time required for participation in the course will vary according to the participant's schedule. For more information contact the following individuals through the Social Science Department:

James H. Cobb, CWE Community Service, Psychology, Sociology
Tricia Hahn, CWE Anthropology, Geography, History, Psychology, Sociology, Political Science
Peggy Marston, CWE Education
Tom Hickey, CWE Criminal Justice

Criminal Justice Courses

CJ 100 Introduction to Criminal Justice . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
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 and arrest of suspects through prosecution,

adjudication, sentencing and imprisonment to release and revocation; organization of criminal justice agencies; theories and current practices in correctional treatment and crime prevention; discussion of crime and the criminal; evaluation of contemporary criminal justice services; survey of professional career opportunities.

CJ 101 Introduction to Criminology . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
The study of deviant behavior as it relates to the definition of crime; crime statistics; theories of crime causation; crime typologies. Introduction to the impact of crime, limits of the criminal law, juvenile delinquency, and society's reactions to criminal behavior.

CJ 111 Concepts of Enforcement Services . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
A study of the concepts, theories, and principles of police operations. Consideration will be given to the prevention of crime, detection of hazardous conditions, preservation of the peace, discretion, general assistance to the public, and other operational procedures as they relate to the total system of justice.

CJ 130 Introduction to Corrections . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
A continuation of the in-depth study of the role and responsibilities of each segment within the administration of the justice system: law enforcement, judicial, corrections. A past, present and future exposure to each subsystem; procedures from initial entry to final disposition; and the relationship each segment maintains with its system members.

CJ 150 Introduction to Security Systems . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
Provides potential security officers with information of present and future employment possibilities, licensing procedures, qualifications, duties, responsibilities and assignments. Weapons, patrol techniques, report writing, first aid, criminal law, and courtroom procedures will be presented in a nontechnical manner.

CJ 152 Commercial and Industrial Security . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
This course covers physical protection of industrial plants and businesses. Included are suggested standards for lighting, fencing, alarms, electric surveillance, television monitoring, pass and identification procedures, and visitor controls. Upon completion, students should be capable of recognizing security deficiencies in commercial and industrial facilties through knowledge of appropriate physical security devices and programs.

CJ 201 Juvenile Delinquency . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
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.

CJ 203 Crisis Intervention . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
Provides a broad base of information regarding ethics and the social structures. The focus is on crime prevention and the variety of cultural influences prevalent in our society. Through interaction and study, the student will become aware of the interrelations and role expectations of the human dimension required by practitioners in developing empathy, sensitivity, and acceptable behavior. Instruction on the importance of open communication and accountability to those within and without the justice process is explored in developing a sound crime prevention philosophy.

CJ 210 Criminal Investigation 1 . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
Fundamentals of criminal investigation, theory, and history; crime scene to courtroom with emphasis on techniques appropriate to specific crimes.

CJ 213 Interviewing and Interrogation . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
Prerequisite: Enrollment in the Criminal Justice Program or consent of the instructor. This course will examine the dynamics of psychological persuasion existing as a product of criminal interrogations. The deliberate, refined processes and techniques utilized will be the focus during the course with specific attention to the practical and legal limitations of achieving the goals of interviewing.

CJ 216 Criminal Justice Management . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
Prerequisite: Introduction to Criminal Justice CJ 100. An examination and analysis of the traditional concepts, techniques, policies and operational systems in the police component of the criminal justice system. Basic knowledge of organizational function, structure, processes, and behavior; theory related to practice applied to the administration of justice process; comprehension of administrative phenomena.

CJ 220 Introduction to Criminal Law . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
Prerequisite: Introduction to Criminal Justice CJ 100 or consent of instructor. 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.

CJ 222 Criminal Law: Procedural Issues . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
Prerequisite: Introduction to Criminal Justice CJ 100 or consent of instructor. 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.

CJ 232 Correctional Casework . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
Prerequisite: Introduction to Corrections CJ 130. Basic concepts of interviewing and counseling techniques used by corrections officers in one-to-one contacts with clients. Rudimentary skills practice through role-playing and demonstration to prepare the student for practice in the field, and an appreciation of further training required.

CJ 233 Community Based Corrections . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
Prerequisite: Introduction to Corrections CJ 130. Exploration of philosophy and programs of juvenile and adult probation supervision, after-care parole, half-way homes, work and educational release-furlough, as well as executive clemency and interstate compact practices. The dilemma of surveillance-custody/control factors vs. supervision-treatment will be examined. Introduction to classification of offenders, leading to treatment implications, will be analyzed. Citizen-agency relationships will be investigated, along with potentials for utilizing citizen volunteer programs.

CJ 243 Narcotics and Dangerous Drugs . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk

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.

CJ 298 Independent Study: Criminal Justice . . . . . (Variable) 1-3 credits
(All Terms) . . . . . 1-3 readings/conference hrs/wk
Prerequisite: Introduction to Criminal Justice CJ 100 or equivalent, plus consent of instructor. This course is designed to provide students with an opportunity to pursue independent study in criminal justice. Areas of study will typically include topics which go beyond the existing core curriculum in extent or depth. Such study may include empirical research where appropriate data sources are available.

Social Science Transfer Courses

The Social Science Department offers a wide variety of courses that equate to courses offered in the lower division curricula of a four-year college or university. Many of the courses listed below fulfill specific general education requirements for LCC's associate degrees and for most baccalaureate degrees.

General Studies Courses

CSP 221 NLP 1 – Sensory Acuity and Rapport . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
This course introduces students to the process, content, and strategies of neuro-linguistic programming and related skills. The focus of this first course is on rapport, rapport skills, and sensory acuity. It includes issues of experiential learning in the development and utilization of NLP skills. It introduces students to behavioral, empirical, operational, and sensory based learning, and their applications to human services. In addition to serving those directly involved in human services programs, this course is also valuable for people working in business, industry, education, and health, as well as for personal growth.

CSP 222 NLP 2 – Anchoring and Reframing . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
Prerequisite: Previous course in this sequence or consent of instructor. This course introduces students to the process, content, and strategies of neuro-linguistic programming and related skills. The main emphases of this course are anchoring and reframing. It includes issues of concern in the human service professions. The task of this course is to provide experiential learning in the development and utilization of NLP skills. It introduces students to behavioral, empirical, operational, and sensory based learning, and their applications to human services. In addition to serving those directly involved in human services programs, this course is also valuable for people working in business, industry, education, and health, as well as for personal growth.

CSP 223 NLP 3 – Chunking and Sequencing . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
Prerequisite: Previous courses in this sequence or consent of instructor. This course introduces students to the process, content, and strategies of neuro-linguistic programming and related skills. Major concerns in this course will be chunking and presuppositions. It includes issues of concern in the human service professions. The task of this course is to provide experiential learning in the development and utilization of NLP skills. It introduces students to behavioral, empirical, operational, and sensory based learning, and their applications to human services. In addition to serving those directly involved in human services programs, this course is also valuable for people working in business, industry, education, and health, as well as for personal growth.

CSP 224 NLP 4 – Modeling Excellence . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
Prerequisite: Previous courses in this sequence or consent of instructor. This course introduces students to the process, content, and strategies of neuro-linguistic programming and related skills. The major focus of this course is on modeling excellence. It includes issues of concern in the human service professions. The task of this course is to provide experiential learning in the development and utilization of NLP skills. It introduces students to behavioral, empirical, operational, and sensory based learning, and their applications to human services. In addition to serving those directly involved in human services programs, this course is also valuable for people working in business, industry, education, and health, as well as for personal growth.

CSP 225 NLP 5 – Models, Metaphors and Influence . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
Prerequisite: Previous courses in this sequence or consent of instructor. This course introduces students to the process, content, and strategies of neuro-linguistic programming and related skills. The major tasks of this course are the integration of the skills learned in the previous four courses and an introduction to NLP teaching strategies. It includes issues of concern in the human service professions. The task of this course is to provide experiential learning in the development and utilization of NLP skills. It introduces students to behavioral, empirical, operational, and sensory based learning, and their applicaitons to human services. In addition to serving those directly involved in human services programs, this course is also valuable for people working in business, industry, education, and health, as well as for personal growth.

CSP 226 NLP 6 – Advanced Strategies . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
Prerequisite: Previous courses in this sequence or consent of instructor. This course introduces students to the process, content, and strategies of neuro-linguistic programming and related skills. The major work in this course will be on advanced NLP strategies. It includes issues of concern in the human service professions. The task of this course is to provide experiential learning in the development and utilization of NLP skills. It introduces students to behavioral, empirical, operational, and sensory based learning, and their applications to human services. In addition to serving those directly involved in human services programs, this course is also valuable for people working in business, industry, education, and health, as well as for personal growth.

HUM 199 The Art of Being Human . . (variable) 1-3 credits
(See Schedule)* . . . . . 1 hr/wk viewing,
2 hrs/wk other work
This is a new interdisciplinary humanities curriculum, designed to be offered in part or whole. It will be offered as a ten-week course that involves two TV viewing sessions per week, some homework assignments, some contact time with the instructor, and testing. Students have a related text and a study guide.

HUM 102 Creativity: The Human Experience . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
The subject of creativity transcends all fields of human endeavor and yet unifies them. In probing the social environment, psychology, nature, and diverse products of human creativity, the

course will explore fundamental issues which lie within the sphere of the humanities. It will help break down the artificial barriers between disciplines by providing a forum for members of the community from different occupations and walks of life. Teachers from various departments of the college and students from both transfer and vocational areas will examine the subject of creativity and its many manifestations.

SSc 101 Changing Cultures . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
This is a multi-disciplinary course designed to enable students to increase their understanding of contemporary social/cultural change and appreciation of cultural differences. The students will look at the basic social structures and cultural patterns of selected societies of the world as dynamic, interacting networks. They will focus on the interrelatedness of economic, political, social, religious, and spatial structures, as well as the recent impact of technology on these systems and its implications for future change.

SSc 112 College Forum . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
Corequisite: Concurrent registration in College Forum E1 112 required. College Forum is a transitional course that aids the student in acquiring effective learning techniques through the study of and participation in issues of concern in the 1980's. In this team-taught course, experts, performers, and speakers from the community will share their knowledge and skills with students in a forum that will optimize listening, note-taking, reading, writing, and discussion skills.

SSc 199 Trends in Social Science . . . . . 1-4 credits
(See Schedule) . . . . . 1-4 class or 3-12 lab hrs/wk
or any appropriate combination
A combination lecture and laboratory course which focuses on trends and current issues in the social sciences; i.e., history, anthropology, philosophy, sociology, psychology, political science, economics, geography, religion, law enforcement.

* *Television course offerings are subject to availability of materials.*

SSc 211 Honors Seminar in the Social Sciences . . . . . (variable) 1-2 credits
(See Schedule) . . . . . 1-2 class hrs/wk
Prerequisite: Phi Theta Kappa members or instructor consent. An analysis in depth of topical issues in the social sciences. Particularly designed to meet the demands of today's students; to enable them to investigate issues that are of paramount concern to them.

SSc 120/6.320 Energy in Society . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
A survey course emphasizing science and social concepts within the following topic areas: history of energy; energy sources and uses; role of energy in the economy; government and energy policy; abuses of energy production and use; energy conservation; energy uses and needs in the Pacific Northwest.

SSc 251 Consumer Problems . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
A course surveying the broad spectrum of consumer decisions in today's economy. As a social science orientation, the student will be dealing with the decision-making process as an individual economic being who not only has a say in resource utilization, but as a person who must be aware of the repercussions of the decision and the decisions of others as each person sees them. The course keys on three themes: *Awareness*—increased knowledge in consumer economics; *Attitudes*—strengthening attitudes so that the student can be more effective as a consumer; *Action*—realization of ability to remedy consumer problems. Additional emphasis will be given to resource materials available in the areas of the course.

Anthropology Courses

Anth 101, 102, 103 General Anthropology . 3 credits each
May be taken out of sequence . . . . . 3 class hrs/wk
Anthropology, literally meaning "the study of Humankind," seeks to understand human behavior in all its diversity as resulting both from the physical nature of the beings we are and from the cultural influences which shape our lives. This introductory sequence covers the three major subdivisions of the field of Anthropology.

Anth 101 (See Schedule) *Physical Anthropology*—An introduction to the study of human evolution, with the goal of understanding humans as part of the natural world and as populations of organisms shaped by their evolutionary past. Discusses the basic processes of evolution in general and then traces the development of humans through the archaeological remains; the increasing role of cultural adaptations in human evolution, such as toolmaking; increasingly complex social organization; and the development of a successful hunting and gathering lifestyle.

Anth 102 (See Schedule) *Archeology*—This study of past cultures 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. These processes are examined as they occurred in two major geographical areas, each of which constitutes a major subdivision of the field of Archeology: (a) Old World Archeology: focuses on the use of city-based civilization as it happened in the Near East. (b) New World Archeology: explores the entry of humans into the Americas and some of the variety of cultural adaptations developed by North American Indians. Also examines the rise of civilization as it happened in ancient Meso-America.

Anth 103 (See Schedule) *Cultural Anthropology*—The underlying goal of this course is to gain an understanding of the extent to which, and the ways in which, culture shapes human behavior. Using a comparative, cross-cultural approach, several specific contemporary cultures are studied in depth in order to provide a close look at the ways some other people organize their lives. Aspects of culture that will be examined through these studies include family organization, marriage patterns, child-rearing practices, religious beliefs, political processes, social control mechanisms, and economic bases. Generalizing from these studies and other examples, concepts basic to an anthropological point of view will be introduced, and the major processes operating in any cultural system will be discussed. These will then be applied to modern American cultures as we examine how these same processes operate in and affect our own lives.

Anth 210 Selected Topics in Ethnology . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
Selected topics in cultural anthropology which will vary from term to term but will emphasize cross-cultural comparison and an anthropological understanding of contemporary peoples. May be repeated for credit under different subtitles.

Anth 224, 225, 226 Readings in Anthropology . . . . . (variable) 1-3 credits
(See Schedule)
May be taken out of sequence.
Prerequisite or Corequisite: Completion of or enrollment in one or more terms in General Anthropology Anth 101, 102, 103.

These are independent study reading and conference courses, one in each of the major subdisciplines of anthropology. After one explanatory class meeting, students independently read books from a list selected by the instructor and meet in small groups to discuss each book as it is scheduled. The amount of credit earned depends on the number of books read and discussed: 6 books = 3 hours credit; 4 books = 2 hours credit; 2 books = 1 hour credit.

Anth 224 Readings in Physical Anthropology—Selected topics relevant to study of human evolution including process of evolution; evolution of vertebrates; primate behavior; evolution of human social behavior (origins of family, sex role differentiation, aggression and war, etc.)

Anth 225 Readings in Archeology—Investigations of peoples and cultures of the past: ancient Sumer and Mesopotamia; prehistoric Europe; North American Indians; civilization of ancient Mexico. Also look at process of doing archaeological excavation and research.

Anth 226 Readings in Cultural Anthropology—Explorations into the nature and variety of contemporary human cultures. Topical areas to be chosen from include studies of geographical regions (Africa, India, North America, etc.); studies of specific aspects of cultures such as religious systems, political and legal systems, family organization, women's roles, etc.; studies in culture change.

Economics Courses

Ec 115 Economics USA . . . . . (variable) 4 credits
(See Schedule)*
A one-quarter, terminal course designed for those students who wish to learn about the major features of the American economy. The course focuses on the problems associated with the operations of prices in the market place and the role of government. In addition to regular classes, students participate in game simulations. May not be taken in place of Principles of Economics Ec 201. Taught as a telecourse.

Ec 201, 202, 203 Principles of Economics . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
A one-year course offering a systematic presentation of economic theory and application with the emphasis on the American economy. The sequence is designed for those students who need a thorough understanding of the economic system or for those who have had an economics course in high school. Must be taken in sequence or with special permission of the instructor.

Arithmetic skills of adding, subtracting, multiplying and dividing whole numbers, fractions and decimals, and the ability to use graphs are essential. If students are not secure in their math skills, they should have them assessed by the college testing service.

Ec 201 (Fall Term) An overview of the economy with the emphasis on the forces that influence the composition of economic activity, the problems of economic measurements, and an analysis of fiscal policy.

Ec 202 (Winter Term) Prerequisite Ec 201. A study of the role of money and the Federal Reserve system; an analysis of supply and demand and its application to market problems.

Ec 203 (Spring Term) Prerequisite Ec 202. An analysis of the operation of firms in various market structures; a study of selected problems in international economics.

**Television course offerings are subject to availability of materials.*

Geography Courses

Geog 101 The Natural Environment . . . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
An introduction to the physical process acting upon the earth's surface and people's relationship with their natural environment. Designed to correspond to The Natural Environment Geog 101 at the University of Oregon.

Geog 103 Landscape, Environment, and Culture . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
The characteristics of landscape. The alteration of the environment and the manner various cultural groups use, perceive, and modify the landscapes they occupy. Origins and dispersion of goods, peoples, and ideas as they create the cultural landscape. Designed to correspond to Introductory Geography Geog 103 at the University of Oregon.

Geog 105 Urban Environment . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
Process of settling the land, population patterns, urban landscapes, perception of place, methods of geographic inquiry.

Geog 201 Geography of Europe . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
Variations in cultural attributes. The physical framework. Urban and rural settlement patterns, regional synthesis of different areas in Western Europe. Sources and methods for independent study beyond the classroom.

Geog 206 Geography of Oregon . . . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
Spatial associations of physical and cultural phenomena as they relate to the state of Oregon. Regional synthesis of different areas in Oregon. Sources and methods for independent study beyond the classroom.

Geog 214 Mexico and Central America . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
Pattern and variety of populations. The natural environment. The built environment of villages and cities. Detailed studies of selected regions. Information sources for study beyond the classroom.

Geog 298 Independent Study: Geography . . . 1-3 credits
(All Terms) . . . . . 2-6 hrs/wk
Prerequisite: Previous work in geography; instructor consent. Independent study in geography is intended to either serve students seeking an opportunity to complete an in-depth study of specialized topic with periodic consultation with an instructor or to permit Lane students to obtain credit while living in environments removed from Eugene. It is not intended to grant credit for tours or vacations but for actual field research made possible by extended visitation.

History Courses

Hst 101, 102, 103 History of Western Civilization . . . . . 3 credits each
(See Schedule) . . . . . 3 class hrs/wk
May be taken out of sequence.
Hst 101 (Fall Term) A study of mankind's individual and societal problems in an historical context. Included are such perennial issues as the nature of war and imperialism, man's efforts to control the environment, the law and individual conscience, and the power of the religions and mystical experience.

Hst 102 (Winter Term) A further examination of the historical causes of our twentieth-century hang-ups from the evolution of the "Renaissance Man" to the beginning of modern industrial

Europe. This includes the rise of the nation state system and the impact of industrialization on man and society.

Hst 103 (Spring Term) A selective survey of some of the great social and political movements, ideas, and people of modern times. Particular emphasis is placed on the pressing issues of living in a thermonuclear age, the threat to the world's environment, totalitarianism, imperialism, and the challenge to European-American supremacy by the Third World movement

Hst 110, 111, 112 History of World Civilization . . . . . (variable) 1-3 credits
(See Schedule) . . . . . 1-3 class hrs/wk
History of World Civilization is a story of civilization on a global stage. Particular attention will be paid to the most neglected peoples of Africa, China, India, the Middle East, and South America, and to the interaction between these peoples and the West. The course will be taught as a tutorial. Students will study assigned readings, take objective tests over those readings, and have the opportunity to discuss with the instructor any material they read. Since it is a variable credit, open-entry/open-exit course, students can progress through the course at their own pace. In other words, one student might earn three credits in three weeks while another student might choose to earn only one or two credits during a 10-week term. May be taken in addition to the traditional Western Civilization course. It will enrich and enhance the Western Civilization course by introducing students to non-Western cultures.

History 110 The origin and diffusion of civilization in the ancient world. May be taken out of sequence.

History 111 The world of the classical and early modern age. May be taken out of sequence.

History 112 A history of the modern world. May be taken out of sequence.

**Television course offerings are subject to availability of materials.*

Hst 123 Readings in European History . . . . . (variable) 1-3 credits
(See Schedule)
Readings in European History is an independent readings and conference course. There is one class meeting for explanatory purposes. After that students will read independently and meet by appointment when a book they have read is scheduled for discussion. The amount of credit a student earns depends upon the number of books he/she reads and discusses with the instructor, e.g., 6 books = 3 hours credit, 4 books = 2 hours credit, 2 books = 1 hour credit.

History 123 is about Europe in the Global Age. Books by and about our grandparents and books by and about ourselves address the questions of our age. Why did the Light Brigade ride into the "jaws of death"? Why didn't the abused and miserable soldiers of World War I just quit and go home? What is the social history of the machine gun? How did Hitler's system appear from the inside? etc.

Hst 201, 202, 203 History of the United States . . . . . 3 credits each
(See Schedule) . . . . . 3 class hrs/wk
May be taken out of sequence. Hst 201, 202, 203 constitute a general survey of American history from Colonial times to the present. All three utilize recent historical scholarship and publications in American history in an attempt to make the study of the history of this nation meaningful and as nearly truthful as is possible. A variety of materials is used, including primary and secondary sources, interpretative history, the dial retrieval system and cassette tape recordings. A variety of methods is employed, including the inductive or inquiry method.

Hst 201 (Fall Term) Begins with a study of the nature of the discipline of history and task of the historian. The scope extends from early Colonial America through the period of Jacksonian democracy (1850).

Hst 202 (Winter Term) Begins with the Manifest Destiny expansionism of the 1840's, includes an intensive study of the slavery controversy, the Civil War and Reconstruction. The course concludes with the study of the industrialization of the United States to 1900.

Hst 203 (Spring Term) Begins with America's venture into overseas imperialism in 1898, includes a study of World War I, World War II, the Korean War, the Cold War and Vietnam. The important reform movements are emphasized, i.e., The Progressive Movement, 1900-World War I, The New Deal, and The Great Society. The struggle for equality by Black Americans is included.

Hst 204 Readings in American History . . . . . (variable) 1-3 credits
(See Schedule)
Readings in American History 1620-1850 is an independent study readings and conference course. There is one class meeting for explanatory purposes. The amount of credit a student earns depends upon the number of books he/she reads and discusses with the instructor, e.g., 6 books = 3 hours credit, 4 books = 2 hours credit, 2 books = 1 hour credit. No incompletes, no make-ups.

Hst 205 Readings in American History . . . . . (variable) 1-3 credits
(See Schedule)
Readings in American History 1840-1900 is an independent study readings and conference course. There is one class meeting for explanatory purposes. The amount of credit a student earns depends upon the number of books he/she reads and discusses with the instructor, e.g., 6 books = 3 hours credit, 4 books = 2 hours credit, 2 books = 1 hour credit. No incompletes, no make-ups.

Hst 206 Readings in American History . . . . . (variable) 1-3 credits
(See Schedule)
Readings in American History 1890 to present is an independent study readings and conference course. There is one class meeting for explanatory purposes. The amount of credit a student earns depends upon the number of books he/she reads and discusses with instructor, e.g., 6 books = 3 hours credit, 4 books = 2 hours credit, 2 books = 1 hour credit. No incompletes, no makeups.

Hst 207 History of the American West . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
A survey of Western America from 1800 to 1900 covering the area from the Mississippi to the Pacific. Particular emphasis paid to cultural and social history including Great Trails, mining, pioneers, and mountain men.

Hst 291 China, Past and Present . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
An introductory course that provides an overview of both traditional and contemporary China. The general objective of the course is to examine the historical roots of modern China through a study of Chinese institutions, values, customs, and relations with the outside world.

Hst 298 Independent Study: History . . . . . 1-3 credits
(All Terms)
Prerequisite: Prior permission of instructor. Independent Study

in History is a course designed to provide able and ambitious students an opportunity to pursue legitimate historical interests on an individual basis. It is an "open-entry/open-exit" course, which means students may enter at the beginning of the course or later. Students can qualify for as many as three hours credit, two hours credit, or one hour credit, depending on the agreement they have made with the instructor and the work actually accomplished. There is no provision for "incompletes" with independent study—either the student completes the agreed upon project within the agreed upon time frame or he/she doesn't.

Philosophy and Religion Courses

Phl 201, 202, 203 Introduction to Philosophy . . . . . 3 credits
3 class hrs/wk

These courses introduce the writings of the great Western philosophers who lived from the 5th Century B.C. to the present. In these classes, students will acquire skill reading classical texts and will become acquainted with the abiding issues of philosophical investigation such as the nature of human moral and social obligation, the limits of human knowledge, and the nature of reality.

Phl 201 (Fall Term) *Ethics*—A philosophical study of morality which deals with issues such as the subjective nature of ethical judgments, the justification of moral claims, and the concepts of duty, right, and wrong.

Phl 202 (Winter Term) *Theory of Knowledge*—A systematic inquiry into the nature of knowledge and its sources: intuition, sense experience, the authority of others, and deductive reasoning. It raises the question, "What does it mean to say we know something?"

Phl 203 (Spring Term) *Metaphysics*—A philosophical investigation into the nature of reality which deals with speculations, ancient and modern, of interest to science and philosophy alike. It raises questions concerning the origin and purpose of the universe, and inquires whether or not Being can be explained in terms of mental, spiritual, or physical realities.

Phl 205 Contemporary Moral Issues . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk

A course in philosophy which provides an overview of some of the major ethical theories that have stood the test of time. The course examines how each of these theories would interpret the ethical problems encountered in daily life.

Phl 221 Elementary Logic . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk

A course in logic, emphasizing practical application of analytical techniques, including uses of evidence, detection of formal and informal fallacies, analysis of persuasive language, use of logical connectors in formal proof and basic applications in computing.

Phl 256 Minds and Machines . . . . . 3 credits
(See Schedule) 3 class hrs/wk

This course will examine traditional problems in philosophy of mind, relating them to issues raised by recent advances in artificial intelligence (the effort to create computers that can perform tasks requiring intelligence).

REL 201 Religions of India (Hinduism, Buddhism) . 3 credits
(Fall Term) 3 class hrs/wk

This course introduces two major religious traditions of India: Hinduism and Buddhism, acquainting students with the historical context in which each arose and emphasizing the central beliefs and practices of the major sub-sects within each tradition.

REL 202 Religions of China and Japan (Taoism, Confucianism, Buddhism, and Shinto) . . . . . 3 credits
(Winter Term) . . . . . 3 class hrs/wk

This course introduces four major religious traditions of China and Japan: Taoism, Confucianism, Buddhism, and Shinto, acquainting students with the historical context in which each arose and emphasizing the central beliefs and practices of the major sub-sects within each tradition.

REL 203 Religions of the Near East (Judaism, Christianity, and Islam) . . . . . 3 credits
(Spring Term) . . . . . 3 class hrs/wk

This course introduces three Near Eastern religions: Judaism, Christianity, and Islam, acquainting students with the historical context in which each arose and emphasizing the central beliefs and practices of the major sub-sects within each tradition.

Political Science Courses

PS 199 Global Issues . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk

Global Issues will vary from term to term but will emphasize international, political, economic, geographic, sociological and cultural barriers to, and opportunities for, increased cross-national interactions. Aimed chiefly at developing skills and knowledge for both general education and to meet the needs of students seeking international employment.

PS 201, 202, 203 American Government . . 3 credits each
PS 203 may be taken out of sequence . . . . 3 class hrs/wk

PS 201 (Fall Term) American democratic philosophies, the voice of the people in government, including the myths on which people base their decisions. A consideration of socio-economic influences on voting and the results of "people pressure" on government; principles of the American constitutional system with its checks and balances; federal government organization; consideration of the presidency.

PS 202 (Winter Term) *PS 201 recommended.* A continuation of PS 201 considering the bureaucracy, Congress, and judiciary; civil liberties and the practical application of the powers of the federal government to society's problems.

PS 203 (Spring Term) The place of the state and local government in the federal system, past and present; present problems; organization and operation of each level of state government; reform of state government; and taxation and the ability of the state to solve its problems.

PS 205 International Relations . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk

Analysis of the nature of relations among states; contemporary international issues; a study of the motivating factors: nationalism, imperialism, economic rivalries, quest for security.

PS 207 Introduction to Political Science . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk

An introduction to the areas of study, the issues, and the methods of political science. The course also will acquaint students with the history of the discipline and explore some practical applications of political knowledge.

PS 208 Introduction to Political Theory . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk

This course introduces students to the role of theory in the ordering of political thought, experience, and action. Topics will include the role of theory in the creation of political knowledge and the heritage of Greeks, classical liberals, socialists, etc., in political thought systems.

PS 220 American Foreign Policy & World Order . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
The course examines U.S. foreign policy makers, processes, and problems. It compares U.S. and key foreign nations' perspectives on foreign policy. It looks at policy tools, both political and economic, available to decision-makers. Students examine real-world present-day foreign policy problems and apply knowledge gained in the course to propose solutions.

PS 222 Introduction to Political Behavior . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
This course will deal with the relationships between the growth of individuals, from gestation to maturity, and the development of politics, from primitive to advanced. Students will look at the basic needs, common to all human beings, that form an ever-present part of the system that determines political action. Political behavior, like all other behavior, is the result of the interaction of organic and environmental forces—of human nature and nurture. The research and theory presented is a step in the direction of predicting when and why people behave as they do in the political arena.

PS 225 Political Ideology . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
This course examines the role of ideology, the organization of propaganda, and the structure of mass action in the modern state. It traces the development of several major political thought/action systems and their relationships to nationalism, political and economic power structures.

Psychology Courses

Psy 199 Understanding Human Behavior . . . . . 3 credits
(See Schedule)* . . . . . 20 one-half hour video modules
A basic introduction to psychology that encourages an appreciation and understanding of the scientific approach to the study of human behavior. The approach integrates physiological, intra-psychic, and social/behavioral perspectives on human thought and behavior. Aimed at "nontraditional" students through televised and workbook course materials.

**Television course offerings are subject to availability of materials.*

Psy 201, 202, 203 General Psychology . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
Basic principles and theories of behavior. Sophomore standing recommended. Also recommend that the courses be taken in sequence.

Psy 201 (See Schedule) Scientific principles related to psychology and psychological research including an introduction to statistical methodology, the human organism considering both developmental and structural aspects, the senses and perceptual processes and how they are influenced by the internal and external environment.

Psy 202 (See Schedule) The study of behavior as it is influenced by learning, remembering, forgetting, higher brain functions, motivation and emotions.

Psy 203 (See Schedule) Individual differences and methods of measurement, personality dynamics, reactions to stress, therapy, social behavior, and the history of psychology.

Psy 205 Applied Psychology . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
This is a basic course emphasizing psychological principles that can be readily applied to everyday life and work. Application of these principles will be illustrated by activities and practices that are easily transported to school, home, and job.

Psy 211 Brain, Mind, and Behavior . . . . . 3 credits
(See Schedule)*
The course presents current information about various brain functions and their relationship to human behavior. The intent is to present the most current findings, theories, and applications concerning their relationship. Specifically, it covers such functions as the senses, movement, rhythms, drives, learning, memory, emotions, and thought. It also addresses topics such as sleep, aging, stress, anxiety, language development, drug action, and mental disorder.

Psy 212 Introduction to Learning . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
Lectures, demonstrations, and seminar review of experimental research in the areas of animal and human conditioning, all levels of learning including signal, stimulus-response, discrimination, chaining, verbal association, concept, rule and problem-solving. Memory, transfer, forgetting, and insightful learning will also be covered.

Psy 213 Introduction to Physiological Psychology . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
An introduction to the physiological processes underlying behavior. The human organism is explored as a specific nervous system interacting with its environments. Lectures, labs, and seminar discussions.

Psy 214 Introduction to Personality . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
A survey of the major topics in the field of personality, including personality theory, personality assessment, and motivation in personality.

Psy 216/SOC 227 Social Psychology . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
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 . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
Lectures, lab, and seminar discussions designed to develop abilities in the application of the attitudes of science as they pertain to the discipline of psychology. Lab experience in the areas of animal learning, bio-feedback application, and social phenomena.

Psy 231 Human Sexuality . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
An introduction to the development and expression of human sexuality. A wide variety of information is presented pertaining to the biological, psychological, and cultural forces that influence one's sexuality. Topics include, but are not limited to: sexuality in childhood, adolescence, and adulthood; the sexual response cycle; contraception; and sexual dysfunction. The course is taught by a health educator and a psychologist. (Also offered through the Health and PE Department.)

Psy 235 Human Development 1 . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
An introduction to human development that includes theoretical perspectives, social, physiological, and psychological forces that impact on the stages of development from conception to puberty.

Psy 236 Human Development 2 . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
An introduction to human development that includes theoretical perspectives, social, physiological, and psychological forces that impact on the stages of development from adolescence to old age.

Psy 239 Introduction to Abnormal Psychology . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
Prerequisite: General Psychology Psy 201; Psy 202, 203 recommended; or be enrolled in professional or paraprofessional programs in the health sciences. A course which will bridge the gap between the mental health-related concepts touched upon in the General Psychology course and the more in-depth analysis of diagnosis, etiology, and therapy of emotional disturbances covered in the usual upper division class in Abnormal Psychology. Major topics to be covered will include the historical and current status of behavioral disorders, introductory statistics regarding the incidence and classification of persons who are emotionally disturbed, and a framework for understanding such phenomena.

Psy 298 Independent Study: Psychology . . . . . (variable) 1-3 credits
The highly motivated and scholarly student is challenged through the Independent Study in Psychology to pursue a personal interest within the discipline on an individual basis. The student may petition for up to three hours of course credit in any one term by working out a contract with the instructor supervising the study. This course is open-entry/open-exit. Students may enter any time during the quarter subject to instructor approval.

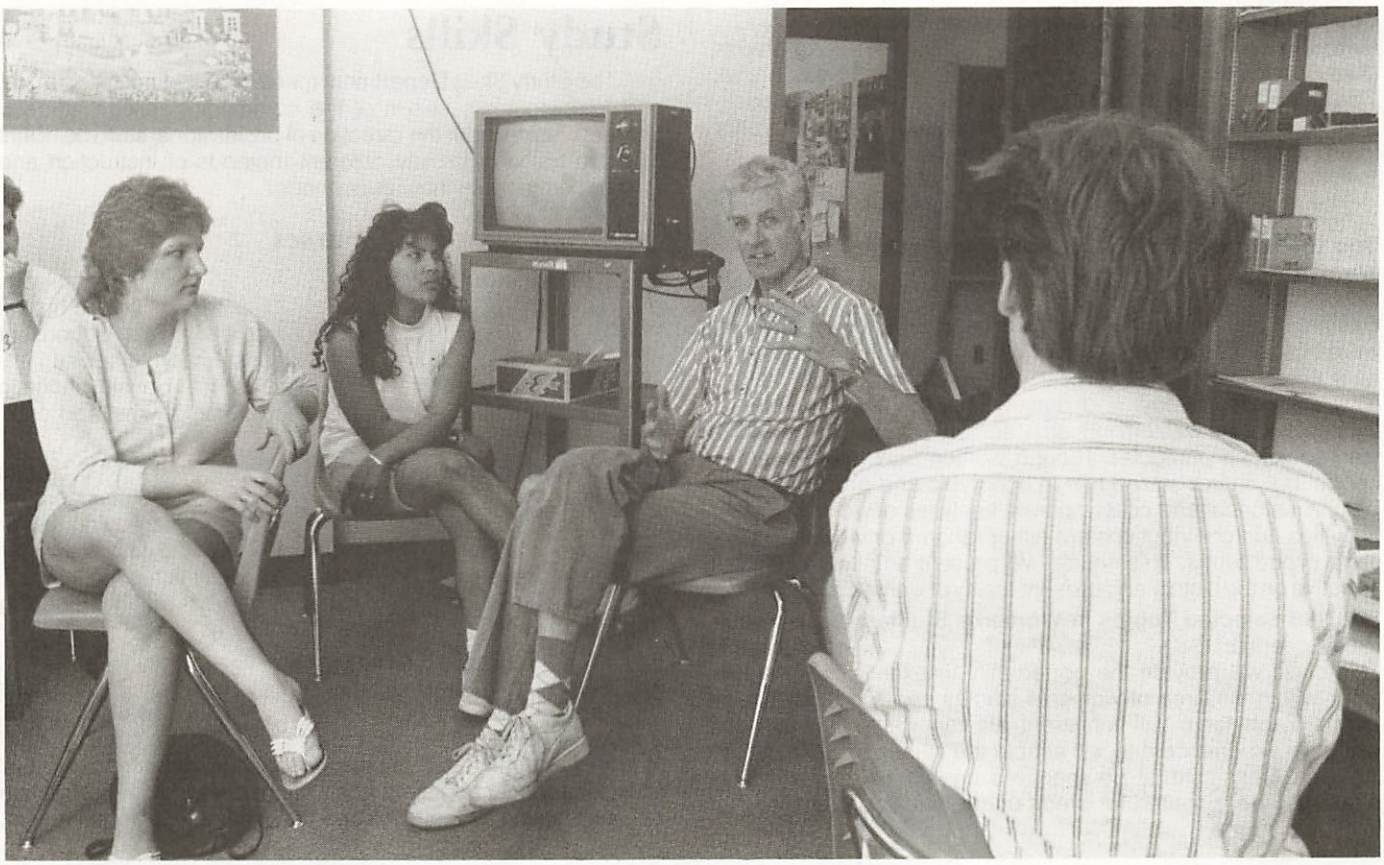
Sociology Courses

SOC 199 Introduction to Sociology . . . . . 3 credits
(See Schedule) . . . . . 20 one-half hour video modules
Sociology 199 is a basic introduction to sociology that encourages an appreciation and understanding of the scientific study of human social behavior. The course surveys the general principles of socialization, human behavior in groups and organizations, and the social structure of our society. It is based on televised text materials. All course activities are flexibly scheduled to accommodate those whose time is heavily committed.

Soc 204, 205, 206 General Sociology . . . . 3 credits each
(See Schedule) . . . . . 3 class hrs/wk
Introduction to basic sociological concepts, theories and findings, with emphasis on the analysis and interpretation of modern societies and contemporary social problems.

Soc 210 Sociology of Marriage and the Family . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
Topics include romantic love, sexual patterns, courting and dating, intimate relationships, happiness and tension and conflict in relationships, separations, divorces, widowhood, remarriages, family systems in other cultures, family system in America, minority family patterns, current changes, and prospects for the future. The course will present sociological descriptions and explanations of these topics and will also guide students into ways of coping better in their own relationships.

Soc 211 Deviant Behavior . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
Prerequisite: Soc 204. The study of behavior that departs from a group's or society's norms. Topics include delinquency and



crime; sexual, religious and life-style deviance; deviant sub-cultures; society's reaction to deviance and social control; explanations of causes of deviance and the tracing of its effects on individuals and society.

Soc 212 Social Control . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
Prerequisite: Soc 204. Describes and analyzes types of social controls (such as imprisonment, coercion, isolations, value training); describes the effects of controls for controller and controllee; the problems of rehabilitation and resocialization.

Soc 220/1.172 Sociology of Work . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
Analysis of the impact of industrialization on Western societies and on the social organization of business and industry within those societies. Topics covered include the social organization of the workplace, the impact of morale and productivity in the modern work environment. From this general framework, the student should gain a better understanding of individual and collective behavior in industrial society.

Soc 225 Social Problems . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
Prerequisite: Soc 204. An examination of selected social problems—basic facts, effects on the individual and society, and explanations. Problems will be selected from the following three areas, but not all topics will be covered each term. *Systemic problems:* racial and sexual discrimination, inequality and poverty, militarization and war, ecological problems, overpopulation, urban and rural problems, life cycle problems. *Problems of specific institutions:* government, economy, family, education, religion, social services. *Personal pathologies:* mental illness, suicide, alcoholism, drug addiction.

Soc 293 Introduction to Social Science Research Methods . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
This is an introductory course designed to give students a background in the concepts and issues which must be known prior to the actual doing of research on social issues.

Women's Studies Courses

Soc 107 Introduction to the American Working Woman . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
Designed as an introductory description and analysis of women's relationship to and participation in work. A cross-cultural perspective will be utilized in examining the real nature of women's work, past and present, but the focus will be on women's work in western industrial society in general and American society in particular. Though women have always had a central but unrecognized role in economic and productive life, both in historical and contemporary analyses of work, women's activities and contributions are either ignored or viewed in sex-stereotyped terms. This course will present an alternative perspective on the history and present reality of women's work lives.

Soc 108 Selected Topics in Women's Studies . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
This class will provide the opportunity to examine a selected topic within the area of women's studies and focus upon it in depth. Each topic will represent an important dimension of women's experience and will enable the student to gain historical and cross-cultural perspectives on women's issues. The class may be repeated for credit under different subtitles.

Soc 108 Selected Topics in Women's Studies Women's Bodies, Women's Selves . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
The connections between women's bodies and women's selves have always been central in forming both images of women and women's experience. This class will explore those connections focusing on the areas of reproduction, health, and sexuality.

WS 101 Introduction to Women's Studies . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
An introductory, interdisciplinary course which looks at women's status in the U.S. from a feminist perspective. Some attention is also paid to historical and cross-cultural context. Topics covered are women's economic status; male bias in the social sciences; sex differences and socialization; marriage and the family; women's health and sexuality; women, language and art; women, law and politics; the Women's Movement; and theory. There is a strong emphasis on class discussion and on the relation of personal experience to class material.

WS 298 Independent Study: Women's Studies . 1-3 credits
(All Terms) . . . . . 2-6 hrs/wk
Prerequisite: Students must have completed introductory course(s) in women's studies. Instructor consent is required. An opportunity for students to independently pursue individual interests in the field of women's studies for variable credit in a one-to-one relationship with the instructor. Suitable projects include a mutually agreed program of readings and conference, in-depth research papers on issues related to women's studies—action or field projects, working with groups or organizations focusing on women's issues, research projects.

Study Skills

The Study Skills Department meets the reading, basic math, and learning skills needs of the community college student. Students learn under the direction of professional staff members who are trained in many different methods of instruction and who accommodate individual needs.

Courses

0.525.1 Phonetic Spelling . . . . . 3 credits
(All Terms) . . . . . 3 class hrs/wk
Prerequisite: 30 percent or above on screening test or consent of instructor. This course will provide instruction in spelling improvement. The course includes instruction in basic phonetic skills, pronunciation, dictation, selected homonyms, and spelling applied to writing.

0.525.2 Morphographic Spelling . . . . . 3 credits
(All Terms) . . . . . 3 class hrs/wk
Prerequisite: 70 percent or above on phonics screening test or consent of instructor. This course will provide instruction in spelling improvement. The course includes instruction in basic word parts, proofreading, spelling generalizations, spelling applied to writing, and selected homonyms.

0.525.3 Basic English Grammar and Sentence Writing . . . . . 6 credits
(All Terms) . . . . . 6 class hrs/wk
Prerequisite: 7th grade reading level or instructor consent, and/or writing sample. This course will provide instruction in basic English grammar and sentence writing. It will include instruction in identification of parts of speech, subject-verb agreement,

pronoun-antecedent agreement, basic sentence pattern recognition and composition, punctuation, and capitalization. The students will have practice in constructing their own sentences demonstrating mastery of grammatical concepts and skills.

0.525.4 Basic Paragraph Writing . . . . . 3 credits
(All Terms) . . . . . 2 class, 1 lab hr/wk
Prerequisite: Student must prove competency in the skills offered in Basic English Grammar and Sentence Writing. Competency evaluated through writing sample containing clear, complete sentences, basic punctuation, basic spelling, and capitalization. This course will provide instruction in writing and rewriting basic expository paragraphs. Included in the course are paragraph structure, paragraph development, and sentence improvement.

0.525.5 Read, Write, and Spell 1 . . . (variable) 1-9 credits
(All Terms) . . . . . 108 hrs/term
Prerequisite: Instructor consent based on a criterion test administered in the Study Skills Center. The course is designed mainly for the student who has basic reading and writing problems. This means that he/she is now functioning at or below 7th grade level in reading words (decoding) and reading comprehension. Read, Write, Spell 1 includes instruction in the following skills: basic phonics, reading comprehension, penmanship (optional), vocabulary, study skills, spelling, grammar, and expository and creative composition (optional). The student will master the skills through small group instruction, practice, individualized tutoring, small group review, and will show mastery of the skills through competency testing.

0.525.5A Basic Reading and Spelling . (variable) 1-9 credits
(All Terms) . . . . . 108 hrs/term
This course is designed for the student who has severe reading and spelling problems. This means that he/she is now functioning below the 5th grade reading level. The course is divided into nine cycles. Each cycle includes instruction in the following skills: phonic reading, sight word reading, reading comprehension, oral reading, phonic spelling, and sight word spelling.

0.525.6 Read, Write, and Spell 2 . . . (variable) 1-9 credits
(All Terms) . . . . . 108 hrs/term
Prerequisite: Mastery of skills from Criterion/Reference Test at 80 percent. This course is designed for students who have demonstrable deficiencies in basic learning skills that hinder their ability to succeed in regular college classes. The class meets 1-9 hours per week in order that the teacher may integrate the necessary learning skills, rather than teach them in isolation. The course consists of cycles or units , each of which when completed, earns the student one credit. Each cycle reviews and expands on reading comprehension, writing skills, and spelling mastery.

0.525.7 Advanced English Grammar and Sentence Writing . . . . . 6 credits
(All Terms) . . . . . 6 class hrs/wk
Prerequisite: Basic English Grammar and Sentence Writing 0.525.3 or consent of the instructor. This course is a continuation of Basic English Grammar and Sentence Writing. It will review parts of speech, sentence patterns, sentence types, sentence errors, and punctuation. It will expand on these grammatical concepts by studying adjectives, adverbs, participles, infinitives, appositives, clauses, tense and verb shift, case, possession and quotation marks. Emphasis will be on sentence writing and the use of sentence combining.

0.527 Preparatory Vocabulary . . . . . 3 credits
(All Terms) . . . . . 2 class, 1 lab hr/wk
Prerequisite: 7th grade vocabulary on standardized test or teacher consent. This course is designed to provide instruction in vocabulary skills which will increase both the students' speaking and understanding vocabularies. The course content includes a study of affixes and roots, pronunciation, dictionary skills, and vocabulary acquisition and enrichment.

0.527.1 Problem Solving . . . . . 3 credits
(Fall Term) . . . . . 3 class hrs/wk
Prerequisite: 7th grade level as determined by standardized test. This course emphasizes the thinking operations that can be used in various problem solving contexts and applied to any content area. The class teaches and reinforces all reasoning operations.

0.529 Reading Comprehension . . . . . 3 credits
(All Terms) . . . . . 3 class hrs/wk
Prerequisites: Sentence writing and decoding skills, 7th grade comprehension as determined by the standardized test. For students who wish to improve their reading efficiency. Instruction will include rate improvement, comprehension skills, and practice in textbook and recreational reading skills.

0.529.3 Notetaking Skills . . . . . 1 credit
(All Terms) . . . . . (3-weeks) 4 class hrs/wk
Students will learn the five steps of the Cornell notetaking system and will have practice taking classroom lecture notes and textbook notes. Students will learn to identify verbal and nonverbal clues for recognizing main points of a lecture. Common notetaking problems and solutions will also be presented.

0.529.4 Time Management . . . . . 1 credit
(All Terms) . . . . . (3 weeks) 4 class hrs/wk
This class is designed for students interested in learning to better manage their academic and personal time. The course includes effective organizational techniques for students, setting short-term and long-term goals, developing a master schedule and ways to improve concentration in order to use time effectively.

0.529.5 Textbook Reading and Studying . . . . . 1 credit
(All Terms) . . . . . (3 weeks) 4 class hrs/wk
This course is designed for students interested in understanding their textbooks more thoroughly and learning textbook information more effectively. Parts of a textbook, the SQ3R reading system, finding topics, main ideas and supporting details, and textbook marking are included. Students will also learn to develop study aids such as flashcards, summary sheets, mappings and hierarchies, categorization charts and mnemonic devices.

0.529.6 Learning Style and Concentration . . . . 1 credit
(All Terms) . . . . . (3-week course) 3 class, 1 lab hr/wk
This class will cover various types of learning styles, and the student will analyze his/her own type. In the second part of the course, the student will learn about barriers to concentration and tips for overcoming them.

0.529.7 Test Taking . . . . . 1 credit
(All Terms) . . . . . (3-week course) 3 class, 1 lab hr/wk
This course reviews the various kinds of tests and gives aids and tips on how to take them. Test preparation, general test skills and test anxiety will all be covered. The course will also give practice with each student's individual testing situation.

0.529.8 Memory Improvement . . . . . 1 credit
(All Terms) . . . . . (3-week course) 3 class, 1 lab hr/wk
This course will provide background on how memories are formed and stored, why people forget, and how to remember better. Emphasis will be on personal strategies to apply in individual situations.

0.593 Learning Skills Laboratory . . . . . 3 credits
(All Terms) . . . . . 1-3 class hrs/wk
Assists students by offering instruction in a broad range of learning skills. Students will work with an instructor or tutor on a one-to-one basis.

0.605 Decimals . . . . . (variable) 1-3 credits
(All Terms) . . . . . 3 class hrs/wk
Prerequisite: Permission of instructor, basded on math placement results. This course provides a brief review of fractions and instruction of addition, subtraction, multiplication, and division of decimal fractions. Instruction of place value, ordering and rounding, and conversion of decimals to fractions and percents, and solving word problems involving decimals is also included.

0.605.1 Fractions . . . . . (variable) 1-3 credits
(All Terms) . . . . . 3 class hrs/wk
Prerequisite: Permission of instructor, based on math placement results. This course will provide instruction in identification of fractional parts; reduction of fractions; addition, subtraction, multiplication, and division of fractions with common and unlike denominators. Instruction of how to solve word problems involving fractions, prime numbers, and prime factorizations is also included.

EL 111/0.768 Effective Learning . . . . . 3 credits
(All Terms) . . . . . 3 class hrs/wk
Prerequisite: 9th grade reading ability as determined by a standardized test. This course is designed to provide instruction in how to take notes, study for tests, improve memory, cope with textbooks, and manage time effectively. Some basic skills in using the library also will be taught. The course is for students who have been out of school for a number of years or who lack good study techniques.

EL 112 College Forum . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
Corequisite: Concurrent registration in College Forum SSc 112 is required. College Forum is a transitional course that aids the student in acquiring effective learning techniques through the study of and participation in issues of concern in the 1980's. In this team-taught course, experts, performers, and speakers from the community will share their knowledge and skills with students in a forum that will optimize listening, note-taking, reading, writing, and discussion skills.

Eng 110 Conversation . . . . . 2 credits
(Fall, Winter, & Spring Terms) . . . . . 2 class hrs/wk
Prerequisite: Meets institutional entry requirements for international students. This course is designed to improve and develop background in American culture and more competent skills in English pronunciation and conversation. Emphasis is on the acquisition, review, reinforcement, and transfer of skills in oral communication.

Eng 110 Grammar . . . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
Prerequisite: Meets institutional entry requirements for international students. The course is designed as a comprehensive review of English grammar for nonnative speakers of English. It will provide review, expansion, and mastery of essential elements for entry into beginning and intermediate writing courses. It will also provide familiarity with the analytical and logical thinking processes used by the native speaker of American English.

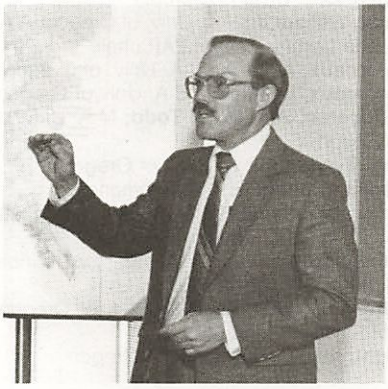
Eng 110 Vocabulary . . . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
Prerequisite: Meets institutional entry requirements for international students. The course is designed to provide vocabulary enrichment for the nonnative speaker of English. It will increase both the student's speaking and listening vocabularies. Special emphasis will be given to the structural differences between English and the native language.

Eng 116 College Vocabulary . . . . . 3 credits
(All Terms) . . . . . 3 class hrs/wk
Prerequisite: 10th grade vocabulary on the standarized test or teacher consent. This course is designed to provide instruction in vocabulary skills which will increase both the students' speaking and understanding vocabularies. The course content includes a study of affixes and roots, pronunciation, dictionary skills, and vocabulary acquisition and enrichment. Instruction will move at a faster pace, introduce more material, and deal with vocabulary of greater difficulty than in Preparatory Vocabulary.

Eng 117 Speed Reading . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
This course is designed for the mature reader who is serious about improving his/her reading speed. The course includes step-by-step instruction to modify reading habits and adapt special techniques (S-pattern, Re-call, Speculation) that will significantly increase the rate of effective reading. High-speed reading is the objective and comprehension is developed during the process.

Wr 110 Preparatory Writing for Foreign Students . . . . . 3 credits
(All Terms) . . . . . 3 class hrs/wk
Prerequisite: Meet LCC's academic admission requirement: currently requires a 475 TOEFL score or a written assessment score of 35 or more in STEL assessment test or consent of instructor. This course is designed to improve and develop more competent skills in writing for the student whose first language is not English. Emphasis is on review, reinforcement, refinement and expansion of structure and intermediate writing skills.

Instructional Staff



Instructional Staff

Adult Basic Education

Rasor, Leslie W.; department chair; M.S. Univ. of Oregon.; B.A. The Evergreen State Col.
Bernhard, Deborah C.; B.S. Univ. of Oregon
Frauman, Maxine; B.A. Univ. of California
Hemsoth, Gail L.; M.S. Univ. of Oregon; B.A. Heidelberg Col.
Johnson, Norman; M.A. Univ. of Oregon; B.A. Seattle Pacific College; diploma Regent Col., British Columbia
Jones, William J.; B.A. Univ. of Oregon; A.A. Lane Comm. Col. – LEAP chair
Lamoreaux, Alice A.; B.A. Univ. of Oregon
Lamoreaux, Lucille F.; B.A. Univ of Oregon
Le Douarec, Annick M. Todd; M.A. Univ. of Oregon
Long, Twyla L.; B.S. Univ. of Oregon
Russell, Catherine; B.A. Simmons Col.
Shelp, Patricia M.; B.A. So. Oregon State Col.; M.A. So. Oregon State Col.
Simon, Michael F.; M.A. Western Illinois Univ.; B.A. Western Illinois Univ.
Whitenack, Alice A.; B.S. Univ. of Oregon; M.S. Univ. of Oregon
Wright, Ida M.; B.A. Univ. of Oregon

Art and Applied Design

Reid, Richard W.; department chair; B.A. Univ. of Minnesota
Blix, Weltzin B.; M.F.A. Univ. of Oregon; M.S. Northern Illinois Univ; B.S. Carroll Col.
Dean, Bruce; M.F.A. Univ. of Illinois; B.F.A. Univ. of Illinois; B.F.A. Art Institute of Chicago
Hoy, Harold H.; M.F.A. Univ. of Oregon; M.F.A. Univ. of Oregon; B.A. Central Washington Univ.
Joyce, J. David; M.F.A. Univ. of Oregon; M.A. Univ. of Oregon; B.A. Carleton Univ., Ottawa
Kommer, Joyce; M.F.A. Univ. of Oregon; B.A. Univ. of Oregon
Rubick, Thomas; B.A., Univ. California at Long Beach
Spilman, Craig M.; M.F.A. Instituto Allende, San Miguel de Allende, Gtol., Mexico; B.A. San Francisco State Col.
VanderSchaaf, Elizabeth; M.A. Univ. of Oregon; B.A. Univ. of Oregon
White, Daniel L.; M.F.A. Univ. of Oregon; B.S. Univ. of Oregon
Wild, Bruce; M.F.A. Univ. of Oregon; B.A. Central Washington State Col.
Wright, Rosco E.; M.S. Univ. of Oregon; B.S. Univ. of Oregon

Athletics

Loveys, Frederick R.; department chair; Ed.D. Univ. of Oregon; M.S. Univ. of Oregon; B.S. Univ. of Oregon; A.M.L. Oxford Univ. Institute of Education
Foster, Robert V.; M.S. Univ. of Oregon; B.S. Oregon Col. of Education

Business

Reilly, William R.; department chair; Ph.D. Purdue Univ; M.B.A. Univ. of Minnesota-Minneapolis; B.S. Univ. of Minnesota-St. Paul
Birkenhead, Thomas E.; M.B.A. Univ. of Southern California; B.S. Univ. of Southern California
Clark, Connie Jo; B.A. Idaho State Univ.; A.S. E.D.S.C.
Day, Vivian L.; M.S. San Fernando Valley State Col.; B.S. San Fernando Valley State Col.
Eno, Esther R.; M.Ed. Oregon State Univ.; B.S. Univ. of Oregon
Eno, Richard H.; M.S. Oregon State Univ.; B.A. Univ. of Northern Colorado
Grant-Churchwell, Cathlene; M.S. California State Univ.-San Jose; B.S. California State Univ.-San Jose
Hamilton, Stephen S.; M.B.A. Univ. of Oregon; B.B.A. Univ. of Oregon; A.S. Treasure Valley Comm. Col.
Harpole, Gregory R.; M.S. Oregon State Univ.; B.S. Southern Oregon Col.
James, Betty E.; M.S. Univ. of Oregon; B.S. Univ. of Oregon
Jellesed, Edna V.; M.S. Univ. of Oregon; B.A. Univ. of Washington
Jennings, Brenda L.; M.Ed. Oregon State Univ.; B.S. Oregon State Univ.
Jesser, Velma K.; M.Ed. Univ. of Missouri; B.S. Univ. of Missouri; C.P.S.
Le Pelley, Eilene R.; B.A. Idaho State Univ.
Lingo, Judy L.; Secretarial Certificate Eugene Business Col.; C.P.S.
Nelson, Robert W.; M.B.A. Univ. of Oregon; B.S. Oregon State Univ.; Oregon Real Estate Broker's License; G.R.I.
Ogan, Bonnie D.; M.Ed. Oregon State Univ.; B.A. Oregon State Univ.
Rholl, Gary O.; M.B.A. Univ. of Oregon; B.A. Kearney State Col.; B.S. Kearney State Col.
Rholl, Marilyn L.; M.Ed. Oregon State Univ.; B.S. Oregon State Univ.
Ryan, Joan S.; M.B.A. Oregon State Univ.; M.S. Oregon State Univ.; B.S. Oregon State Univ.
Wilson, Donald James; J.D. Willamette Univ.; B.A. Stanford University

Cooperative Work Experience

Way, Robert F.; department chair; M.S. Oregon State Univ.; B.A. Oregon State Univ.; A.S. Oregon Technical Institute
Freeman, Joe E.; M.S. Univ. of Oregon; B.S. Sacramento State; A.A. Cabrillo Comm. Col.
Hahn, Patricia I.; M.S. Univ. of Oregon; B.S. Southern Oregon State Col.
Marston, Peggy; M.S. Univ. of Oregon; B.S. Eastern Montana Col.; A.A. Goshen County Comm. Col.
Maurer-Clemons, Dixie L. K.; B.A. Antioch Col.
Meyer, Clifford Fred, III; B.S. William and Mary
Moore, Sharon L.; M.Ed. Oregon State Univ.; B.S. Oregon State Univ.
Myers, Linda E. K.; M.A. Univ. of Oregon; B.A. Chico State Col.

Cottage Grove Center

Strahan, Donald F.; director; M.S. Univ. of Oregon; B.A. Humboldt State Univ.

Counseling (Human Development Classes)

Bernham, John A.; director; M.Ed. Univ. of Oregon; B.A. Cascade Col.; National Certified Counselor
Ashwill, Beverly J.; M.S. Univ. of Oregon; B.S. Oregon State Univ.; National Certified Counselor
Bailey, Wilbert G.; M.Ed. Pennsylvania State; B.S. Pennsylvania State
Blood, Timothy L.; M.S. Univ. of Oregon; B.S. Albion Col.; National Certified Counselor
Brandstrom, Janice M.; M.Ed. Univ. of Oregon; B.S. Univ. of Washington; National Certified Counselor
Conklin, Jean H.; M.A. Univ. of Oregon; B.A. Univ. of Oregon
Davis, Mason R.; Ph.D. Univ. of Oregon; M.S. Univ. of Oregon; B.S. Univ. of Wisconsin at Platteville
Freund, Richard D.; Ph.D. Stanford Univ.; B.A. Brown Univ.
Geyer, Phyllis; M.S. Univ. of Oregon; B.A. Univ. of Oregon; National Certified Counselor
Haverland, Dallas; M.S. Purdue Univ.; M.Ed. Univ. of Oregon; B.S. Univ. of Oregon
Hodges, Daniel L.; Ph.D. Univ. of Oregon; M.A. Univ. of Oregon; B.A. Colby Col.
Litty, Carolyn L.; Ph.D. Univ. or Oregon; M.S. Univ. of Oregon; M.S.N. Univ. of California Medical Center; B.S. Univ. of California Medical Center; N.C.C.

Information reflects Personnel records of contracted staff as of April 12, 1989.

Lorence, Margie
Poole, Julia A.; M.S. Univ. of Oregon; B.S. Univ. of Oregon; A.A. Lane Comm. Col.; National Certified Counselor
Roof, David E.; M.S. Univ. of Oregon; M.A. Western Kentucky Univ.; B.S. Hanover Col.
Shadwick, Jack; M.S. Univ. of Oregon; A.A. Lane Comm. Col.
Vail, Betty M.; M.S. Univ. of Oregon; B.A. Southern Oregon State Col.; B.S. Univ. of Oregon; National Certified Counselor
Winquist, John C.; Ph.D. Univ. of Oregon; M.S. Univ. of Oregon; B.S. Oregon State Univ.
Wynia Takei, Marjorie I.; M.S. Univ. of Oregon; B.S. Oregon Col. of Education; National Certified Counselor

Data Processing

Reimer, Thomas E.; department chair; M.S. Oregon State Univ.; B.S. Seattle Pacific Col.
Beisse, Fred; M.A. Univ. of Oregon; B.A. Western Washington Univ.
Loft, Linda L.; M.S. Univ. of Oregon; B.S. Univ. of Oregon
Shirey, John R.; Ph.D. Univ. of Oregon; M.A. Univ. of Oregon; M.A. San Jose State Col.; B.A. Univ. of Oregon

Electronics

Vogel, Robert; department chair; M.Ed. Wayne State Univ.; B.S. California State Polytechnical Univ.
Allison, Mac G.; Oregon State Licensed Technician.; RCA Videotape Service Cert.
Forbess, Danny Scott; M.A. California State Univ.-Long Beach; B.A. California State Univ.-Long Beach; A.A. El Camino Col.
Huntington, James R.; Vocational Instruction Certificate
Micken, Donald A.; Ph.D. Univ. of Oregon; M.S. Univ. of Oregon; B.Arch. Montana State Univ.
Romanek, Richard E.; M.Ed. Univ. of Oregon; B.A. Univ. of Oregon; B.S. Tri State Univ.
Smith, A. Wilson; Journeyman, Appliance Repair

English and Foreign Language

Powell, Jack L.; department chair; M.A. Univ. of Portland; B.A. Univ. of Portland; A.A. Clark Col.
Albrecht, Ruth E.; M.A. Colorado State Univ.; B.A. Colorado State Univ.
Berg, Teodor L.; Ph.D. Univ. of Utah; M.A. San Francisco State Col.; B.A. Univ. of Oregon
Breaden, Barbara L.; M.A. Univ. of Illinois; B.A. Univ. of Illinois
Danielson, Linda L.; D.A. Univ. of Oregon; M.A. Univ. of Colorado; B.A. Univ. of Colorado
De Chaine, Virginia H.; M.S. Univ. of Oregon; B.S. Univ. of Oregon
Dunne, Susan E.; M.A. Univ. of Oregon; B.A. Univ. of Oregon
Forestieri, Mary C.; M.F.A. Univ. of Oregon; B.A. Western Michigan Univ.
Garger, Jerome S. J.; M.A. Univ. of Utah; B.S. St. Louis Univ.
Hall, Elizabeth S.; M.A. Wayne State Univ.; B.A. Smith Col.
Juba, Sheila; M.A. Univ. of Oregon; B.A. Univ. of Oregon
Locke, Karen S.; M.F.A. Univ. of Oregon; B.A. Univ. of Oregon
Nelson, Virginia C.; M.A. Univ. of Oregon; B.A. Univ. of Oregon
Powell, William N.; B.A. Sonoma State Col.
Prengaman, Ann Marie; D.A. Univ. of Oregon; M.A. Univ. of Oregon; B.A. Seton Hall Col.
Robert, John H.; M.A. Univ. of Oregon; B.S. Univ. of Massachusetts; A.A.A.S. Holyoke Comm. Col.
Rose, Michael R.; M.A. Univ. of Oregon; B.A. Univ. of Oregon
Sanderson, Delta A.; M.A. Univ. of Oregon; B.A. Univ. of Oregon
Sherman, David A.; M.S. Univ. of Oregon; B.S. Univ. of Oregon
Swan, Susan K.; Ph.D. Univ. of Oregon; D.A. Univ. of Oregon; M.A. Univ. of Oregon; B.A. Univ. of Oregon
Taylor, Cherry; M.S. Univ. of Southern California; B.S. Univ. of Oregon
Tegger, Arthur L.; M.A. Pacific Univ.; B.A. Westmont Col.
Thomas, Sharon T.; D.A. Univ. of Oregon; M.A. Univ. of Oregon; B.A. Brigham Young Univ.
Woods, Arden P.; M.A. Univ. of Oregon; B.A. Univ. of Oregon

English as a Second Language

Rasor, Leslie W.; department chair; M.S. Univ. of Oregon; B.A. The Evergreen State Col.
Frauman, Maxine; B.A. Univ. of California
Johnson, Norman A.; M.A. Univ. of Oregon; B.A. Seattle Pacific Col.; diploma Regent Col., British Columbia
Le Douarec, Annick M. Todd; M.A. Univ. of Oregon; B.A. Univ. of Oregon

Flight Technology

Hagberg, Terry L.; department chair; A.S. Lane Comm. Col.
Farrand, Robert A., Jr.; J.D. Univ. of Oregon; B.S. Univ. of Oregon; FAA Gold Seal Flight Instructor
Gustafson, Ron A.; B.P.A. Embry-Riddle Aeronautical Univ.; A.S. Lane Comm. Col.; FAA Pilot Examiner, Helicopters, Lic.; FAA Airline Transport Pilot Lic.

Health Occupations

White, Douglas G.; department chair; Ed.D. Univ. of Oregon; M.S. Univ. of Oregon; B.S. Lewis & Clark Col.
Wiles, Marie B.; associate department head; M.S. Northern Illinois Univ.; B.A. George Williams Col.; diploma Samaritan Hospital School of Nursing
Adler, Jerene F.; A.A. Fresno City Col.
Barber, Tarley G.; B.S.N. Univ. of Oregon School of Nursing
Bates, Clarice; M.S. Univ. of Oregon; B.S.N. Pacific Lutheran
Blanchard, Carolyn F.; A.S. Lane Comm. Col.; R.D.H.; C.D.A.; E.F.D.A.
Blue, Judith H.; B.S. Univ. of Oregon; R.D.H. Univ. of Oregon Dental School
Brown, Charlotte M.; M.S. Univ. of Oregon; B.S.N. Univ. of Portland
Canale, Suzanne; M.S.N. Oregon Health Sciences Univ.; M.S. Univ. of Oregon; B.S.N. State Univ. Col.-Plattburgh, NY
Chandler, Sharon E.; B.S. State Univ. of New York-Buffalo; A.A.S. Erie Comm. Col.; L.D.H.
Clemens, Glenna M.; M.N. Oregon Health Sciences Univ.; B.S.N. Oregon Health Sciences Univ.
Coffman, Ruth Ann; M.S.N. Yale Univ.; Diploma Kings Park State Hospital School of Nursing; B.A. Duke Univ.
Decroos, Carmel; M.R.E. New York Christian Theological Seminary; M.S.N. Univ. of California-San Francisco; B.S.N. Univ. of British Columbia
Ellingson, Joann M.; BEd. Univ. of Oregon
Gardipee, Sheila B.; M.S. Univ. of Oregon; B.S.N. Carroll Col.; Nursing Diploma Carroll Col.
Hagan, Sharon Savage; M.S. Western Kentucky; B.S. Idaho State Univ.; R.D.H.
Harcleroad, Jeanne E.; M.S. Univ. of California-San Francisco; B.S.N. Univ. of Iowa; Diploma Fairview Hospital School of Nursing
Hopkinson, Kathleen L.; B.A. Linfield Col.; A.S. Lane Comm. Col.; R.D.H.
Kinman, Janice L.; B.S.N. Oregon Health Sciences Univ.; Clinician, O.C.C.P.
Larson, Janet; M.S.N. Univ. of Minnesota; B.S.N. Univ. of Minnesota
Lewis, Saralie N.; B.S. Univ. of Oregon; A.D.N. Lane Comm. Col.
Lynch, Mary Lou; M.S.N. Oregon Health Sciences Univ.; B.S.N. Mt. St. Mary's Col.
Mendenhall, Steven F.; B.S. Col. of St. Mary; A.S. Lane Comm. Col.; R.R.T.
Munkvold, Julia P.; M.S. Univ. of Oregon; B.S.N. Univ. of New Mexico
Naylor, Elizabeth H.; M.S. Univ. of Wisconsin-Stout; B.A. Univ. of Colorado; R.D.
Newman, Annette H.; M.S. Univ. of Oregon; B.S.N. Lewis & Clark Col.
Nutting, Julianne L.; M.A. Washington State Univ.; B.A. Portland State Univ.
Plaa, Loretta; M.S. Rutgers Col.; B.S. Douglass Col.; R.D.
Rice, Maureen A.; M.S.N. Univ. of Minnesota; C.N.P. UCLA/USC Long Beach; B.S.N. Mt. Mercy Col.
Riepe, Linda D.; M.S. Univ. of Oregon; B.S. Southern Oregon State Col.
Schubert, Matthew P.; B.A. Univ. of Kansas; R.R.T.
Stevens, Norma K.; Vocational Instruction Certificate; C.M.A.-A.C.; C.M.T.

Tupper, Kristi L. Stewart; B.S. Univ. of Oregon; Certificate Lane Comm. Col.; C.D.A.; E.F.D.A

Ulrich, Susan K.; M.S.N. Oregon Health Sciences Univ.; B.S.N. Oregon Health Sciences Univ.

Webb, Beth; Certificate of Completion Salem Voc. Tech. Comm. Col.; C.D.A.; E.F.D.A

Wendell, Sharon M.; M.S.N. Catholic Univ. of America; B.S.N. Univ. of Portland; Cancer Nurse Clinician; OCCP

Young, Joyce A.; M.S. Univ. of Oregon; B.S.N. Indiana Univ. School of Nursing

Health and Physical Education

Loveys, Frederick R.; department chair; Ed.D. Univ. of Oregon; M.S. Univ. of Oregon; B.S. Univ. of Oregon; A.M.L. Oxford Univ. Institute of Education

Bates, Dale J.; M.S. Univ. of Oregon; B.S. Southern Oregon Col.

Burch, Susan W.; Ph.D. Univ. of Oregon; M.S. Univ. of Oregon; B.S. Univ. of Oregon

Creed, Robert J.; M.A. Northern Arizona Univ.; B.S. Minot State Teachers Col.

Daggett, Delpha; M.S. Oregon State Univ.; B.S. Oregon State Univ.

Hodges, M. Cecil; M.S. Univ. of Oregon; B.Ed. Univ. of Oregon

Miller, Dwane A.; M.S. Univ. of North Dakota; B.S. Linfield Col.

Radcliff, Robert A.; M.S. Univ. of Oregon; B.S. Univ. of Oregon

Schultz, Kurt C.; M.S. Univ. of Oregon; M.A.T. Univ. of Alaska; B.A. Alma Col.

Seereiter, Mary Lou; M.S. Univ. of Oregon; B.S. Univ. of Oregon

Thomas, Frances R.; M.S. Univ. of Oregon; B.S. Univ. of Oregon

Thompson, Susan J.; M.A. California State Univ.-Los Angeles; B.A. California State Univ.-Los Angeles; A.A. Los Angeles City Col.

Wilken, Lyndell K.; M.S. Univ. of Illinois; B.S. Univ. of Illinois

Young, Thomas A.; M.Ed. Springfield Col.; B.S. Springfield Col.

Yriarte, Harland L.; M.S. Univ. of Oregon; B.S. Southern Oregon Col.

High School Completion

Rasor, Leslie W.; department chair; M.S. Univ. of Oregon; B.A. The Evergreen State Col.

Breeden, Susan J.; M.A. Univ. of Oregon; B.A. Univ. of Oregon

Jacobsen, Dennis R.; M.A. Univ. of Illinois; B.A. Univ. of Minnesota

McClain, Fay; M.S. Univ. of Wyoming; B.S. Sam Houston Univ.

Nagy, Evelyn; M.A. Univ. of Oregon; B.A. Univ. of Oregon

Phifer, Nan M.; M.L.A. Johns Hopkins Univ.; B.A. Univ. of Colorado

Wolf, Steven A.; B.S. Univ. of Oregon

Industrial Technology Programs

Horstrup, Carl A.; department chair; A.S. Lane Comm. Col.; Journeyman Bricklayer

Arthur, Thomas W.; M.Ed. Oregon State Univ.; B.S. Oregon State Univ.

Davis, Donald H.; B.S. Oregon State Univ.; Journeyman Gardener

Huntington, Mark; M.S., B.A. Eastern Washington State Univ.; Diploma Pinellas & Voc. Tech. Cert. in Welding Tech.

Kealoha, Wilfred P.

Plaa, Guy A.; C.A.P. Ecole hoteliere des Roches; B.E.P.C. Col. St. Bernard; Cert. d'Aptitude Professionelle, de Cuisinier

Rhodes, Kenneth N.; A.A. Boise State Univ.; Idaho type A Cert. for Cabinetmaking; Journeyman Cabinetmaker

Rowe, Albert H.; Certificate Welding Trade School; Oregon Welding Certification; Journeyman Welder/Fabricator

Savoie, Donald F.; Chefs de Cuisine Society of Oregon; American Culinary Federation; Chef

Learning Resource Center (Library)

Dawdy, Clifford G.; director; M.L.S. North Texas State Univ.; M.Ed. Texas A & M Univ.; B.S.Ed. Texas A & M Univ.

Coleman, Cheryl L.; M.L.S. Univ. of Oregon; B.S. Univ. of Idaho

Fogg, May Chen; M.A. Univ. of Oregon; M.L.S. Univ. of Hawaii; B.A. National Taiwan Univ.

McClellan, Nola Dee; M.A. Univ. of Denver; B.A. Colorado State Univ.

Ownbey, Donald C.; M.L.S. Univ. of Oregon; M.Ed. Linfield Col.; B.A. Linfield Col.

Wiederholt, Kathleen M.; M.A. Univ. of Oregon; M.A. Rosary Col.; B.A. Immaculate Heart Col.

Mass Communication

Reid, Richard; department chair; B.A. Univ. of Minnesota

Dunne, J. James; M.A. Chico State Col.; B.S. Univ. of Southern California; A.A. Compton Comm. Col.

Hopkinson, Michael J.; M.S. Univ. of Oregon; B.S. Univ. of Utah

Peterson, Pete; M.S. Univ. of Oregon; M.F.A. Univ. of Oregon; B.A. Eastern Michigan Univ.

Prokop, Robert L.; M.A. Southern Illinois Univ.; B.S. Institute of Design, Illinois Institute of Technology

Mathematics

Reimer, Thomas E.; department chair; M.S. Oregon State Univ.; B.S. Seattle Pacific Col.

Coalwell, Richard C.; M.A. Boston Col.; B.S. Univ. of Oregon

Fish, Joyce E.; M.S. Univ. of Oregon; B.S. Oregon Col. of Education

Kaseberg, Alice Morse; M.S. Univ. of California, Berkeley; M.A. Univ. of Oregon; B.A. Univ. of Oregon

McKenney, Jill K.; M.S. North Dakota State Univ.; B.S. North Dakota State Univ.

Miller, E. Dwight; Ph.D. Univ. of Southern California; M.A. Stanford Univ.; B.S. Stanford Univ.

Nelson, John H.; M.S. Univ. of Oregon; B.S. Oregon State Univ.

Seabloom, Edward W.; M.S. Univ. of Oregon; B.S. Oregon State Univ.

Smith, Hazel S. C.; M.S. Michigan State Univ.; B.Ed. Univ. of Alberta

Thompson, Robert; M.S. Univ. of California-Los Angeles; B.S. Univ. of California-Los Angeles; A.A. Santa Monica Col.

Yasuda, Keiichiro; M.S. Univ. of Oregon; B.S. Cornell Univ.

Mechanics

Kotsakjs, Ted A.; department chair; B.A.Ed. Central Washington Univ.; A.A. Columbia Basin Col.

Baker, Thomas L.; M.Ed. Oregon State Univ.; B.S. Oregon State Univ.; A.A. Contra Costa Col.; Journeyman

Bergen, Dean E.; IICACR Instructor Cert.; Indust. Certs.; 3M Sys. Aut Refin./Collision Rep. Shop Mgmt. and Est.; Journeyman

Brooks, James W.; A.S. Lane Comm. Col.; FAA DME; FAA Airframe and Powerplant Lic.; U.S.M.C. Capt. Ret., Aircraft Maint. Officer

Donohoe, Paul R.; FAA Airframe and Powerplant; Journeyman; FAA Commercial Pilot; FAA DME

Ellsworth, German C.; B.S. Utah State Univ.; FAA DME; FAA IA; FAA Airframe and Powerplant; FAA Pilot; Single Engine, Glider

Foster, Charles P.; A.S. Lane Comm. Col.; FAA Airframe and Powerplant; FAA Private Pilot

Jossart, Daryl A.; A.S. Pacific Univ.; Master Mechanic

Kelm, Harvey D.; A.S. Lane Comm. Col.; Blue Mountain Comm. Col. (DSL Fuel Injection); Blue Ribbon Service and Heston Service Schools

Kimball, Daniel G.; GM/Ford Apprenticeship schools; Industry clinics and seminar certificates; IICACR certified; Journeyman

Mathews, James L.; Journeyman; ASE Cert. Master Auto. Tech.

Meyer, Roland O.; Journeyman

Noble, Nels Frank; FAA AF/PP; FAA IA; Chief Inspector at LCC FAA Repair Station RS 410-2

Robillard, Richard E.; M.Ed. Oregon State Univ.; B.A. San Diego State Col.; Journeyman

Wellborn, Paul W.; Master Mechanic

Workman, L. Wayne; Diploma Eugene Voc. School; ASE Cert. Master Auto. Tech; Journeyman

Performing Arts

Reid, Richard; department chair; B.A. Univ. of Minnesota

Cammack, Nathan E.; M.A. Univ. of Washington; B.A. Univ. of Washington

Greenwood, James B., Jr.; M.M. Kansas State Univ.; B.A. Univ. of Nevada-Las Vegas

Kirchner, Wayte A.; M.Ed. Central Washington State Univ.; B.A. Central Washington State Univ.

McCarty, James E. III; M.F.A. San Diego State Univ.; A.B. San Diego State Univ.

McManus, Edward C.; M.M.Ed. Univ. of Oregon; B.M. Univ. of Oregon

Myrick, Barbara L.; D.M.A. Univ. of Oregon; M.A. Eastman School of Music; M.M. Univ. of Oregon; B.M.Ed. Montana State Univ.

Sachs, Daniel G.; M.A. California State Univ.-Sacramento; B.A. California State Univ.-Sacramento

Seifert, Jerald L.; M.A. San Francisco State Univ.; B.A. San Francisco State Univ.

Torelle, Patrick; M.A. Portland State Univ.; B.S. Portland State Univ.; Lee Strasburg Institute

Science

Armstrong, Mabel K.; department chair; M.S. Oregon State Univ.; B.S. Oregon State Univ.

Bentz, Charles A.; M.S. Oregon State Univ.; B.S. Univ. of Kansas; B.A. Univ. of Kansas

Boettcher, Robert J.; M.A. Univ. of Oregon; B.A. Jamestown Col.

Buskirk, William C.; Ph.D. Univ. of Oregon; M.A. Univ. of Oregon; B.A. San Francisco State Col.; B.S. Univ. of Nebraska

Fraga, Richard T.; M.S. Univ. of Oregon; B.S. Oregon State Univ.

Gubrud, Allan R.; Ph.D. Cornell Univ.; M.S. Syracuse Univ.; B.A. Pacific Lutheran Univ.

John, Stephen W.; M.S. Univ. of Oregon; B.S. Fort Lewis Col.

Marston, Jay R.; M.S. Univ. of Oregon; B.S. Eastern Montana Col.

Mitchell, Michael; M.A.T. Washington State Univ.; B.S. Washington State Univ.

Null, Richard L.; M.S. Portland State Univ.; B.A. Univ. of California

Pepperdine, Wendell; Ph.D. Univ. of Oregon; M.S. Univ. of Oregon; B.S. Univ. of California

Sokolowski, Gary J.; M.S. Washington State Univ.; B.S. Eastern Michigan Univ.

Wayne, Thomas A.; M.S. Univ. of Oregon; B.S. San Jose State Col.

Weitzel, Floyd E.; M.A. Univ. of Colorado; B.A. George Fox Col.

Siuslaw Area Center

Owens, Alfred E.; director; M.Ed. Univ. of Oklahoma; B.S. Central State Univ.

Spriggs, Jean M.

Small Business Development Center

Piercey, James R.; director; M.Ed. Univ. of Washington; B.A. Western Washington Col.; A.A. Everett Jr. Col.

Dotson, William O.; M.Ed. Univ. of Oregon; B.A. Colorado State Col.; A.A. Oakland City Col.

McGean, Kelly; M.S.M. Florida International Univ.; M.B.A. Florida International Univ.; B.A. California State-Hayward; A.A. Foothill Jr. Col.

Names-Cross, Jean H.; M.S. Univ. of Oregon; B.S. Univ. of Oregon

Valde, Gary L.; J.D. Univ. of Oregon; B.S. Oregon State Univ.

Social Science

Mitchell, Ronald F.; department chair; B.A. Fresno State Col.

Alvergue, George R.; M.A. Univ. of San Francisco; B.S. Univ. of San Francisco

Anderson, Ryan; M.A. Univ. of Oregon; B.S. Univ. of Oregon

Barry, Kathleen R.; M.A. Univ. of Oregon; M.A. Univ. of Newcastle; B.A. Univ. of Newcastle

Burrows, William H.; M.S. Southern Oregon State Col.; B.S. Southern Oregon State Col.

Cobb, James H.; M.A. Peabody Col. for Teachers; B.A. Birmingham Southern Col.

Delf, Gregory; M.A. Univ. of Iowa; B.A. Univ. of Iowa

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