1987-88 College Catalog

Go for Success

Lane Community College

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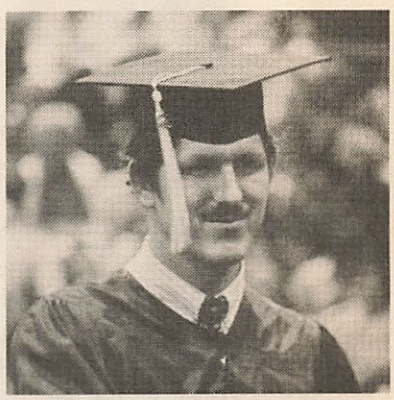


Information at a Glance

- ☐ Academic Calendar
- ☐ Building Directory and Campus Map
- ☐ District Map and Off-campus Centers
- ☐ Phone Numbers

Academic Calendar 1987-88

Summer Term 1987-88

June 9 (Tues.) . . . . . Registration Begins
June 22 (Mon.) . . . . . Summer Term Begins
July 3 (Fri.) . . . . . Independence Day Holiday
July 17 (Fri.) . . . . . First 4-week Session Ends
August 14 (Fri.) . . . . . Second 4-week & 8-week Sessions End
September 11 (Fri.) . . . . . Twelve-week Session Ends

Fall Term 1987-88

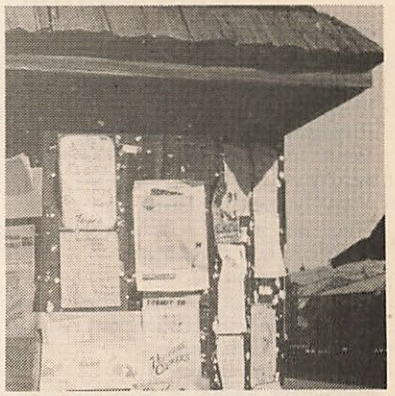
September 9 (Wed.) . . . . . Registration Begins
September 28 (Mon.) . . . . . Classes begin
September 30 (Wed.) . . . . . Last day to change schedule w/o charge
October 9 (Fri.) . . . . . Last day to register w/o late fee
November 11 (Wed.) . . . . . Veterans Day Holiday
November 13 (Fri.) . . . . . Last day to withdraw with no grade record
November 20 (Fri.) . . . . . Last day for grade option changes
November 26-27 (Thurs.-Fri.) . . . . . Thanksgiving Holiday
December 4 (Fri.) . . . . . Last day for schedule changes
December 14-18 (Mon.-Fri.) . . . . . Fall Term Examination Week
December 18 (Fri.) . . . . . Fall Term ends

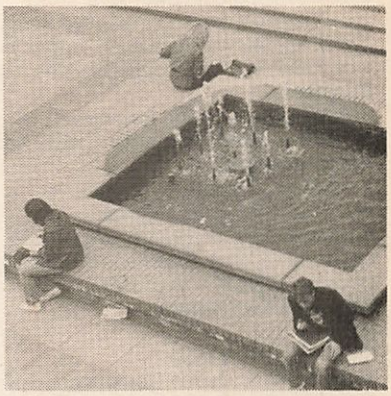
Winter Term 1987-88

December 14 (Mon.) . . . . . Registration Begins
January 4 (Mon.) . . . . . Classes begin
January 6 (Wed.) . . . . . Last day to change schedule w/o charge
January 15 (Fri.) . . . . . Last day to register w/o late fee
February 15 (Mon.) . . . . . Presidents' Day Holiday
February 19 (Fri.) . . . . . Last day to withdraw with no grade record
February 26 (Fri.) . . . . . Last day for grade option changes
March 4 (Fri.) . . . . . Last day for schedule changes
March 14-18 (Mon.-Fri.) . . . . . Winter Term Examination Week
March 18 (Fri.) . . . . . Winter Term ends

Spring Term 1987-88

March 14 (Mon.) . . . . . Registration Begins
March 28 (Mon.) . . . . . Classes begin
March 30 (Wed.) . . . . . Last day to change schedule w/o charge
April 8 (Fri.) . . . . . Last day to register w/o late fee
May 13 (Fri.) . . . . . Last day to withdraw with no grade record
May 20 (Fri.) . . . . . Last day for grade option changes
May 27 (Fri.) . . . . . Last day for schedule changes
May 30 (Mon.) . . . . . Memorial Day Holiday
June 6-10 (Mon.-Fri.) . . . . . Spring Term Examination Week
June 10 (Fri.) . . . . . Spring Term ends





Campus Map and Building Directory

Main Campus Buildings

Health Technology
Child Day Care Center, lower level
Health Occupations Department, upper level
Home Economics Department, lower level
Physical Education Building
Health and Physical Education Department, upper level
Auxiliary Gymnasium, lower level
Main Gymnasium, lower level
Men's and women's locker rooms, lower level
Weight Room, lower level
Administration
Board of Education room, upper level
Financial Services Office, lower level
Personnel, lower level
President, upper level
Institutional Research, lower level
Institutional Advancement, upper level
Staff Development, lower level
Vice President for Administrative Services, upper level
Vice President for Instruction, upper level
Vice President for Student Services, upper level
Business
Business Department, lower level
Data Processing Department, lower level
Apprenticeship
Adult Basic Education, upper level
Adult Education, upper level
Apprenticeship Programs, upper level
Cooperative Work Experience, upper level
Director ABE/ESL/WAC/HSC
Industrial Technology
Forum
KLCC-FM, mezzanine
Mass Communication Department, lower level
Television Studio, lower level
Center
Admissions Office, second floor
Bookstore, mezzanine
Counseling, second floor
English and Foreign Language Department, fourth floor
Financial Aid, second floor
Foodservices, first floor
Library, second floor
Social Science Department, fourth floor
Student Government, fourth floor
Student Health Services, first floor
Student Records, second floor
Study Skills Learning Center, fourth floor
The Torch, second floor
Veteran's Office
Women's Awareness Center
Science
Science Department
Electronics
Electronics Department, upper level
Machine Technology
Mechanics Department, upper level
Mathematics/Arts
Art and Applied Design Department, lower level
Mathematics Department, upper level
Air Technology
Auto Technology
Performing Arts
Performing Arts Department, second floor
Theatre, second floor
Campus Services
Campus Services, second floor
Lost and Found, second floor
Mailroom, first floor
Purchasing, first floor
Security & Communications, second floor
Warehouse, first floor
Restricted Parking
Northwest Parking Lot
West Parking Lot
South Parking Lot
East Parking Lot
Northeast Parking Lot

Physical Education Building Facilities

Main Gym–140' x 120' . . . . . Room PE 201-202
6 volleyball courts, 10 badminton courts, 7 basketball courts.
Bleacher seating capacity approximately 2,500.
Special features: Inter-communication system, large storage area, electrically operated moving partition, space for television and radio broadcasting, dual- and single-controlled basketball and wrestling scoreboard, public address system.

Auxiliary Gym–99' x 80' . . . . . Room PE 101
From floor to beam 25'6". Use: Primarily for gymnastics, conditioning classes, and dance.

Weight Room–40' x 80' . . . . . Room PE 123
Approximately 12' ceiling
Use: for heavy weight lifting apparatus and therapeutic exercise machines. Classes in body building and weight lifting, combined under the title Strength Training, and developmental programs. Used both on an individual and class basis.

Corrective Therapy Laboratory . . . . . Room PE 112
Use: This area has multiple uses such as lab for first aid classes in relaxation and massage, training room for care and prevention of injuries, rehabilitation, light exercise for corrective and adaptive program.

This area is divided to allow utilization by both men and women. Each area is directly accessible to the training rooms. Special facilities include therapeutic shower, saunas, toilet for the handicapped, ice machine, refrigerator, and therapeutic modalities (ultraviolet, ultrasound, diathermy).

Athletic Training . . . . . Room PE 114
Located adjacent to the therapy laboratory. This area is used primarily for LCC athletes. Examination, referrals, care and prevention of injuries.

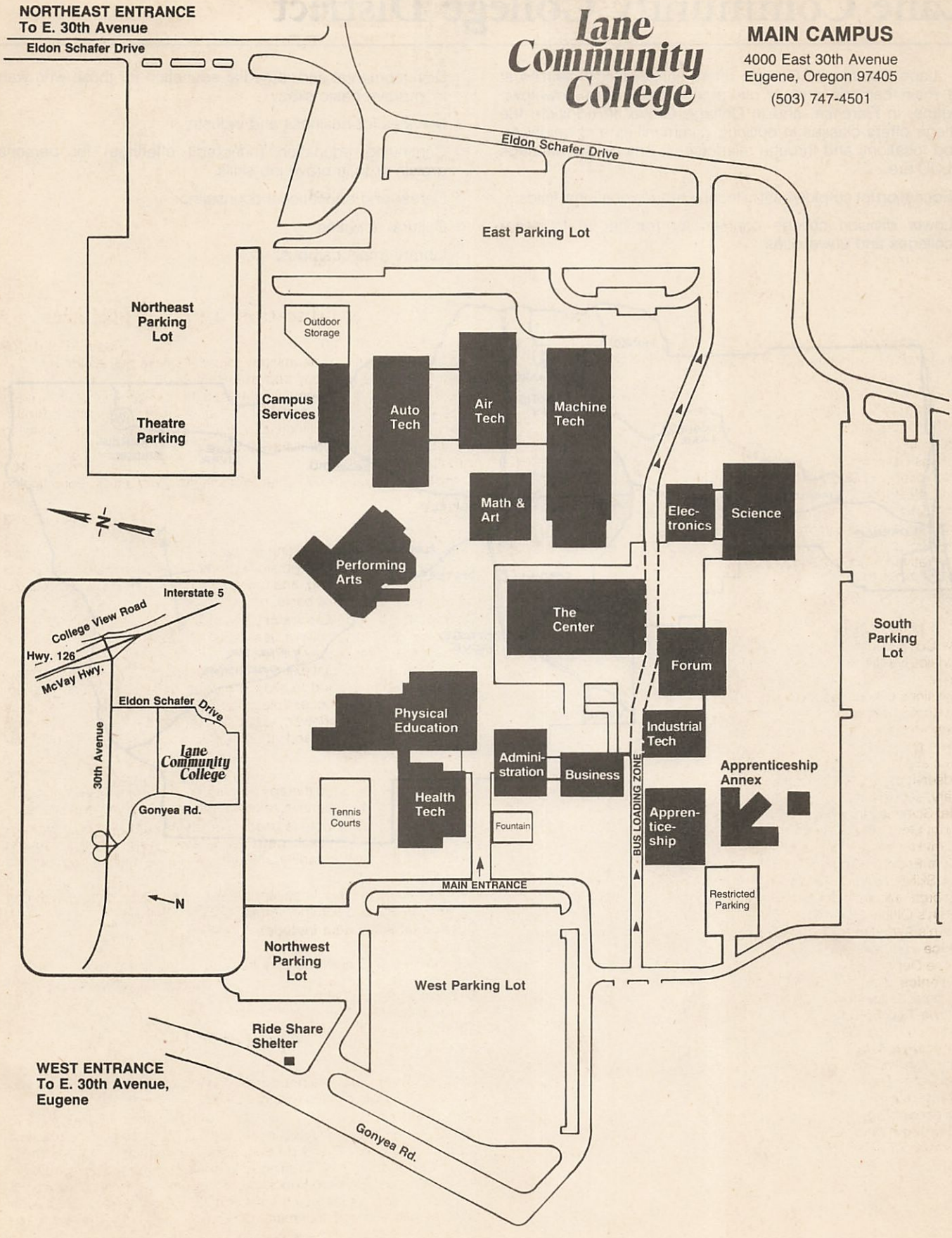
Room PE 125 This room is used primarily as a multi-purpose classroom. Conditioning classes, personal defense, wrestling, exercise and weight control, and a variety of other classes offered throughout the school year.

Tennis Courts Four outside tennis courts are used extensively during the fall, spring, and summer terms.

Outside facilities also include:
Track
10K certified TAC cross-country trail
Running trails
Several PE playing fields
Soccer fields (2)
Archery range
Baseball field
Golf driving range

Locker Rooms Fully equipped locker rooms are available for men and women, and for LCC faculty and staff.

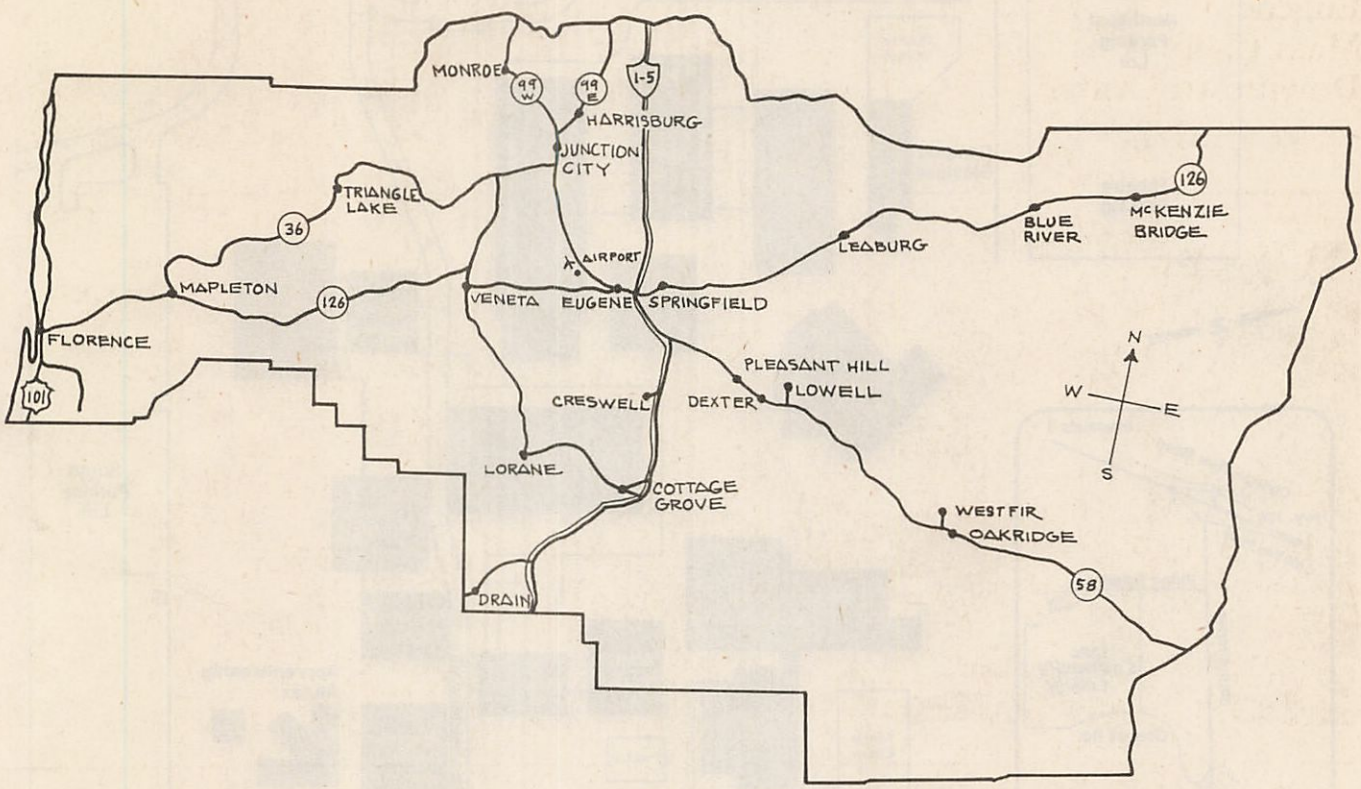
Classroom Areas . . . . . Rooms PE 239, PE 240
Health classes are conducted in the classrooms upstairs in the physical education facilities. First Aid Laboratory is in room PE 115. Room PE 303 is designed as a PE Training/AV Studio for small group instruction. The Health and Physical Education offices and conference rooms PE 214 and 217 are located on the second floor of the Physical Education complex. Athletic and Intramural Offices, PE 204, are adjacent to the lobby of the Main Gymnasium.

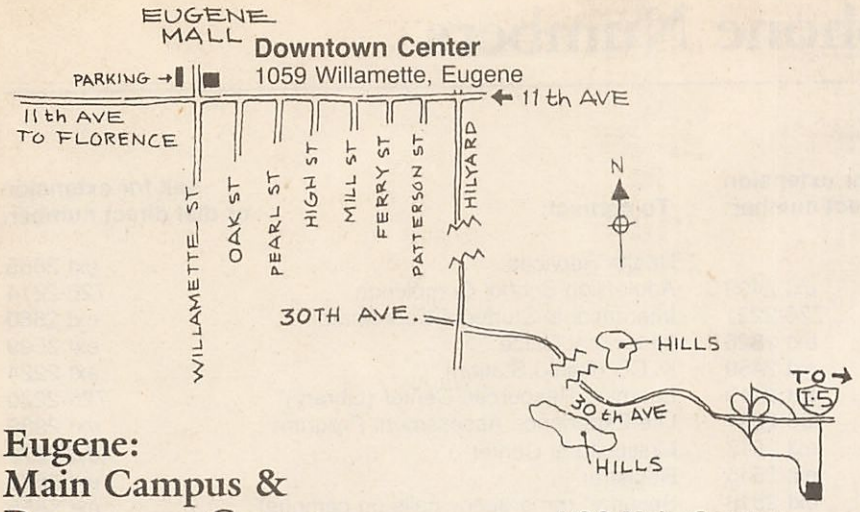

NORTHEAST ENTRANCE
To E. 30th Avenue
Eldon Schafer Drive
Lane Community College
MAIN CAMPUS
4000 East 30th Avenue
Eugene, Oregon 97405
(503) 747-4501
Eldon Schafer Drive
East Parking Lot
Northeast Parking Lot
Theatre Parking
Outdoor Storage
Campus Services
Auto Tech
Air Tech
Machine Tech
Math & Art
Performing Arts
Electronics
Science
The Center
Forum
South Parking Lot
Physical Education
Administration
Business
Industrial Tech
Apprenticeship Annex
Health Tech
Tennis Courts
Fountain
Apprenticeship
BUS LOADING ZONE
MAIN ENTRANCE
Restricted Parking
Northwest Parking Lot
West Parking Lot
Ride Share Shelter
WEST ENTRANCE
To E. 30th Avenue, Eugene
Gonyea Rd.
Interstate 5
College View Road
Hwy. 126
McVay Hwy.
Eldon Schafer Drive
30th Avenue
Lane Community College
Gonyea Rd.
N

Lane Community College District

Lane Community College offers services and classes at the main campus and at off-campus centers in downtown Eugene, in Florence, and in Cottage Grove. In addition, the college offers classes in outlying communities and neighborhood locations and through telecourses. Among the offerings of LCC are:

- Education for employment in technical and vocational fields.
- Lower division college courses for transfer to four-year colleges and universities.
- Developmental and remedial education for those who want to improve basic skills.
- Services for business and industry.
- Continuing education (noncredit offerings) for personal growth or to improve job skills.
- Career and educational counseling.
- Cultural activities.
- Library (main campus).

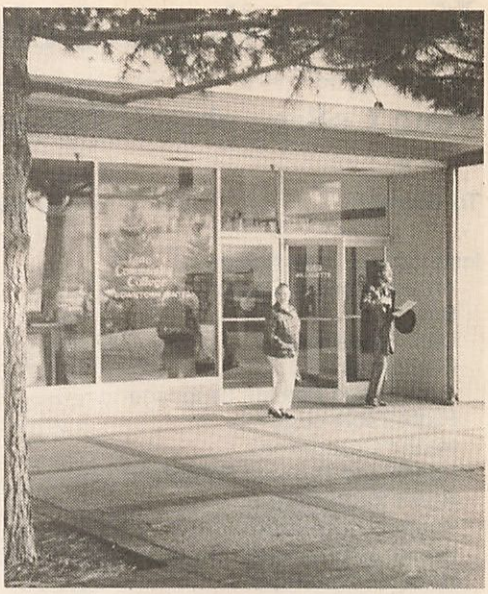




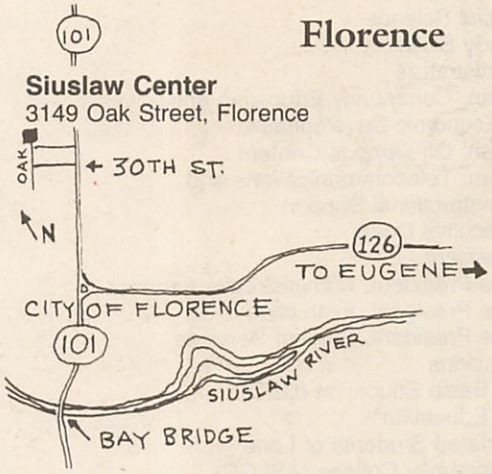
Downtown Center
1059 Willamette, Eugene

Eugene: Main Campus & Downtown Center

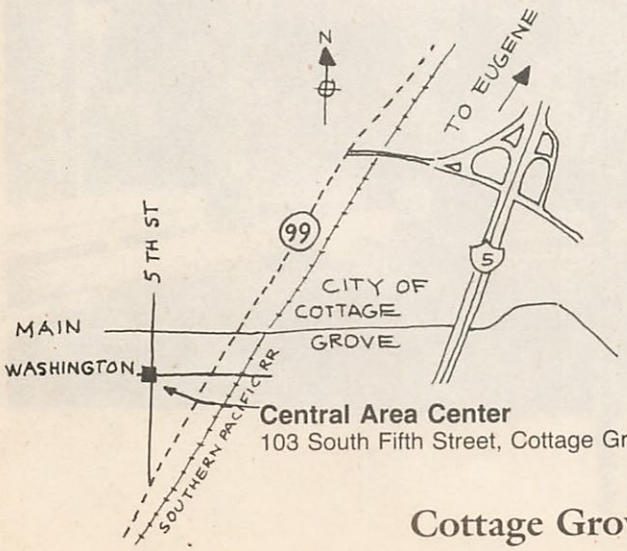
LCC Main Campus
4000 East 30th Avenue, Eugene



Florence



Siuslaw Center
3149 Oak Street, Florence



Central Area Center
103 South Fifth Street, Cottage Grove

Cottage Grove

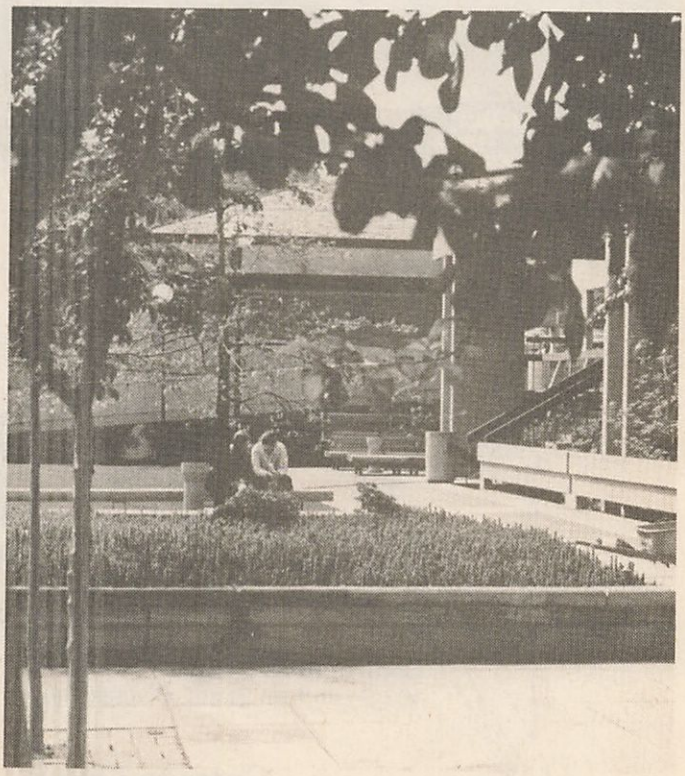
Key College Telephone Numbers

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
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
Home Economics	ext 2519
Human Development	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, Off-campus Centers	ext 2855
Dean, Telecommunications and Instructional Support	ext 2360
Executive Dean	ext 2302
President	ext 2200
Vice President, Administrative Services	ext 2311
Vice President, Instruction	ext 2306
Vice President, Student Services	ext 2315
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
Box Office	726-2202
Business Assistance Center	726-2255
Career Information Center	ext 2297
Central Area Center (Cottage Grove)*	942-4202
Child Development Center	ext 2524
Community Education and Economic Development	ext 2901
Cooperative Work Experience	726-2203
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
English as a Second Language	726-2253
Evening College Administrator*	ext 2900
Financial Aid	726-2205
Financial Services Counter	ext 2595
Student Loan Payments	726-2210
Tuition and Other Payments	ext 2610

To contact:	Ask for extension or dial direct number:
Health Services	ext 2665
Adult High School Completion	726-2214
International Students Coordinator	ext 2660
Intramural Office	ext 2599
KLCC (Radio Station)	ext 2224
Learning Resources Center (Library)*	726-2220
Life Experience Assessment Program	ext 2939
Multicultural Center	ext 2276
Registrar	ext 2685
Security* (emergency calls on campus)	ext 5555
General Security Information	ext 2558
Siuslaw Area Center (Florence)*	997-8444
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 2350

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



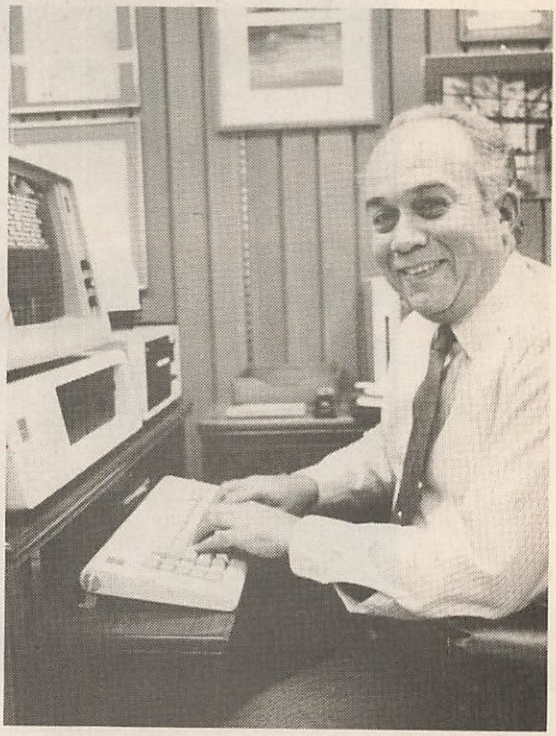
About LCC

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 providing the needs of District residents and students. In 1985 LCC was selected as one of the top five community colleges in the United States by a national panel of education experts.

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. They come from many national, racial, ethnic, and economic backgrounds. Their common goals are self-development and greater community service.

LCC offers more than 50 vocational-technical 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. Many people take advantage of the offerings of LCC's Small Business Development Center. The Dislocated Worker Program, in conjunction with the Southern Willamette Private Industry Council, assists unemployed workers in developing job-finding skills. The English as a Second Language Program 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 updated as the community's needs change. We have an exceptionally talented teaching staff, noted for creativity and innovation.

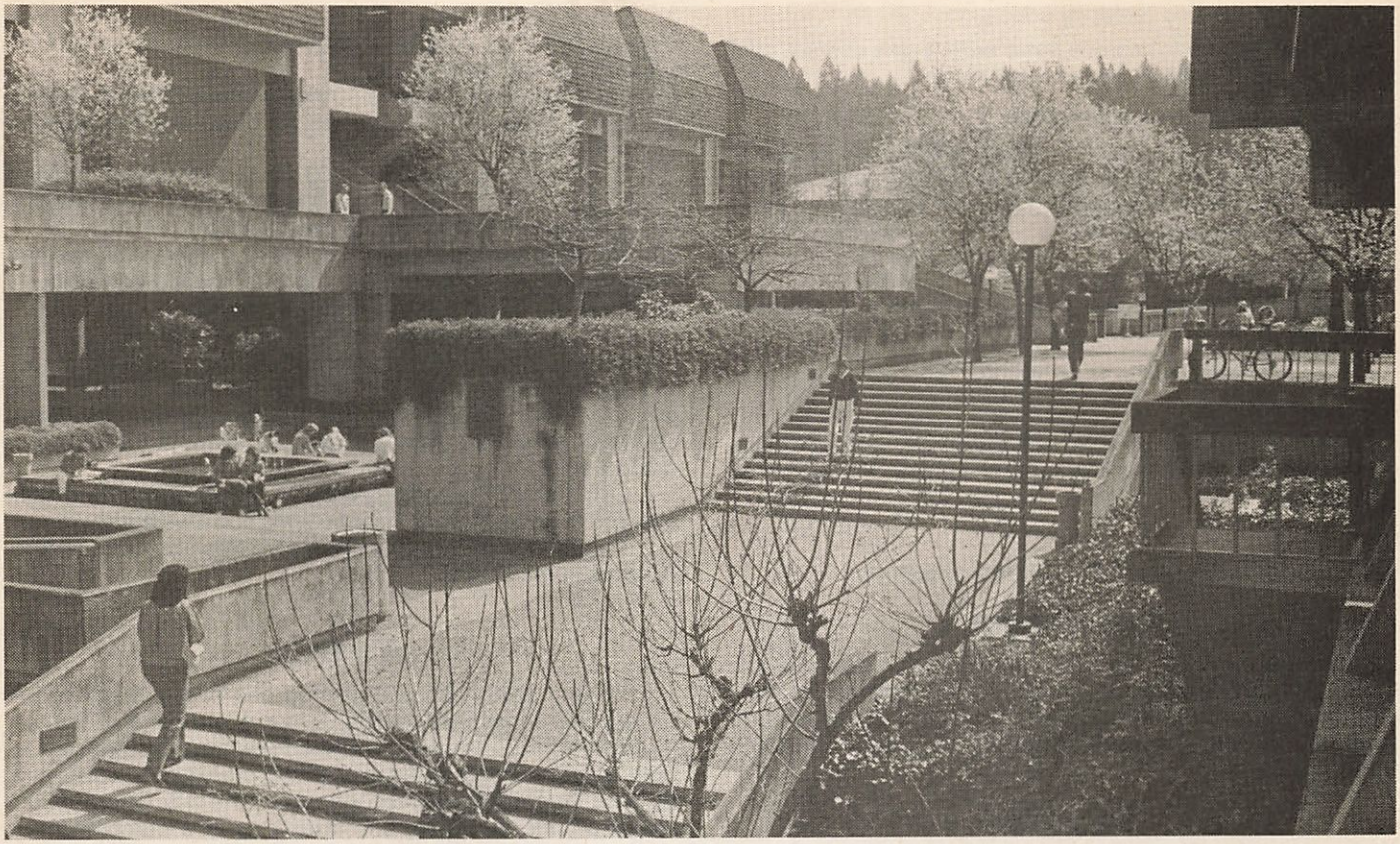
We strive to make the College's offerings accessible to students in our district. Tuition is low, and classes are held throughout the College District. In addition to the main campus, located between Eugene and Springfield, we have teaching centers in Florence, Cottage Grove, and downtown Eugene. Other 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 certainly do 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.

Richard M. Turner, III
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

Established to provide comprehensive, high-quality education to meet the needs of district residents, LCC offered classes for the first time in July 1965. By fall of that 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 and 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 1986-87 general budget was $29,635,100, of which approximately 42 percent came from local property taxes and 19 percent from tuition and fees. State funding was based on enrollment of 7,541 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.

Programs and Services

Lane Community College offers:

- Education for employment in technical and vocational fields.

  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, Respiratory Care, 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 vocational-technical 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.

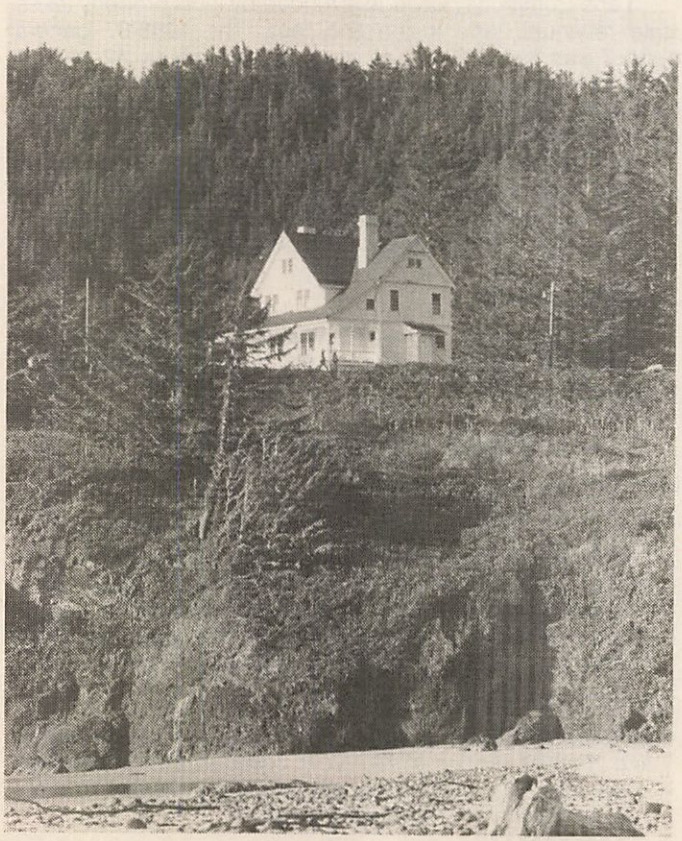
  Library cards are available to District residents.

Enrollment

During the 1986-87 academic year, 29,792 different people enrolled in LCC classes. Of these, 11,542 enrolled in credit programs and 20,192 in noncredit Community Education programs and classes. The average age was 29 and the age range was 13 to 82.

Facilities

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



Off-campus centers in Florence, Cottage Grove and downtown Eugene offer credit and noncredit courses to residents in outlying parts of the District.

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

The Central Area Center, 103 South Fifth Street, Cottage Grove, provides educational services for residents in the southern and eastern parts of the College District.

The Siuslaw Area Center in 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.

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 the construction money came from local taxes and two-thirds from state and federal grants.

LCC has received national recognition for efforts to reduce energy usage. The College's energy management program has 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.

Barbara M. Doster, postmaster, Mapleton, 1984 to present; term expires 1988.

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.

Charlene L. Curry, educator, Springfield, 1978 to present; term expires 1989.

Zone 3–Marcola and Springfield school districts.

William D. Manley, businessman, Eugene, 1984 to present; term expires 1988.

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

Mary L. Unruh, retired stockbroker, Eugene, 1982 to present; term expires 1990.

Zone 5–Central Eugene

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

At-Large

Martin E. Lewis, LCC student, Eugene, elected in 1986; 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.

- **Richard M. Turner, III,** D.M.E., L.H.D., President; at LCC since 1985.
- **Jacquelyn M. Belcher,** M.A., J.D., Vice President for Instruction; at LCC since 1986.
- **John E. Carter,** M.Ed., Vice President for Student Services; at LCC since 1967.
- **Paul Colvin,** M.A., Interim Vice President for Administrative Services; at LCC since 1970.
- **Larry J. Warford,** M.Ed., Executive Dean, Office of the President; at LCC since 1978.
- **James E. Ellison,** M.S., Dean for Telecommunications and Instructional Support; at LCC since 1967.
- **Larry D. Murray,** M.S., Dean for Community Education and Economic Development; at LCC since 1968.

Emeriti

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

Oregon Board of Education

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

- **Thelma Elliot,** Portland;
- **Clifford Freeman,** Portland;
- **Ruth Hewett,** Salem;
- **Don Kruse,** Roseburg;
- **Roba Rathkey,** McMinnville;
- **Gene Stunz,** Nyssa;
- **Jane Reyneke,** Grants Pass.

State Department of Education administration includes:

- **Verne Duncan,** Superintendent of Public Instruction;
- **Michael Holland,** Executive Director, Community College Services.

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. 1986-87 members are:

- **Larry Brown,** term expires 1987, Vice President, Jerry Brown Co., Junction City.
- **Carole Daly,** term expires 1988, Director, Program Development, College of Business Administration, University of Oregon, Eugene.
- **Linda Hunter,** term expires 1987, Vice President, Cottage Grove Bank.
- **Catherine Lauris,** term expires 1989, retired editor, University of Oregon, Eugene.
- **Gary Parrish,** term expires 1988, Vice President, Freedom Federal Savings & Loan, Corvallis; Springfield.
- **Dean Van Leuven,** term expires 1987, attorney, Veneta.
- **C. Peter Sorenson,** term expires 1989, attorney, Eugene.

Advisory Committees

Several hundred volunteers are appointed by the Lane Community College Board of Education to 50 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.

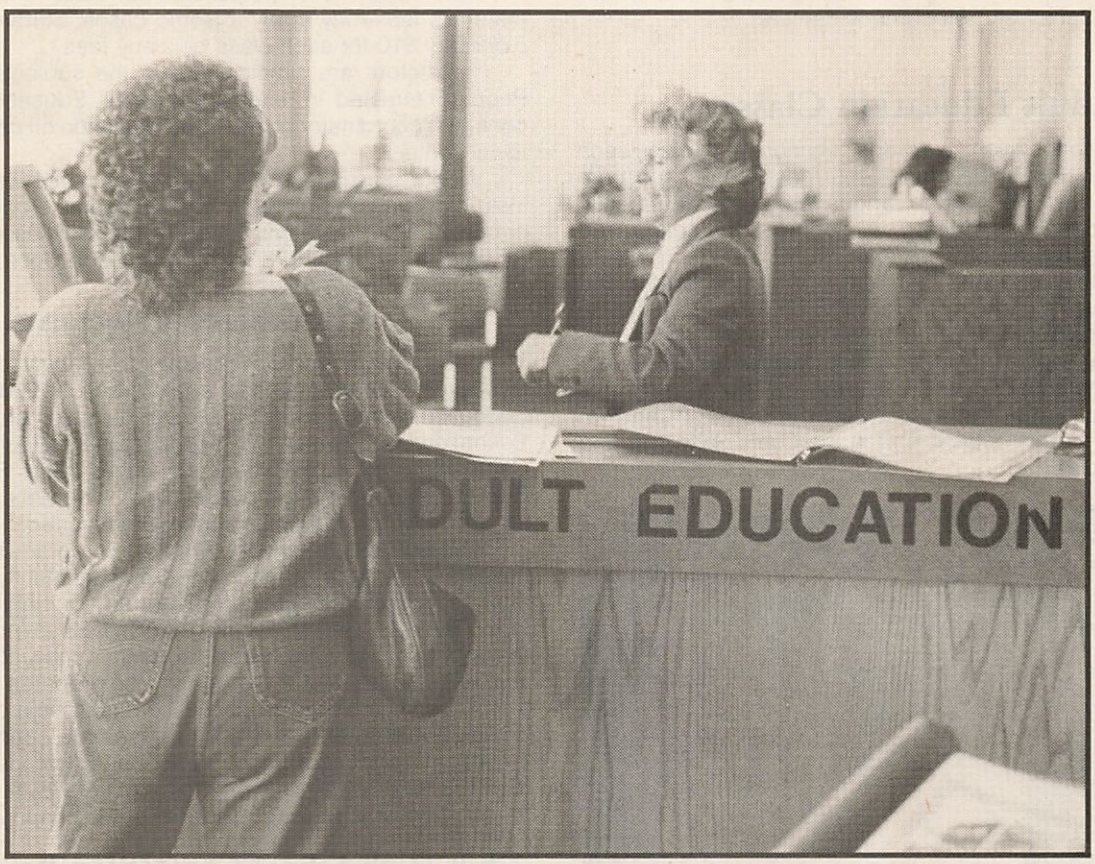
Each of the College's vocational programs has an advisory committee. The College also has advisory committees that take a general view of vocational education, women's programming, high school relations, and evening programs.

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/ 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.

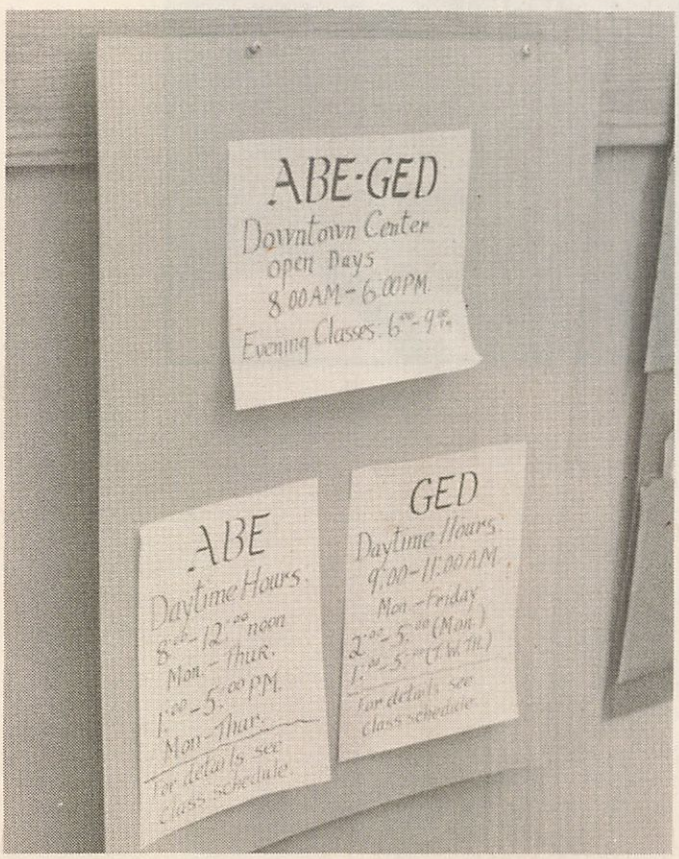
The division offers programs for adults who want to improve basic skills, like reading and writing, or who wish to complete high school, or to learn English as a second language.

In addition, services are offered through the Small Business Development Center and off-campus centers.

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 $1.10 per hour; tuition for a typical 30-hour class is $33. Rent and materials fees may apply in some cases. Students age 62 or older pay $10 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 Completion 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 Completion Program

Lane Community College, in cooperation with local school districts located within the college district, offers an Adult High School Completion Program (AHSCP). The AHSCP 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 AHSCP has two components: (1) a classroom-based program (High School Completion - HSC) and (2) an experience-based option (Life Experience Assessment Program - LEAP).

Enrollment Procedures

The AHSCP 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 HSC 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, AHSCP students are awarded an Adult High School Diploma in June.

High School Completion (Classroom Option)

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

Adult high school courses 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 Completion 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 AHSCP 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 Completion Program office at 726-2214.

The Adult High School Completion 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 Educational 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; Central Area Center in Cottage Grove; Siuslaw Area Center in Florence; Lane County Jail; and various locations in Veneta, Springfield, and Oakridge. In addition, GED preparation is available through LCC's Mobile Classroom. 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.

Apprenticeship Training

Training for registered apprentices is offered through Adult Education 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: Inside Wireman, Power Lineman, Industrial Electrician, Millwright, Plumber, Radio-TV, Steamfitter, Sheetmetal, Trowel Trades, Cable TV, Pipefitters, Power Plant Operators, CATV Lineman.

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 and the apprenticeship coordinator.

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.

Employment Skills Training

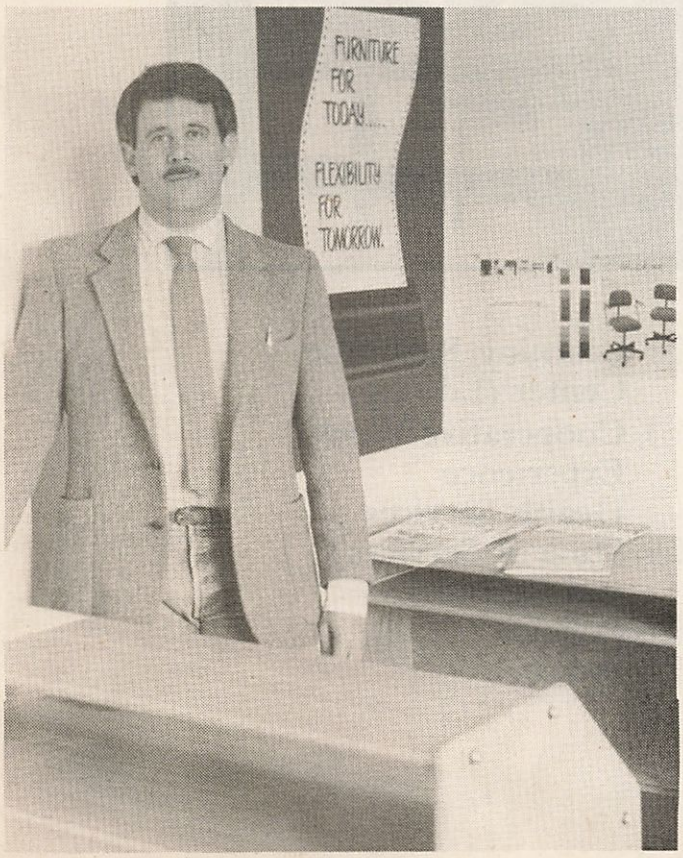
During 1985-1986, LCC's Training and Development Department received federal Job Training Partnership Act (JTPA) funds to operate the Office and Accounting Skills Training and Dislocated Worker programs. The Office and Accounting Skills Training Program provided six-month and three-month intensive clerical skills training to 80 Lane County economically disadvantaged residents. The Dislocated Worker Program provided career life planning, job search assistance, and in some cases skills upgrading or retraining, to 500 unemployed Lane County residents who lost their jobs due to changes in the economy.

The federal Job Training Partnership Act (JTPA) funds for these activities were administered locally by the Southern Willamette Private Industry Council.

Small Business Development Center

The Lane Community College Small Business Development Center provides services and resources to Lane County urban and rural businesses, professional organizations, and farm owners and managers. The center also is active in economic development in Lane County and Oregon.

The center, located at the LCC Downtown Center, provides information about business counseling, special business related workshops and classes, and access to a library and audiovisual resources.



The center offers three noncredit business management programs that provide information to 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 developing programs, the center utilizes faculty from the college and consultants and resource specialists from outside the college. For information, contact the Business Assistance Center or a current schedule of programs.

LCC's Small Business Development Center served as the model for a number of similar services that have formed the Oregon Small Business Development Center Network.

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, 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.

For further information about the Work Activity Center, contact Howard Bird, coordinator.

Student Information

- ☐ How to Get Started at LCC
- ☐ Academic Programs and Procedures
- ☐ Money Matters
- ☐ Counseling and Human Development
- ☐ Study Skills Learning Center
- ☐ Learning Resource Center (Library)
- ☐ Cooperative Work Experience
- ☐ Health Services
- ☐ Student Services and Resources
- ☐ Policies
- ☐ Index

How to get started at LCC

Admissions

Start planning now. There are many programs at Lane Community College. Read about them because one may be exactly what you want. 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 the program you want, contact the LCC Admissions Office as soon as possible. LCC is also a good place to start if you are uncertain about your educational goals.

Call, write, or visit the LCC Admissions Office 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 you are 18 years of age or older, no high school diploma is necessary. If you are under 18, you must be a high school graduate or follow one of the three procedures listed below.

- If you are currently enrolled in high school and plan to enroll at LCC after graduation, your counselor has the forms to fill out and information you need for admission to the college.
- If you are under 18, *not* a high school graduate and *not* attending high school, you 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 you submit your application for admission.
- If you are under 18 and want to take classes at LCC for dual credit (college credit *and* high school credit) or want to attend LCC's High School Completion program, you should obtain information from your high school counselor or principal about a release to attend LCC. (When you have the release form, it must be submitted to LCC's High School Completion Office before you may enroll in credit classes.)

Complete your application for admission. Applications are available from the LCC Admissions Office and should be returned to that office as soon as possible. Verification of your social security number (student identification number) should be included with the application. (Send a copy of your social security card, not the original, or bring your card to the Admissions Office.)

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.

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 your major will be available.) Some programs, which are identified by a single asterisk on the back of the application for admission, accept only a limited number of students. The earlier your date of application, the better your chance for acceptance into that program. Registration, including payment, for these programs occurs immediately following the required program orientation. A student who does not attend the limited enrollment program orientation will lose his or her chance to be accepted into that major and will have to reapply for a later term.

Programs with special admission procedures. If you plan to major in Flight Technology, Associate Degree Nursing, Practical Nursing, Dental Hygiene, Dental Assisting, 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 your work in high school or other colleges are not necessary for admission to LCC. However, official transcripts from schools you have attended since high school are needed for Financial Aid, Veterans' benefits, or if you wish previous credit to apply toward your graduation from an LCC program.

Physical Exams If you plan to major in Flight Technology, Associate Degree Nursing, Practical Nursing, 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 you register for your 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 their major and in registration appointments for fall term if they apply for admission by June 30. All students have the same preference after their first term.

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 5 for Winter Term, and March 5 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, the Siuslaw Area Center at Florence, the Central Area Center in Cottage Grove, and other classes scheduled away from the main campus, may be completed at each of the centers.

Registration

New Students If you have finished all of the admission requirements, you are ready to begin the registration process. You should have received a registration permit when you applied for admission. That card must be validated at your program orientation and at the Testing Office before you can register. See the academic calendar for registration days.

Continuing Students (those staying at LCC from one term to the next) You simply register according to the continuing student registration schedule in the term's schedule of classes. Both spring and summer term students register as continuing students fall term.

Returning Students (those who have skipped one or more terms) Visit Student Records to reactivate your file and receive a registration permit.

All Students may register at their appointed time or at any later scheduled registration time. All money owed to the college from previous terms must be paid along with tuition and fees for the current term.

Mail-In Registration By using a mail-in form appearing in the term class schedule, mail-in registration is possible for some evening credit classes for in-district residents. Classes eligible and the deadline for receiving mail-in registration are specified in each term schedule. Students may also register for these classes during regular registration. Mail-in registration may also be used for TV classes.

Schedule Changes Students may change their term schedules during regular registration hours beginning the day after their initial registration.

Late registration and schedule changes are processed in the gym lobby during the first week of classes. After that time, they are handled in the Admissions Office. Beginning the fourth day of classes, any additions or new registrations require the instructor's signature and the department stamp.

Also beginning the fourth day of classes, a fee of $1.00 must be paid for each revised schedule, which may include any number of adds, drops, and credit changes. Only one schedule revision is possible on a given day. Students who register late or register off-campus after the term has started will be charged the schedule change fee beginning the next calendar day. There is no charge for a complete withdrawal from all classes.

Any waivers of the schedule change fee must be approved by the director of admissions or registration supervisor. Waivers will be approved for the following reasons only:

- Cancelled classes
- Errors caused by incorrect information appearing in the term schedule.

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 Office. 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 Center

Second floor, Center Building

The Counseling Center is an excellent source of information about the college, its programs, and services.

The goal of the Counseling Department is to help students meet their educational goals. Each academic department at LCC has an assigned counselor. In addition, counselors are available for consultation and referral on personal issues of all kinds. For more information, read about the services of the Counseling and Human Development Department in this section of the catalog.

Veterans' Office

Second floor, Center Building

If you are eligible for veterans' benefits you should contact the Veterans' Office for information on how to apply for the GI Bill. Each student using the GI Bill must report his/her schedule to the Veterans' Office each term and maintain satisfactory progress.* The Veterans' Office arranges for counseling and tutorial services to veterans.

Office hours are generally 8 a.m. to 2 p.m. Monday through Friday.

Students receiving Veterans' Administration educational benefits are responsible for demonstrating satisfactory progress toward a degree in an identified program of study. By regulation, ***the VA will only pay for classes and grades that advance the student toward his or her stated program.*** Therefore, a student who takes a class or receives a grade in a class that is not specifically required to earn the degree declared for VA purposes will not be paid for that class.

For payment purposes, 12 credits is considered full-time; 9-11 credits is three-quarter time; and 6 to 8 credits is half-time. Credit requirements vary during summer term.

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 that he/she fails to meet minimum standards

of academic progress for three consecutive terms, or receives all 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 Veteren's Administration.

**Veterans Satisfactory Progress Policy: Effective Spring Term, 1976 (revised September, 1985).*

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

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 (child care, 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:

- Reentry 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 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

Room 213C, Center Building

LCC is concerned about educational equity for disabled students. Support Services for Disabled Students is a program designed to meet the needs of credit, high school completion, adult education, and adult basic education students. The program offers a diverse number of services and equipment including:

- Academic counseling
- Career planning
- Admissions/registration assistance
- Early registration (only when receiving direct services)
- Sign language interpreting
- Notetaking
- Reading/recording textbooks, tests, notes
- Mobility aid
- Accessibility map with Braille legend
- Braille typewriter, Perkins Brailler
- Resource and referral information for students, staff, and community
- Disabled Students' Guide to Lane Community College handbook
- Minor emergency wheelchair repair
- VLAA-Voice of Limited Abilities Association
- Support groups
- TDD-Telecommunications device for the deaf
- Elevators with brailled control panels
- Disabled parking spaces
- Elevator keys
- Lockers

In addition, there are limited individualized services depending on the unique needs of the disabled student. Students requiring attendant care while on campus must provide their own attendants.

A disabled student wishing any direct services should contact the coordinator of the program as soon as possible each term for scheduling purposes.

Other departments that provide special services for disabled persons include:

- The Health and Physical Education Department offers a PE Correctives course for temporarily or permanently disabled persons. The instructor works with the student to set up an individualized exercise program.
- The Math Resource Center has a closed-circuit television for use by visually impaired students.
- The Social Science computer lab (fourth floor, Center Building) has a detachable keyboard and lap board for use by mobility impaired students and a closed-circuit television for visually impaired students.

  A one-credit processing class must be taken to access the speech synthesizer.
- The Library has an electric door, cassette players to check out, raised study tables, and a closed-circuit television for use by visually impaired students. A disabled student may also be assisted with ordering material from the Oregon State Library Services for the Blind and Physically Handicapped.
- The Student Health Center provides limited restroom assistance and assistance with medication during the regular school year only.

The campus itself has an interconnecting ramp system which makes most areas accessible. Restroom facilities are equipped with handrails, and the Center Building has a low-level public telephone on the first floor.

For further information and/or a copy of the handbook stop by Room 213C, Center Building.

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 Center is open Monday through Thursday from 5 to 8 p.m. throughout the academic term. The Career Information Center is open Monday and Tuesday until 8 p.m., and the Testing Office is open Monday and Thursday until 8 p.m. throughout the academic year. Student Services at the Downtown Center is open until 7 p.m., Monday through Thursday.

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 adds, drops, transcript orders, etc., may be requested through a drop box near the Admissions Office. Receipts or information will be mailed to students the following day.

Other Resources

Child Development Centers

LCC has three Child Development Centers. The Infant and Toddler Center and one preschool center are located off campus, and one preschool is located on campus. 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 Department office, room 107 of the Health Building 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 7:30 a.m. to 5 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 an hourly 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 Central Area Center in Cottage Grove.

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 or the Evening/Weekend College Administrator.

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 outreach centers.

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

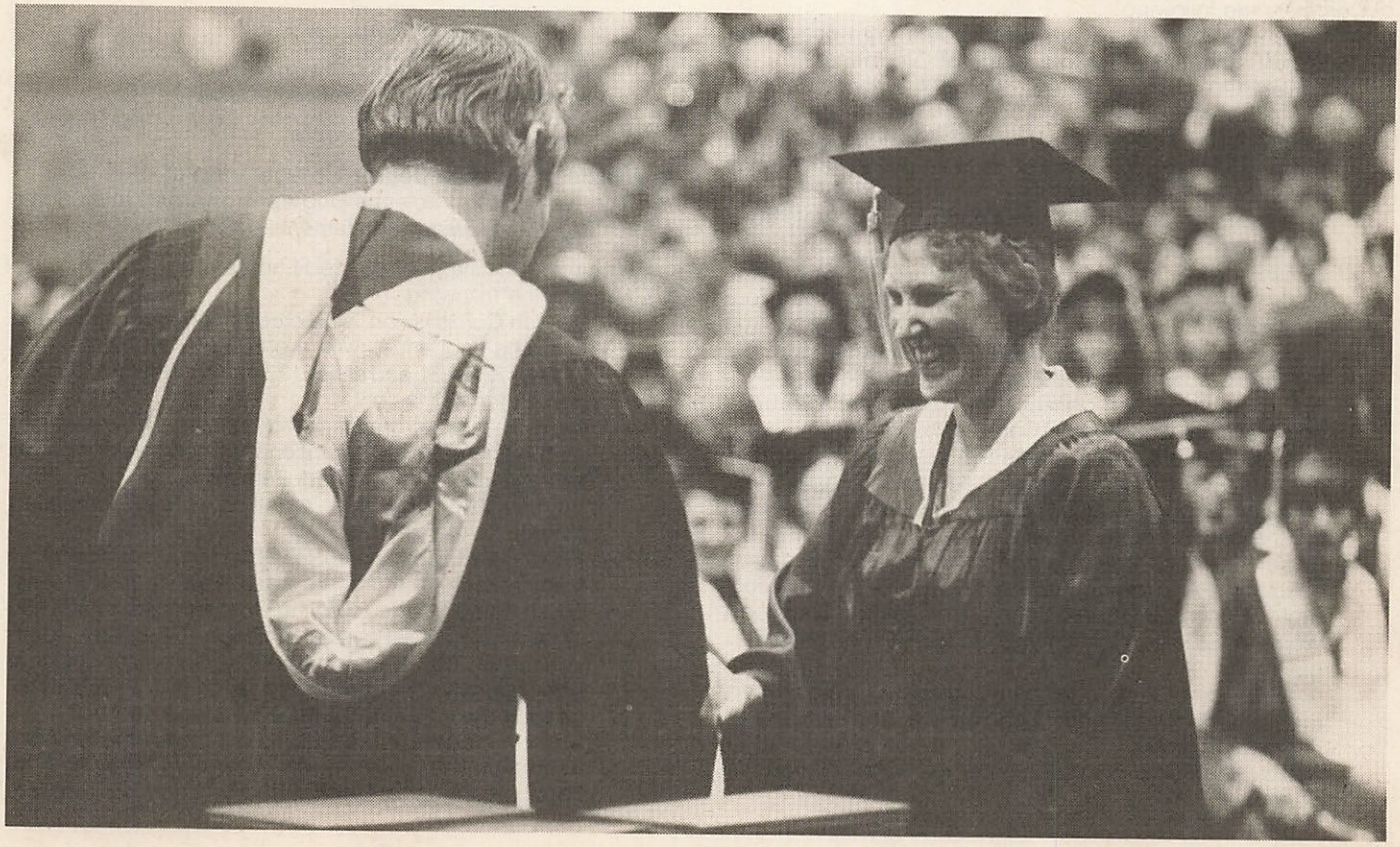
LCC telecourses are available on a number of different channels. Most are available in Eugene-Springfield; others are shown throughout Lane County.

Tuition for telecourses is the same as for other courses. In addition, students pay a $7 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 1986-87 school year approximately 200 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's 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, performing arts, and art and applied design.

For more information about the College High Program, students, parents, or school districts should contact coordinator Judith Gabriel at LCC's main campus.

Degrees, Certificates, and Diplomas

New degree requirements are in effect for students who started a program fall term 1986. Students who started a degree before that time and who are continuing work on a degree after an interruption will be required to complete their degrees under these new requirements. Students who are continuing work without interruption should proceed under the former degree requirements.

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 will meet this requirement.)
  - Physical Education, three credit hours to be completed in three or more terms.
  - 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).
  - 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.
- 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).
  - A maximum of 18 credits of Supervised Field Experience and/or Cooperative Work Experience may be applied.
  - The developmental courses listed below ***may not*** be used in satisfying degree requirements:

    Basic English Grammar/Sentence Writing (0.525.3)
    Basic Paragraph Writing (1.525.4)
    Basic Reading/Spelling (0.525.5A)
    English/Second Language (0.747.1)
    Learning Skills Lab (0.593)
    Morphographic Spelling (0.525.2)
    Phonetic Spelling (0.525.2)
    Prep Vocabulary (0.527)
    Reading (0.529)
    Read, Write, Spell 1 (0.525.5)
    Read, Write, Spell 2 (0.525.6)
    Textbook Reading (0.773)
    Thinking Skills (0.527.1)
    Language Lab (0.593.1)
    Elementary Algebra (4.306)
    Math 1 (4.200)
    Math 2 (4.202)
    Math 3 (4.204)
    Math Renewal (6.269)

    *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)
    Intro to Business Data Processing (CS 241)
    Intro to Computer Info Processing (CS 131)
    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 will meet this requirement.)
  - Physical Education, three credit hours to be completed in three or more terms.
  - 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, Elecronics*, Biology, Physics, Geology, Computer Science, (Programming Language classes only)**, Physical Anthropology, Physical Geography (Geog 101).
  - 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.
- 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).
  - — A maximum of 18 credits of Supervised Field Experience and/or Cooperative Work Experience may be applied.
  - — The developmental courses listed below *may not* be used in satisfying degree requirements:

Basic English Grammar/Sentence Writing (0.525.3)
Basic Paragraph Writing (1.525.4)
Basic Reading/Spelling (0.525.5A)
English/Second Language (0.747.1)
Learning Skills Lab (0.593)
Morphographic Spelling (0.525.2)
Phonetic Spelling (0.525.1)
Prep Vocabulary (0.527)
Reading (0.529)
Read, Write, Spell 1 (0.525.5)
Read, Write, Spell 2 (0.525.6)
Textbook Reading (0.773)
Thinking Skills (0.527.1)
Language Lab (0.593.1)
Elementary Algebra (4.306)
Math 1 (4.200)
Math 2 (4.202)
Math 3 (4.204)
Math Renewal (6.269)

*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)
Intro to Business Data Processing (CS 241)
Intro to Computer Info Processing (CS 131)
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 chosen from one of the following groups:
    Communication Skills 1, 2, 3; Writing 121, 122, 123; 227 Business English 1,2.
  - — Math 100 (Four credits) or four one-credit modules taken from Math 2 and/or 3, or demonstrative equivalent competency.
  - — Health, three credit hours, HE 250, HE 251, or HE 199.
  - — Physical Education, three credit hours to be completed in three or more terms.
  - — 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, Applied Economics, Personal Finance, Philosophy, Religion.
  - — 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).
  - — 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.
- 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).
  - — 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.
  - — The developmental courses listed below *may not* be used in satisfying degree requirements:

Basic English Grammar/Sentence Writing (0.525.3)
Basic Paragraph Writing (1.525.4)
Basic Reading/Spelling (0.525.5A)
English/Second Language (0.747.1)
Learning Skills Lab (0.593)
Morphographic Spelling (0.525.2)
Phonetic Spelling (0.525.1)
Prep Vocabulary (0.527)
Reading (0.529)
Read, Write, Spell 1 (0.525.5)
Read, Write, Spell 2 (0.525.6)
Textbook Reading (0.773)
Thinking Skills (0.527.1)
Language Lab (0.593.1)
Elementary Algebra (4.306)
Math 1 (4.200)
Math Renewal (6.269)

*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)
Intro to Business Data Processing (CS 241)
Intro to Computer Info Processing (CS 131)
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 121, 122, 123 or 227; Communication Skills 1, 2, 3, Business English 1, Business English 2 (grade of C or higher).
  - — Mathematics 1, Math Renewal or Business Math, (three credits) with a grade of C or better or demonstration of equivalent competency.
  - — Health and/or Physical Education, three credits.
  - — 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.
- 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.
- A maximum of 48 credits of Credits-by-Assessment may be applied to any one degree.

*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)
Intro to Business Data Processing (CS 241)
Intro to Computer Info Processing (CS 131)
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.

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, cap and gown rental, 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.

Degrees and Certificate Programs

These programs are described in the catalog section titled Programs and Suggested Courses of Study.

Two-Year Associate of Applied Science Degree

Agricultural & Industrial Equipment Technology
Appliance-Refrigeration Technician
Apprenticeship Trades
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
Environmental Technology

Fire Prevention Technology
Flight Technology
Insurance Adjusters
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
Manufacturing Technology

One-Year Certificate
Auto Body & Fender Technology
Auto Metalwork
Auto Paint
Culinary, Food Service, and Hospitality
Dental Assisting
Early Childhood Education
Early Childhood Education: Nanny Option
Landscape Development
Medical Office Assistant
Microcomputer Information Systems
Office Administration Certificate
  Accounting/Clerk Option
  Clerical Assistant Option
Practical Nursing (4 terms)
Real Estate
Sales & Marketing
Residential Energy Analyst
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 32.

Attendance Instructors usually 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.

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). 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 other students receiving financial aid or who have been awarded 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

Beginning the day after a student's initial registration for the term, schedule changes (adds, drops, etc.) may be processed during scheduled registration hours. After the first week of the term, changes are processed in the Admissions Office and then through Financial Services. Beginning with the fourth day of classes, a charge of $1 will be assessed for a revised schedule.

No schedule changes will be accepted between Monday of the week preceding finals week and Monday of the second week of the succeeding term.

Dropping a Class, Withdrawing from All 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 Admissions and the Financial Services Office. 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 information except his or her name withheld from that directory must complete a Student Directory Exemption card *each term* during registration. These cards are available in the registration area and 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.

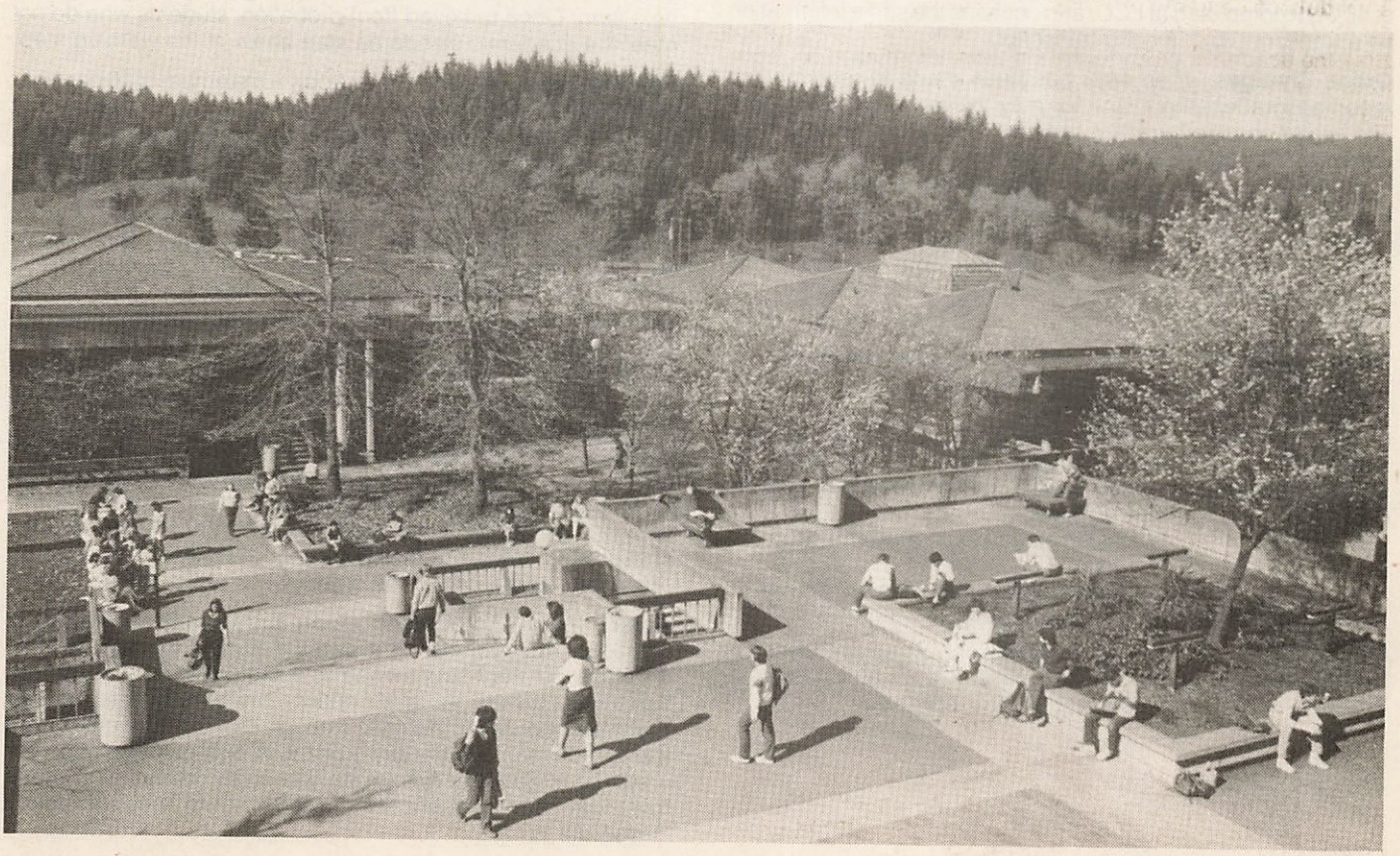
Information necessary to determine student eligibility for athletic participation and for financial aid granted by state or federal agencies which provide a student's tuition, will be released as directory information. This may include term schedules, grades, credit hours of enrollment, and past academic 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 the student or 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 waiver 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.

Waivers It is possible to get waivers for required course work in vocational programs. Students cannot get waivers for required course work toward the Associate of Arts, Associate of Science, and Associate of General Studies degrees. A waiver may allow the student (1) to substitute a similar course or one which better fits the student's goals for a course required by a program or (2) to substitute courses giving elective credit when the student's work or life experience indicate the student has adequate knowledge but does not need additional college credit for that course. A waiver does not affect the student's transcript.

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	May be recorded only when a student has
N-Not Passing	processed a pass/no pass option request, or is taking a P/NP-only class

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. A counselor's signature is always required on the P/NP option form to guarantee that the student has the appropriate information when selecting this option. 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, C, or D, the student will receive a grade of P. If the grade is 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 or in Admissions through the eighth week of the term. Audit rates are the same as the in-district tuition rates per credit hour. 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 a course grade removed from the cumulative grade point average if the grade was C, D, F, or NP. 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 credits 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
B = 3 points
C = 2 points
D = 1 point
F = 0 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 mid-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

Tuition*

Tuition and fees must be paid at the time of registration unless arrangements for a tuition loan have been made at Fee Assessment. Any money owed from previous terms must be paid when the student pays tuition and fees for the current term. A student may use MasterCard or VISA to make payments of total tuition and fees.

	Full-Time* (11 or more credits)	Part-Time (less than 11 credits)
Residents of Oregon,	$242 per term	$22 per credit hour
Senior Citizens**		$10 per course
Nonresidents of Oregon	$924 per term	$84 per credit hour
International Students	$924 per term	$84 per credit hour

(See "Residency Determination," page 35.)

* 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 $10 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 are subject to change without prior notice. Current tuition rates will appear in each term class schedule.*

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

Tuition	$693
Books	$450
Special & Miscellaneous Fees (varies by program)	$ 45-105
Insurance (individual student)	$164

Tuition Loans Tuition loans are available only for in-district students. Those wishing tuition loan must fill out the form at Financial Services. The process is as follows:

- A minimum payment of $84 plus fees will be required at the time of registration.
- Balance of tuition must be paid within 60 days of date charged. A billing charge of 75¢ is made each month. If the amount is unpaid 90 days from date charged, a late charge of $5 per month is assessed to a maximum of $10.00
- Tuition loans are available only to in-district students who receive no financial aid.
- The registration process is completed through the Cashier with the tuition loan form.

Refunds

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

Tuition refunds Instead of charging a fee at the time a student applies for admission, Lane Community College retains $20 of any tuition paid each term to cover application and processing fees. This means that there is no refund for a one-credit class under any circumstances except for a cancelled class. The remaining tuition is refunded for formal drops and withdrawals during the first three weeks of fall, winter, and spring terms, at the rate of:

100% through 1:30 p.m. on Friday of the first week.
70% through 4:00 p.m. on Friday of the second week.
30% through 4:00 p.m. on Friday of the third week.

Refunds are calculated as follows:

1. Subtract $20 nonrefundable application processing fee.
2. Multiply tuition by appropriate rate (see above).
3. Round down to the next whole dollar.

Refund checks are written approximately one month after the date of withdrawal.

Petitions for exceptions to the refund policy are handled in the Student Records Office. Extenuating circumstances (circumstances clearly beyond a student's control) may be cause for a 70% refund after the refund deadline. Written verification (a note from a doctor if the student was unable to attend for medical reasons, from an employer if work schedule was changed to conflict with scheduled classes, etc.) is nearly always necessary. If the student is involved in circumstances which are catastrophic to the student and if Student Records is notified of the circumstances as soon as possible, a 70% refund of tuition is possible upon petition with written verification. All refunds are minus the $20 nonrefundable application processing fee.

All petitions must be received by the Student Records Office by the end of the eighth week of the term. Students who cannot attend classes after the eighth week because of extenuating circumstances should check the college policy for incomplete grades.

Refund for Cancelled Class All tuition paid, including the $20 application processing fee, is refunded if a class is cancelled because too few students register to meet enrollment criteria. To receive such a refund, the student must drop the class and process the schedule change through the Financial Services Office.

Refund for Class Waiting List Status If a student remains on a class waiting list at the beginning of the second week of classes and is entitled to a refund (less than 11 credit hours or a class fee refund), the student must drop the class by the end of the third week of classes to obtain the refund.

Student Body Fees are non-refundable except for some unusual circumstances:

- The college could not provide expected courses or program.
- Special circumstances such as severe illness or injury.

If a 100% tuition refund is granted, a 100% refund of the mandatory student body fee is automatic. Any refund of the student body fee for a student not receiving a 100% tuition refund requires the authorization of the Office of Student Activities.

Class Fees (Fees for curricular offerings) will be refunded according to the following policies:

- Refunds for Class Fees are initiated in the department office.
- All special fees paid by the student where the College has contracted for outside services are non-refundable after the first day of the term, or after the first day of the class for open-entry/open-exit students.
- Special Fee Refund other than the above: 100% of the special fee is refunded if the request is dated the first week; 50% is refunded during the second week; 25% is refunded during the third week. There is no refund after the third week.
- Materials Refund: Materials that are reusable may be returned. Students will be reimbursed for usable returned materials.

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 . . . . . $10 per credit hour, maximum $100 per term.

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

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

Late Registration $5
Beginning the third week of the term, a $5 late fee will be assessed students registering for classes which began the first week of the term. Open-entry/open-exit classes are exempt from this charge.

Schedule Change Fee $1
Beginning with the fourth day of classes (normally a Thursday), a charge of $1 will be made for each revised schedule.

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.

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.

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. Longer hours are in effect during registration week for 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.
- 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.

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 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; parents' contribution if a dependent, or spouse's contribution if a student is married.

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 Guaranteed Student Loans are available to eligible students all year.

Enrollment Status Students must be enrolled at least half time (6-8 credits) to receive any funding. Students may also enroll three-quarter time (9-11 credits). Students receive the most funding if enrolled full time (12+ 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 Service

The Employment Service is available to students and former students who are seeking part-time or full-time employment. Employers are businesses and private individuals who need both permanent and temporary employees. Individuals seeking employment opportunities may register with the Employment Service, second floor, Center Building.

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:

- Making vocational or career decisions
- Planning academic programs
- Solving personal and family problems
- Facilitating support groups
- Building skill in personal communication
- Coping with stress and depression
- Adjusting to returning to school
- Crisis intervention

Counseling and guidance are available through individual counseling sessions or in classroom settings. You can meet a counselor for the first time when you are in the process of admission and preparing for your first term registration. The Counseling Center is open from 8 a.m. to 8 p.m., Monday through Thursday and from 8 a.m. to 5 p.m. on Friday. Summer hours are from 8 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.
- Find out which LCC courses 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 them in their department offices during office hours or in the Counseling Center. During the New Student Orientations held before the beginning of each term, these counselors conduct group meetings to orient new students to their departments.

While counselors are available during registration, it's a good idea to visit counseling before registration as staff will have more time to help.

As requirements in various programs change periodically, special advising meetings are held to explain these changes. To find out about times and locations read the LCC *Torch*, talk to the department counselors, or inquire at the Counseling/Advising Center.

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 help at registration and new student orientation. They also staff the Career Information Center, fill in at the Counseling information desk, 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.

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 Margie Holland Lorence in the Counseling Department.

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 8 a.m. to 5 p.m., and evenings as announced. Student Services at the Downtown Center, which houses the career resources in that location, is open 10 a.m. to 7 p.m. Monday through Thursday. 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 Adult Learners 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. Each term, CIC sponsors a series of career talks on careers relevant to LCC students and the community. Most programs and materials are free to anyone in the community.

Staff members are always available to assist in using the terminal 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 Educational 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 8 during the regular academic year.

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 ways 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 a lot of 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 other four-year colleges and universities. These credits do not appear on the LCC transcript when mailed to another school except on special request. 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 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. Various learning machines are used in the lab.

The Center staff will be glad to counsel students about their skills or test them if they wish. Contact the Study Skills Center for more information: daily from 7:30 a.m. to 4:30 p.m..

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)
- Textbook readibility determination
- Consultation

Credit Courses

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

Learning Resource Center (Library)

Second and third floors, Center Building

The Lane Community College Learning Resource Center, which consists of the library and audiovisual services, is centrally located on campus and contains a balanced collection covering the college curriculum. The collection includes approximately 58,000 books, more than 340 magazine and newspaper subscriptions, 18,000 audiovisual items including audio & 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 eleven million bibliographic records as well as the ability to borrow materials on inter-library loan from more than 4,000 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.

Other library services include a three-credit college transfer course, Use of the Library; photocopy facilities; typewriters; 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 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 and 7:30 a.m. to 5 p.m. Friday. It is closed weekends and holidays.

Library Class

Use of the Library LIB 127 . . . . . 3 credits
(All Terms) . . . . . 3 class hrs/wk
Training and practice in using library resources and services effectively. Students will also learn research strategy and bibliographic form. 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 2,000 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 vocational goal. Normally, a maximum of 18 CWE credits can be earned at LCC. Credit is assigned on the basis of one credit for every

36 hours of work experience. Any student seeking CWE credit must be currently enrolled at LCC. Certain vocational programs require CWE credits. Other programs offer CWE as an elective.

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	Bets Cole	Graphic Design
	Tricia I. Hahn	Art & Applied Design
Business	Fred Meyer	Business Management
		Real Estate Management
	Sharon L. Moore	Office Administration
	Cathy C. Grant-Churchwell	Legal Secretary
Central Area Center	Jack Shadwick	Business
		Lower Division
		Trades Industry
Data Processing	Joe Freeman	Data Processing
Electronics	John Winquist	Electronics
		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. Gardipee	Nursing
	Beth Webb	Dental Assisting
	Norma K. Stevens	Medical Office Assistant
	Douglas White	Respiratory Care
	Jack W. Shadwick	Pre-Health Occupations
Health & P.E.	Dave E. Roof	Health & P.E.
Home Economics	Julianne Nutting	Early Childhood Education
	Tricia Hahn	Culinary, Food Service and Hospitality
Industrial Technology Programs	Robert F. Way	Landscape
	Joe Freeman	Construction
	Albert H. Rowe	Welding
	Linda Myers	Mobile Classroom
Mass Communication	Michael Hopkinson	Radio Broadcasting
		Video Production
		Radio Broadcasting
	Pete Peterson	Journalism/Newswriting
	Robert L. Prokop	Photography
	Dorothy Wearne	Publication Design & Production
	Jan Brown	Journalism/Advertising

DEPARTMENT	COORDINATOR	SECTIONS
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
Science	Dixie Maurer-Clemons	Biology
		Engineering Science
		Chemistry/Physics
		Energy Management
	Robert F. Way	Environmental Technology
Proficiency Skills Training	Renee Lo Pilato	Encompasses all programs
	Dixie Maurer-Clemons	
Siuslaw Center	TBA	Business
		Siuslaw Office
		Trade Industry
		Lower Division
		Siuslaw Technical
		Sociology
		Education
		Siuslaw Community Service
Social Science	Joseph A. Kremers	Political Science
	Rita Hennessy	Sociology
		Psychology
	Jim Cobb	Community Service
		Psychology
		Sociology
	Peggy Marston	Education
	Thomas V. Hickey	Law Enforcement
		Criminal Justice
Training & Development	Jan Graveline Eliot	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	15.00
Family Planning	15.00
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 at the time a student registers in the registration area. From the second week of classes to the end of each term, a Photo I.D. card can be made during designated hours in the Student Activities area on the second floor of the Center Building, and also during two evenings per week in the Library.

The cost to main campus credit students for the I.D. card is included in the $5 mandatory term fee. For Adult Basic Education, High School Completion, or outreach students, or for community patrons or staff, the cost is $2.

A student must retain the Photo I.D. card for the entire stay at LCC. Each term the card will be updated during registration. The replacement fee for a lost or stolen card is $2.

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), on the second floor of the Center Building, 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 SRC include recycling programs, voter registration, and general information. SRC provides LCC students with assistance and referrals in areas such as childcare, housing, transportation, and other special student interests.

SRC also coordinates a carpool program for students and staff. A bulletin board at the SRC has maps of Eugene and outlying areas, and cards listing rides and riders wanted and 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 by coming to the Legal Services Office located on the second floor of the Center Building.

Clubs and Organizations

Clubs and organizations range from Chess Club, Voice of Limited Abilities Association 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. 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 competition is offered in the tournament form. Novice, intermediate, and advanced skill divisions are organized. Participants compete within these divisions. Competitors are responsible for match results being turned into the Intramural Office in tournaments that are run on a drop-in format. Tournaments or contests are supervised by the Intramural office. All weight lifting contests are closely supervised, whereas badminton, tennis, and ping-pong tournaments are less formally supervised. In the latter case, matches scheduled before a prearranged deadline 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 include soccer, men's volleyball, co-ed volleyball, 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 479G, fourth floor, Center Building, or Karen Locke, English and Foreign Language Department.

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.

Television

The Mass Communication Department has a full-color video facility 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.

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 18 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.

Policies

Board Policies Directly Affecting LCC Students

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

Collection for Breakage or Damage-3293

All parties responsible for loss, breakage, or damage to College property shall be charged restitution in a fair and equitable manner. All funds collected shall be made available to the administrative unit sustaining such damage or loss.

Cheating and Plagiarism-5129

Each instructor shall enforce reasonable regulations to ensure honesty and may take steps to initiate disciplinary action against students who violate such regulations.

Smoking-5142.6

Smoking is permitted only in designated smoking areas. No instructor shall smoke while instructing a class. There shall be no smoking during a public meeting of the Board of Education.

Use of Intoxicants-5142.8

No person may bring onto the campus for ingestion any intoxicating beverage, dangerous drug, narcotic, marijuana, glue or thinner. No person may appear on campus under the influence of any of the above-mentioned items.

Exceptions to the use of the above-mentioned:

1. Alcoholic Beverages to be used for cooking and/or instructional purposes in food preparation labs or courses related to the science and/or service of alcoholic beverages or authorized foodservice activities as approved by the President.
2. Scheduled Drugs and Narcotics as legally prescribed by a physician.
3. Glues and Thinners to be used in course-related lab environments and in plant construction and maintenance.

Gambling-5.142

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

Conduct of Persons on Campus-8331

It shall constitute an improper use of Lane Community College facilities for any person upon or within any of the areas owned, operated by or under the control of the College to commit any act or threaten to commit any act in violation of State law or College regulations where the present ability to carry out such threat exists. The administration of the College is hereby authorized and directed to appoint suitable security personnel to act with its authority to remove from the premises any person violating any of the provisions of this policy.

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 bring expulsion from the College.

Student Rights

Academic Council Variance Procedure For exceptions to college-wide policies related to instruction. Petitions available in the Admissions 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 or Associate of General Science Degree.

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 For all other situations. Copies available in Student Activities Office, second floor, Center Building.

This procedure is used:

1. If there has been an incident of unfair or unreasonable treatment (includes discrimination on the basis of sex, age, race, religion, national origin, marital status, disability).
2. If there are circumstances beyond the student's control, which warrant special exemption from the requirements of a course syllabus, established college policy, or procedure.

Contact Jack Carter, vice president for student services, or Robert Marshall, director of admissions for more information, or for help.

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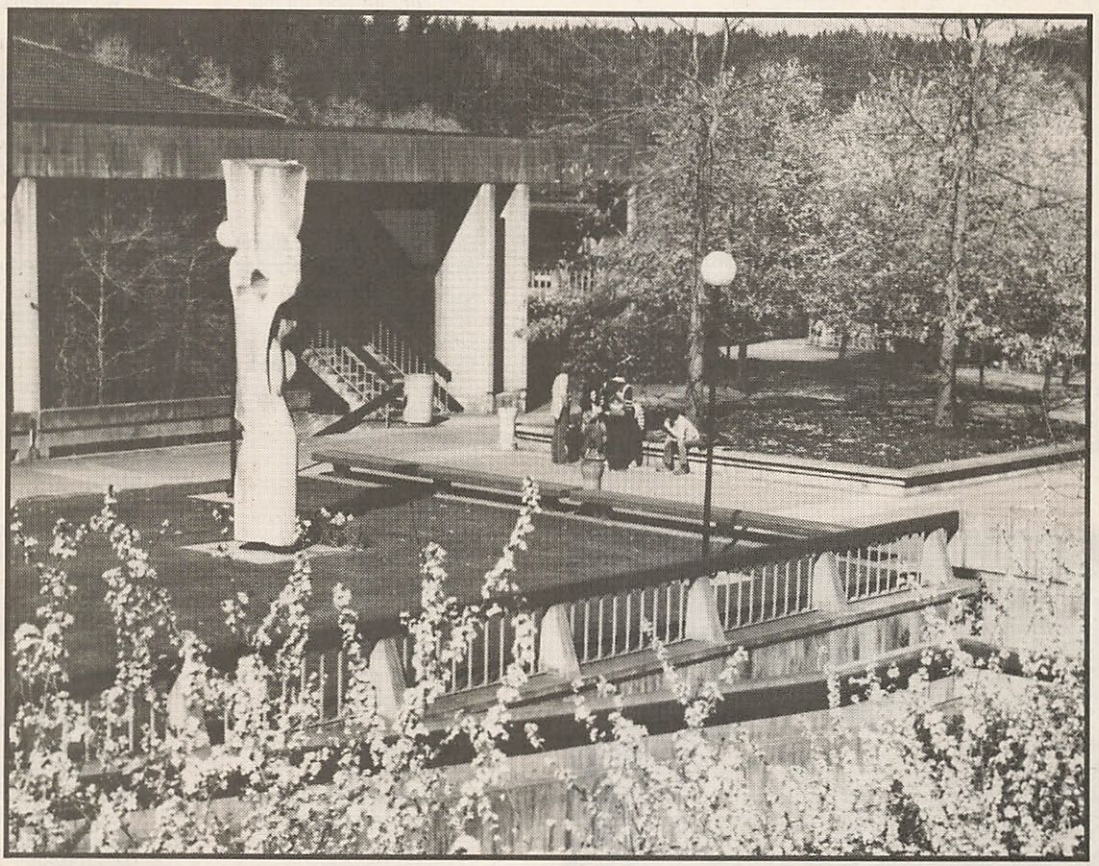
Programs and Suggested Courses of Study



- ☐ Transfer Planning and Procedures
- ☐ Credit Programs and Suggested Courses of Study
- ☐ Noncredit Programs

Transfer Programs and Procedures

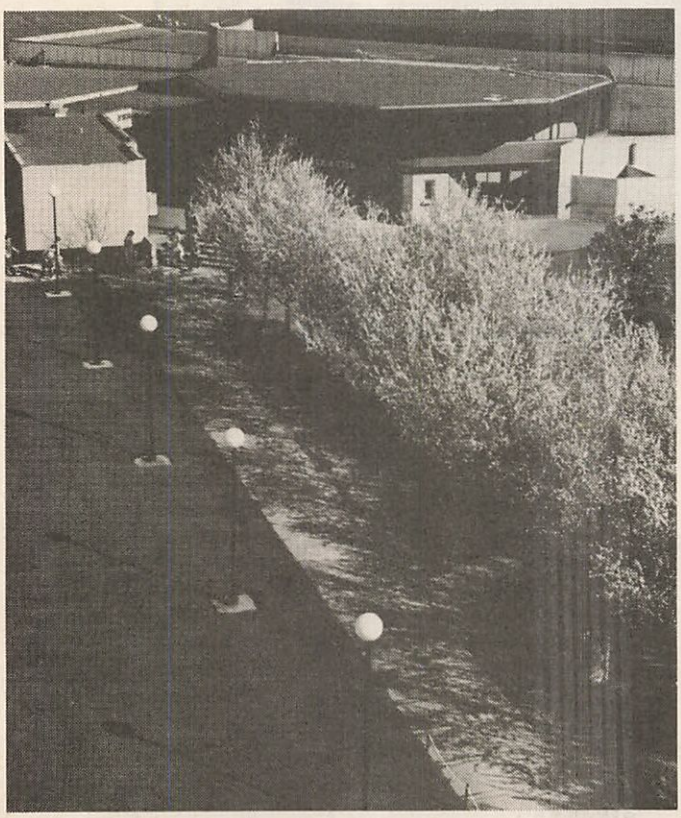
Lane Community College offers courses for students who wish to pursue a four-year degree at a public or private college or university. A student who attends LCC can complete all or most of the general education requirements of the four-year institution and begin work on the requirements for a specific 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

Agricultural and Industrial Equipment Technology
Appliance-Refrigeration Technician
Auto Body and Fender Technology
Automotive and Diesel Technology
  Automotive Technology
  Diesel Technology
Aviation Maintenance Technician
Banking and Finance
Broadcasting
  Broadcasting/Visual Design and Production
  Radio Broadcasting
Business Management
Coaching
Computer Operations
Computer Programming
Construction Technology
Criminal Justice
Culinary, Food Service and Hospitality
  Culinary Option
Dance
Dental Assisting
Dental Hygiene
Early Childhood Education
  Nanny Option
Electronic Engineering Technician
Electronics Technician
Energy Management Technician
Environmental Technology
Fire Prevention Technology
Flight Technology
Forest Technology
Graphic Design
Insurance Adjusters
Manufacturing Technology
Medical Office Assistant
Microcomputer Information Systems
Music
Nursing
  Associate Degree Nursing
  Practical Nursing
Office Administration
  Accounting Clerk Option
  Associate Account Option
  Clerical Assistant Option
  Legal Secretary Option
  Professional Secretary Option
Physical Education
Pre-Engineering
Real Estate
Residential Energy Analyst
Respiratory Care
Sales and Marketing
Technical Drafting
Theater
  Performance
  Technical
Welding Technology

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—$425; 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 Orientation 3.395	6
Consumer Education SSc 250/2.150[3]	3
Total Credits	21

	Spring
Agricultural and Industrial Equipment Technology 8.155	12
Occupational Mathematics 1 Mth 50[4]	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]	3
Selling BA 238/2.238[6]+	3
Gas Processes 1 3.931[1]	4
Total Credits	22

	Winter
Agricultural and Industrial Equipment Technology 8.155	12
Science Elective +#	3
Total Credits	15

	Spring
Agricultural and Industrial Equipment Technology 8.155	12
Humanities Elective+	3
Science or Math Elective+	3
Total Credits	18

\+ Not required for the two-year certificate of completion.
\# Physics for Technicians 1 4.300 recommended.
[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.
[c] Refer to Mechanics Department Course Descriptions for other courses in this curriculum.

Appliance-Refrigeration Technician

Two-Year Associate of Applied Science Degree Program*

Offered by LCC's Electronics Department

This two-year program leads to the Associate of Applied Science degree in refrigeration and combines classroom study of appliance-refrigeration principles with daily shop experience. Students work on refrigerators, freezers, ice machines, air conditioners, and heat pumps (home, auto, RV).

Qualified graduates work in a variety of settings including appliance retail stores, general service shops, factory service or distributor centers, automotive air-conditioning repair shops, building maintenance, laundromats, and mobile home sales and service companies.

This program is currently being revised to reflect an industrial and consumer emphasis. Plans are to offer a one-year certificate in addition to the two-year Associate of Applied Science degree in the near future.

Employment Trends, Salary, and Student Costs Employment prospects in Eugene and the state are fair to good, with some placement out of state. Pay ranges from $5 to $7 per hour in independent shops. Required tools for the program will cost the student approximately $150 for the year.

**Students beginning this program in the 1987-88 year will take the second year courses.*

Curriculum

First-year curriculum is currently under revision. Please contact the Electronics Department for additional information.

Second Year	**Fall**
Refrigeration and Air Conditioning 1 3.606	5
Refrigeration and Air Conditioning 1 Lab 3.607	8
Silver Brazing 3.620	1
Free Elective	3
Total Credits	17
	Winter
Refrigeration and Air Conditioning 2 3.608	5
Refrigeration and Air Conditioning 2 Lab 3.609	8
Communication Skills 2 1.102[1]	3
Social Science Elective[4]	3
Total Credits	19
	Spring
Refrigeration and Air Conditioning 3 3.610	5
Refrigeration and Air Conditioning 3 Lab 3.611	8
Heat Pumps (Reverse Cycle Refrigeration) 3.621	2
Heat Pumps Lab (Reverse Cycle Refrigeration) 3.622	1
Physics for Technicians 2 4.302[5]	4
Total Credits	20

[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 Course Descriptions.
*Refer to Electronics Department Course Descriptions for other courses in this curriculum.

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 $70; 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]	3
Science Elective+#	3
Total Credits	18
	Winter
Auto Metal Work 3.237	12
Basic Mathematics Review Mth 20[5] *or*	3
Math Renewal Mth 20[5]	(3)
Humanities Elective+	3
Total Credits	18
	Spring
Auto Metal Work 3.237	12
Consumer Education SSc 250/2.150[6]	3
Science or Math Elective+	3
Total Credits	18

\# Physics for Technicians 1 4.300 recommended
\+ Not required for certificate of completion
[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 Mathematics Department Course Descriptions.
[6] Refer to Social Science Department Course Descriptions.
[0] Refer to Mechanics Department Course Descriptions for other courses in this curriculum.

Automotive and Diesel Technology

Two-Year Associate of Applied Science Degree Program in Automotive Technology and/or Diesel Technology

Two-Year Certificate of Completion in Automotive Technology and/or Diesel Technology

Offered by LCC's Mechanics Department

The Automotive and Diesel Technology program, as listed below, is the *first year* of both the Automotive Technology and Diesel Technology two-year programs.

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

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

Books—$130 (1st yr); additional $50 (2nd yr Auto) or $115 (2nd yr Diesel)

Tools—$500, Auto or $700, Diesel (two-year program)

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.

Variable Credit Each first-year auto-diesel course is variable credit. A student should register for two auto-diesel courses (12 credits), plus any required corequisites, each term. Credits earned are dependent upon the amount and quality of work completed.

Students are required to attend class for the full scheduled block of time each day. No interruption for other classes will be authorized.

Curriculum

Each first-year Auto-Diesel class is offered each term and need not be taken in sequence.

First Year	**Fall**
Auto-Diesel 1 Engines 3.130*	6
Auto-Diesel 1 Chassis 3.131*	6
Manufacturing Orientation 3.395*	6
Industrial Safety HE 125[1]	3
Total Credits	21
	Winter
Auto-Diesel 2 Applied Fluids 3.132*	6
Auto-Diesel 2 Power Trains 3.133*	6
Basic Hydraulics 3.137*	2
Gas Processes 1 3.931[2]*	4
Basic Mathematics Review Mth 20[3] *or*	3
Math Renewal Mth 20[3]	(3)
Total Credits	21
	Spring
Auto-Diesel 3 Electricity 3.134*	6
Auto-Diesel 3 Fuel Systems 3.135*	6
Arc Welding 1 3.921[2°]	4
Basic Electricity 3.136*	2
Total Credits	18

* Must be satisfactorily completed before enrolling in second-year Auto or Diesel
° Must be satisfactorily completed before enrolling in second-year Diesel
\+ Not required for Certificate of Completion
[1] Refer to Health & PE Department Course Descriptions.
[2] Refer to Industrial Technology Programs Course Descriptions.
[3] Refer to Mathematics Department Course Descriptions.
** Refer to Mechanics Department Course Descriptions for other courses in this curriculum.

Automotive Technology

(Refer to first-year curriculum listed under Automotive & Diesel Technology.)

This training can lead to employment in entry occupations in the automotive service and repair field. Beginners usually earn from $5.00 to $12.00 an hour; journeymen earn up to $24,000 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.

Cooperative Work Experience (Supervised Field Experience) Under the supervision of the coordinator and with instructor consent, a maximum of five CWE credits may be earned each term in lieu of the required lab course credits in Automotive Technology (second year) for a total of 15 credits.

Curriculum

Second Year	**Fall**
Auto Technology 4 3.306	8
Auto Technology 4 Lab 3.307	5
Communication Skills 1 1.100[1]	3
Science Elective°+	3
Total Credits	19
	Winter
Auto Technology 5 3.308	8
Auto Technology 5 Lab 3.309	5
Consumer Education SSc 250/2.150[2]	3
Humanities Elective+	3
Total Credits	19
	Spring
Auto Technology 6 3.310	8
Auto Technology 6 Lab 3.311	5
Science Elective+	3
Total Credits	16

° Physics for Technicians 1 4.300 recommended.
\+ Not required for Certificate of Completion
[1] Refer to English and Foreign Language Department Course Descriptions.
[2] Refer to Social Science Department Course Descriptions.
* Refer to Mechanics Department Course Descriptions for other courses in this curriculum.

Diesel Technology

(Refer to first-year curriculum listed under Automotive & Diesel Technology.)

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. Beginning pay averages $8.50 per hour; journeymen earn $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.

Cooperative Work Experience (Supervised Field Experience) Under the supervision of the coordinator and with instructor consent, a maximum of five CWE credits may be earned each term in lieu of the required lab course credits in Diesel Technology (second year) for a total of 15 credits.

Curriculum

Second Year	**Fall**
Diesel Technology 4 3.312	8
Diesel Technology Lab 3.319	5
Arc Welding 2 3.922[1]	4
Communication Skills 1 1.100[2]	3
Science Elective°+	3
Total Credits	23
	Winter
Diesel Technology 5 3.314	8
Diesel Technology Lab 3.319	5
Humanities Elective +	3
Consumer Education SSc 250/2.150[3]	3
Total Credits	19
	Spring
Diesel Technology 6 3.316	8
Diesel Technology Lab 3.319	5
Science Elective+	3
Total Credits	16

+ Not required for Certificate of Completion
° Physics for Technicians 1 4.300 recommended.
[1] Refer to Industrial Technology Programs Course Descriptions.
[2] Refer to English and Foreign Language Department Course Descriptions.
[3] Refer to Social Science Department Course Descriptions.
* Refer to Mechanics Department Course Descriptions for other courses in this curriculum.

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 qualify the 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—$350
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 1 3.284	6
General 4 3.287	6
General 5 3.288	6
Occupational Mathematics 1 Mth 50[1]	3
Total Credits	21
	Winter
General 2 3.285	6
General 3 3.286	6
Powerplant 3.281#	6
Total Credits	18
	Spring
Powerplant 3.281#	18
Total Credits	18
Second Year	**Fall**
Airframe 3.280#	12
Powerplant Return to Service 3.283	6
Communication Skills 1 1.100[2°]	3
Total Credits	21
	Winter
Airframe 3.280#	12
Occupational Mathematics 2 Mth 55[1]+°	3
Science Elective+°	3
Total Credits	18
	Spring
Airframe Return to Service 3.282	6
Humanities Elective°+	3
Consumer Education SSc 250/2.150[3°]	3
Industrial Safety HE 125[4°]	3
Total Credits	15

\# 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.
[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.
* Refer to Mechanics Department Course Descriptions for other courses in this curriculum.

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.

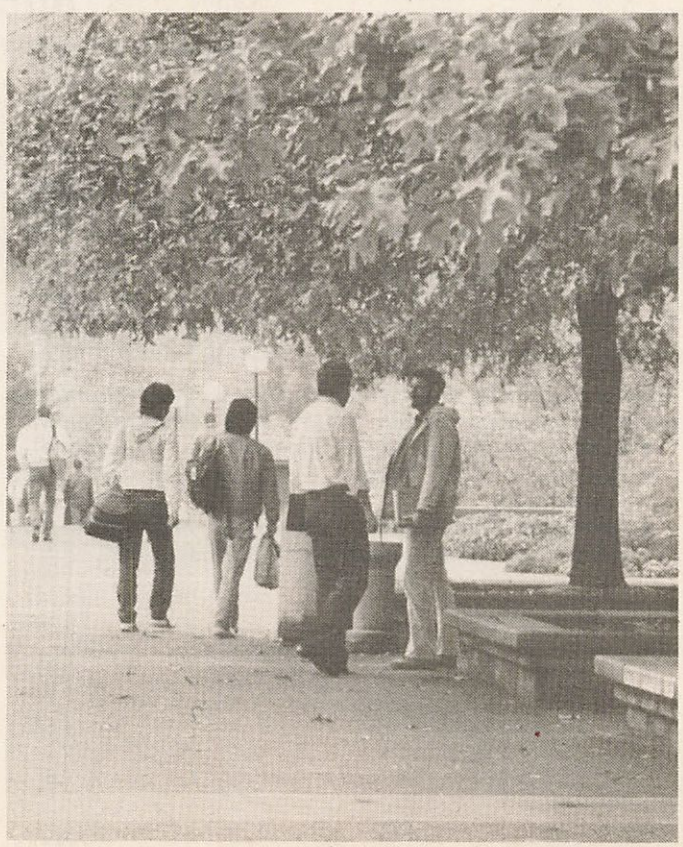
Curriculum

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
Bank Investments BA 279
Credit Administration BA 283



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, 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, department head, in Forum 105.

Broadcasting/Visual Design and Production

Two-Year Associate of Applied Science Degree

Offered by LCC's Mass Communication Department

This sequence offers theory and practical experience designed to qualify students for entry-level jobs in broadcasting, film, video tape production, advertising and instructional media programs.

Prior training and experience are not required for admission. Admission is on a first-come, first-served basis.

Students enrolled in the Broadcasting/Visual Design and Production program take 96 credit hours of required courses including broadcasting electives from an approved list to complete the associate of applied science degree.

Students in the sequence will work with a color television studio facility. In addition, the department provides 16mm cameras, portable video cameras and recorders, and a videotape editing facility, including computerized editing. Students are taught how to use equipment with emphasis on how to express ideas and to serve the needs of clients.

The program offers students small classes and intensive small group instruction. Practical experience is provided in labs. Opportunities to work with or observe local media professionals are provided by the Cooperative Work Experience program.

Students interested in Broadcasting/Visual Design and Production 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 Sp 241**	3
English Composition Wr 121[1]	3
Beginning Photography ART 161	3
Keyboarding OA 120/2.501[2]	1-2
Total Credits	14-15
	Winter
Electronic Studio Production 3.430	4
Beginning Drawing ART 131[3]	3
Fundamentals of Lighting ART 264	3
Applied Design: Moving Images and Sound ART 225***[2]	3
Introduction to Microcomputers CS 110[5] *or*	3
General Purpose Microcomputer Software CS 111[5]	(3)
Physical Education PE 170/180/190[4]	1
Total Credits	17
	Spring
Electronic Field Production 3.435	4
Media and the Law 3.434	3
Introduction to Electronics 6.193[6]	4
Writing for Visuals and Sound 3.442	3
Slide/Tape Production 3.444	3
Total Credits	17
Second Year	**Fall**
Media Production: Instruction 3.446	3
Advanced Field Production 3.445	4
Film as Literature Eng 195/Eng 196[1]	3
Photography/Shooting/Editing 16mm Film ART 261****	4
Basic Mathematics Review Mth 20[7] *or*	3
Math Renewal Mth 20[7] *or*	(3)
Business Mathematics BA 103[2]	(3)
Total Credits	17
	Winter
Creating/Selling Advertising for Broadcasting 3.439	3
Media Production: Entertainment 3.447	3
History of the United States Hst 201[8]	3
Fundamentals of Speech: Communication Sp 111[1]	3
Physical Education PE 170/180/190[4]	1
Supervised Field Experience: B/VDP 1.300	2
Total Credits	15
	Spring
Media Production: Information 3.448	3
Supervised Field Experience: B/VDP 1.300	3
Computerized Video Editing 3.449	3
Physical Education PE 170/180/190[3]	1
Broadcasting Electives +	6
Total Credits	16

* Audio Production ideally should be taken before Electronic Studio Production but may be taken as a corequisite.

** Fundamentals of Media should be taken in the first year of the sequence.

*** Audio Production and Beginning Photography are prerequisites or corequisites to Applied Design: Moving Images and Sound.

**** Applied Design: Moving Images and Sound is a prerequisite or corequisite to Electronic Field Production and Photography/Shooting/Editing 16mm film.

+ **Broadcasting Electives**
Advanced Audio Production 3.457
Newswriting 1 J 216
Newswriting 2 J 217
Newswriting Lab J 215
Publication Design and Production 1 3.443
Publication Design and Production 2 2.211
Public Relations J 205
Photography/Film Production 2 ART 262
News and Public Affairs for Television 3.404
Photography ART 162
Announcing and Narration 3.436
Video Production Unit 3.437

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

Radio Broadcasting

Two-Year Associate of Applied Science Degree

Offered by LCC's Mass Communication Department

This program is designed to provide students with entry level skills in small and medium market radio.

Prior training and experience are not necessary for admission to the Radio Broadcasting program. Since the sequence is a limited-enrollment program, admission is on a first-come, first-served basis.

Students enrolled in this program are required to take courses in music, electronics, business, voice, and at the same time, complete vocational training courses in the department. Special emphasis within the department is given to audio production, including sound mixing, writing, announcing, laws/rules and court decisions, governing radio today, and designing/selling advertising for radio. Practical experience is provided in labs, as well as opportunities for Cooperative Work Experience in local media. Opportunities to work at the college radio station, KLCC-FM, may also be available to qualified students in 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 Sp 241	3
Introduction to Assertive Behavior HD 205[1] *or*	1-3
Coping Skills for Stress and Depression HD 206[1] *or*	(1-3)
Eliminating Self-Defeating Behavior HD 204[1]	(3)
Voice Training for Acting Students TA 127[2]	3
Keyboarding OA 120/2.501[3]	2
English Composition Wr 121[4]	3
Total Credits	16-18

	Winter
Writing for Visuals and Sound 3.442	3
Media and the Law 3.434	3
Voice and Articulation Sp 110[4]	3
Introduction to Electronics 6.193[5]	4
Concepts of Computing CS 121[2]	3
Total Credits	16

	Spring
Creating/Selling Advertising for Broadcasting 3.439	3
Announcing and Narration 3.436	3
Geography of Oregon Geog 206[6]	3
Advanced Audio Production 3.457	4
Basic Mathematics Review Mth 20[7] *or*	3
Math Renewal Mth 20[7] *or*	(3)
Business Mathematics BA 103/2.206[3]	(3)
Total Credits	16

Second Year	**Fall**
Newswriting 1 J 216	2
Newswriting Lab J 215	1
History of Rock Music 1 Mus 264[2]	3
Radiotelephone Operator's Preparation 1 4.915[5]	4
Music Fundamentals Mus 101[2]	3
Physical Education PE 170/180/190[8]	1
Total Credits	14

	Winter
Fundamentals of Speech: Communication Sp 111[4]	3
Radiotelephone Operator's Preparation 2 4.917[5]	4
History of Rock Music 2 Mus 265[2]	3
Oral Interpretation of Literature TA 229[2]	3
Introduction to Music and Its Literature Mus 201[2]	3
Physical Education PE 170/180/190[8]	1
Total Credits	17

	Spring
Electronic Music 1: An Introduction Mus 117[2]	3
Radiotelephone Operator's Preparation 3 4.919[5]	4
Introduction to Jazz History Mus 205[2]	3
Physical Education PE 170/180/190[8]	1
Supervised Field Experience: Radio 1.300	3
Total Credits	14

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

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 $750 to $1,000 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]	3
Intermediate Algebra Mth 100[2]	4
Physical Education PE 170/180/190[3]	1
Principles of Accounting BA 211	3
Keyboarding OA 120/2.501**	3
Total Credits	17
	Winter
College Algebra Mth 101[2]	4
Fundamentals of Speech: Communication Sp 111[1]	3
Physical Education PE 170/180/190[3]	1
Principles of Accounting BA 212	3
Elective (Social Science)*[4]	3
Elective	3
Total Credits	17
	Spring
Business Communications BA 214	3
Management Fundamentals BA 206	3
Introduction to Business Statistics BA 232 *or*	3
Introduction to Probability and Statistics Mth 103[2]	(4)
Physical Education PE 170/180/190[3]	1
Principles of Accounting BA 213	3
Elective (Social Science)*[4]	3
Total Credits	16

Second Year	**Fall**
Personnel Administration BA 224	3
Marketing BA 223	3
Personal Health HE 250[3]	3
Principles of Economics Ec 201[4]	3
Microcomputer Accounting Applications BA 209	3
Total Credits	15
	Winter
Business Law BA 226	3
Finance BA 222	3
Principles of Economics Ec 202[4]	3
Elective (Social Science)*[4]	3
Electives	6
Total Credits	18
	Spring
Business & Professional Speech Communication Sp 230[1]	3
Production BA 221	3
Supervised Field Experience FE 207	3
Electives	6
Total Credits	15

* College Transfer Course Required

** Students that have a touch typing speed of 25 words per minute or more should challenge Keyboarding OA 120/2.501.

[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 Business Department Course Descriptions for other courses in this curriculum.

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 Option Instruction in the Data Processing Department is designed to prepare a person for an entry-level position as a computer programmer. The courses taken are designed to provide students with the specific data processing skills needed, as well as a general knowledge of the type of problems which one may be called on to solve.

To accomplish this, approximately one-third of the student's program will be in data processing courses covering such subjects as programming languages, programming techniques, computer operating systems, and systems design techniques. The programming languages studied will include Assembly Language, COBOL, BASIC, and RPG. The remainder of the student's program will be selected from other departments in the college and will include courses in business, mathematics, language arts, and the social sciences. These courses will provide students with a knowledge of the areas in which they will apply their understanding of the computer.

Operations Option The Data Processing Operations curriculum is designed for students who desire to pursue an educational program which will prepare them for employment as computer operators, control clerks, and data processing librarians.

The student will be able to operate digital computing equipment with a console device or auxiliary control panel. Under the direction of the staff operator, students will also learn to prepare the computer for program processing and operate the equipment for the completion of scheduled programs.

The student will perform a quality control function for the input/output and will examine, approve, and dispatch reports based on quality criteria defined by operations control. The student will also store and circulate program documentation, material, and data files kept on cards, disks, and tapes.

Because of restricted facilities, a limited number of operations majors are selected by lottery during spring term to complete the second year of the program. The selection is made from operations majors who have completed the first two terms of the program.

Curriculum

First Year	**Fall**
Concepts of Computing CS 121	3
Introduction to Computer Information Processing CS 131	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)
Intermediate Algebra Mth 100[3]*	4
Total Credits	17

	Winter
Assembler Language Programming CS 290	4
Accounting 2 2.111[1] *or*	3
Principles of Accounting BA 212[1]	(3)
Personal Health HE 250[4]	3
Communication Skills 2 1.102[2] *or*	3
Composition: Style Wr 122[2]	(3)
Elective	4
Total Credits	17

	Spring
Advanced Assembler Language CS 291	4
Accounting 3 2.112[1] *or*	3
Principles of Accounting BA 213[1]	(3)
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 Operating Systems CS 245	4
Total Credits	15-16

	Winter
Business Data Processing CS 242	5
Social Science Elective[5]***	3
Introduction to Systems Analysis CS 244	3
Business and Economics Elective[1]**	3
Total Credits	14

	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**
Introduction to Operating Systems CS 245	4
Social Science Elective[5]***	3
Introduction to Business Statistics BA 232[1] *or*	3
Introduction to Probability and Statistics Mth 103[3]	(4)
Business and Economics Elective[1]**	3
Total Credits	13-14

	Winter
Business Data Processing CS 242	5
Introduction to Systems Analysis CS 244	3
Social Science Elective[5]***	3
Data Processing Computer Operations 1 2.617	5
Total Credits	16

	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

[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. Additional hours may be taken in math; however, students achieving the Mth 100 level may choose electives from other areas in the college.

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

Approved business electives are business classes whose subject matter covers an academic business subject. Skills classes such as typing, calculator operation, and shorthand are not approved.

Classes that are taught by the Business Department but are not traditional business classes, such as Business English, Microcomputers, and Introduction to Management of Information Systems, are also not approved.

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)**

The following courses are examples of approved social science elective courses:

Human Relations 1 1.608 . . . 3
Human Relations 2 1.609 . . . 3
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
Social Psychology Psy 216 . . . 3

Data Processing

The following classes may be taken as programming or operations electives:

Introduction to Numerical Computation CS 133 . . . 4
Introduction to Microcomputers CS 110 . . . 3
General Purpose Microcomputer Software CS 111 . . . 3
Microcomputer Software Systems CS 112 . . . 3
Microcomputer Graphics CS 235 . . . 4
Independent Study: Computer Information Processing CS 198 . . . 3
Introduction to Computer Science 1: Pascal CS 201 . . . 4
Introduction to Computer Science 2: Advanced Pascal CS 203 . . . 4

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
Occupational Mathematics 2 Mth 55[2]	3
Building Construction 3.118 *or*	5
Housing Rehabilitation 3.120	(5)
Industrial Safety HE 125[3]	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
Communication Skills 3 6.126[1]	3
Introduction to Bricklaying 3.183	1
*Restricted Electives	6
Total Credits	18

[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 106 classes for the Math 20, 50, 55 sequence.
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 Entrepreneurship 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 IS: 248	3 credits

Drafting/Design Courses

Drafting 1 4.120	4 credits
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
Architectural Design—Remodeling Arch 180	5 credits
Architectural Design—Solar Residence Arch 181	5 credits
Architectural Design—Custom Residence Arch 182	5 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 IS: 248	3 credits

Science/Technical Trades Courses

Physics for Technicians 1 4.300	4 credits
Electrical Science 4.304	4 credits
Physics for Technicians 2 4.302	4 credits
Physics for Technicians 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 IS: 248	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

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.

Selected Electives (choose 9 credits)

Concepts of Enforcement Services CJ 111	3 credits
Introduction to Corrections CJ 130	3 credits
Juvenile Delinquency CJ 201	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 Home Economics Department

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, or Judy Dresser, Home Economics Department head.

Curriculum

First Year	**Fall**
Food Preparation 1 7.170	5
Food Service Fundamentals 7.185	3
Buffets and Banquets 7.179	1
Restaurant Lab (Renaissance Room) 7.184	5
Humanities Elective*	3
Total Credits	17
	Winter
Food Preparation 2 7.171	5
Dining Room Supervision and Service 7.186	3
Buffets and Banquets 7.179	1
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	17
	Spring
Food Preparation 3 7.172	5
Menu Planning and Promotion 7.147	3
Introduction to Nutrition 7.151	3
Buffets and Banquets 7.179	1
Restaurant Lab (Renaissance Room) 7.184	5
Total Credits	17

Second Year	**Fall**
Food and Beverage Controls 7.177	5
Buffets and Banquets 7.179	1
Accounting 1 2.110[2]	3
Supervised Field Experience 1.300	2
Health Elective[3] *or*	3
Physical Education PE 170/180/190**[3]	(3)
Total Credits	14
	Winter
Purchasing and Records Analysis 7.183	4
Equipment Layout and Interior Design 7.178	3
Buffets and Banquets 7.179	1
Communication Skills 1 1.100[4] *or* higher	3
Supervised Field Experience 1.300	2
Social Science Elective[5]	3
Total Credits	16
	Spring
Financial Operational Analysis in the Food Service Industry 7.192	3
Innkeeping and Front Office Management 7.188	3
Buffets and Banquets 7.179	1
Supervised Field Experience 1.300	2
Science and Math Elective***[6]	3
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 three terms.
***Computer class recommended.
[1] Refer to Mathematics Department Course Descriptions.
[2] Refer to Business 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 Social Science Department Course Descriptions.
[6] Refer to Science or Mathematics Department Course Descriptions.
[0] Refer to Home Economics Department 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 Home Economics Department

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 cooks and dinner cooks.

Curriculum

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

Accounting 1 2.110[1]	3
Health Elective[2] *or*	3
Physical Education PE 170/180/190*[2]	(3)
Total Credits	15

Winter

Purchasing and Records Analysis 7.183	4
Classical Cuisine and Service 2 7.291	3
Buffets and Banquets 7.179	1
Equipment Layout and Interior Design 7.178	3
Communications Skills 1 1.100[3] *or* higher	3
Science or Math Elective**[4]	3
Total Credits	17

Spring

Financial and Operational Analysis in the Food Service Industry 7.192	3
Classical Cuisine and Service 3 7.292	3
Buffets and Banquets 7.179	1
Supervised Field Experience 1.300	3
Social Science Elective[5]	3
Humanities, Science and Mathematics, or Social Science Elective	3
Total Credits	16

* Students choosing the PE elective must take one credit in each of three terms.
**Computer class recommended.
[1] Refer to Business Department Course Descriptions.
[2] Refer to Health and PE Department Course Descriptions.
[3] Refer to English and Foreign Language Department Course Descriptions.
[4] Refer to Science or Mathematics Department Course Descriptions.
[5] Refer to Social Science Department Course Descriptions.
[6] Refer to Home Economics Department Course Descriptions for 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.

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 PE 170/Modern Dance PE 170/Jazz Dance PE 170/Dance Techniques PE 170/Dance Performance PE 170 (select three)	3
Dance Conditioning and Mechanics D 256	3
Dance Practicum D 266	2
Introduction to Teaching Dance D 276	3
Electives	4
Total Credits	23

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

▶ **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.**

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 Radiological 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.

The admissions process includes a screening examination (Nelson-Denny Reading 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 $600 for the year. Costs are subject to change without notice.

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 $700 to $900/mo.

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 registered dental hygienist is a licensed, professional, oral health educator and clinical operator. As an auxiliary to the dentist, the hygienist uses preventive, therapeutic, and educational methods for the control of oral diseases. At LCC, the curriculum has been developed in conjunction with the philosophy that the hygienist operates as a periodontal co-therapist in the treatment of moderate to advanced periodontal disease.

A dental hygienist may be employed in a private office, public health facility, industry, or teaching. Duties may include, but are not limited to, oral prophylaxis, fluoride applications, dental health education, radiographic techniques, taking impressions for and preparing study models, infiltration of local anesthesia, and application of pit and fissure sealants.

This program is accredited by the American Dental Association's Commission on Accreditation of Dental and Dental Auxiliary Educational Programs. Students who complete the program successfully are eligible to take the national dental hygiene written test and written and practical examinations for state licensure. Students must pass the Oregon State Board of Dental Examiners Examination to practice in Oregon.

The dental hygiene program consists of basic health sciences, specific dental sciences, nutrition, methods of communication, and patient care in the dental clinic.

Related LCC courses may be taken by students planning to apply to the program. These courses will give the student appropriate background and knowledge for entering this program:

Elementary Chemistry CH 101, 102, 103 (CH 103 provides the best and most useful information)
Nutrition FN 225
Fundamentals of Speech: Communication Sp 111
Fundamentals of Speech: Styles Sp 112
Small Group Communication: Process and Theory Sp 215/1.105
General Sociology Soc 204, 205, 206 *or*
General Psychology Psy 201, 202, 203
Writing courses: Wr 121 (composition), Wr 122 (style), and Wr 123 (research)
First Aid HE 252
Advanced Emergency Care HE 254

The admissions procedure in the Dental Hygiene program is currently under revision.

Admission The Dental Hygiene program is limited to 20 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). Early application is important.

Requirements In-district (LCC district), in-state, and out-of-state applications are accepted. An applicant must be a high school graduate by fall, 1987, or have a GED certificate, complete all applicable admission packet forms, take the SCAT, Verbal Test,[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 in January and prior to the May deadline (refer to Admissions application packet for the exact deadline date). Only completed packets will be accepted.

Point System Selection Process To be eligible for the selection process, applicants must pass the basic arithmetic test and score a minimum of 4 on the SCAT - Verbal Test.

The admissions packet gives exact criteria for obtaining points and providing supporting information for all categories.

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 terms of 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 pressure considerably. Students should generally count on being at school from 8 a.m. to 5 p.m. on a daily basis.

The following describes how coursework is counted in the admissions process and how classloads can be managed:

- Completion of all of the following general education courses with a GPA of 3.25 or above are worth 2 points in the admissions process. These classes must be graded A, B, C, D or equivalent.
  English Composition Wr 121 3
  Fundamentals of Speech Sp 111 3
  Nutrition FN 225 3
  General Sociology Soc 204, 205, or 206 *or*
  General Psychology Psy 201, 202, or 203 6
  First Aid HE 252 3
- Completion of Elementary Human Anatomy and Physiology Bi 121, Bi 122, and/or Bi 123 with a grade of C (2.00 GPA or better) is worth 1 or 2 points in the admissions process.
- Composition: Research Wr 123 is not worth extra points but is often difficult to work into the term schedule due to the nature of clinical and laboratory courses and can be taken prior to actual enrollment.
- Students may wish to enroll in non-dental hygiene numbered courses during the summer term between the first and second years or complete these courses prior to acceptance to the program to alleviate heavily loaded terms.

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

Concerns Miscellaneous costs in addition to tuition total approximately $1,500 for first-year students and $1,200 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 Job prospects are fair in Eugene and Portland with usually less than half of the graduates finding jobs in Eugene/Springfield. However, prospects are good in Oregon if the graduate is willing to go to the southern, eastern, or coastal Oregon areas. Prospects are good nationwide. Starting salaries vary between $90 and $100 per day.

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]	4
English Composition Wr 121**[2]	3
Supervised Field Experience FE 207 (elective)	(1)
Independent Study: Dental Hygiene DH 248 (elective)	(1)
Total Credits	22

	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**[3]	4
Oral Roentgenology 2 DH 210	2
Supervised Field Experience FE 207 (elective)	(1)
Independent Study: Dental Hygiene DH 248 (elective)	(1)
Total Credits	21

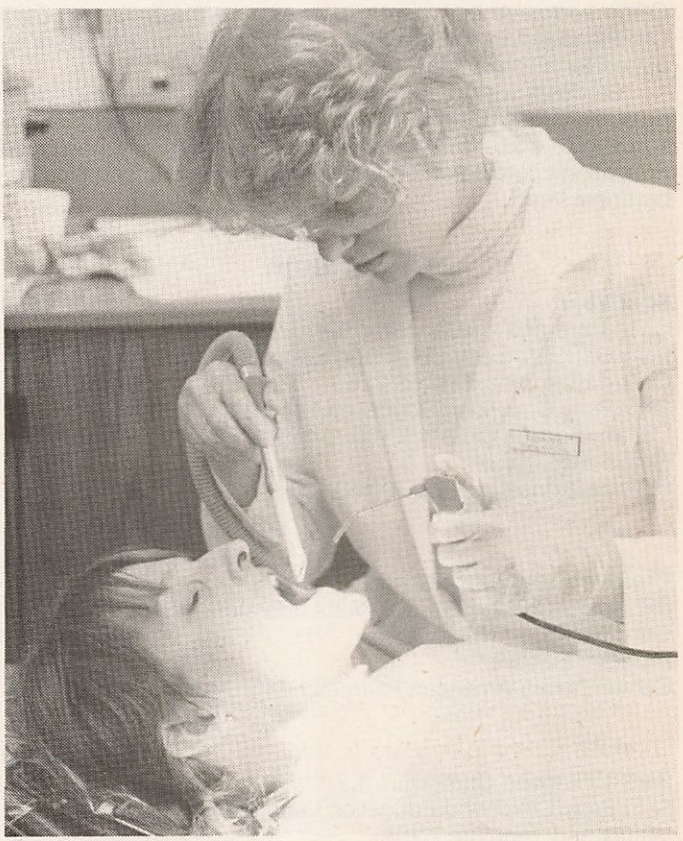
	Spring
Clinical Dental Hygiene 3 DH 120	6
Dental Materials and Procedures DH 132*	3
Oral Biology 3 DH 230	4
Pharmacology DH 254	3
Oral Roentgenology 3 DH 211	2
Supervised Field Experience FE 207 (elective)	(1)
Independent Study: Dental Hygiene DH 248 (elective)	(1)
Total Credits	18

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[4] *or*	3
General Psychology Psy 201, 202, 203[4]	(3)
Supervised Field Experience FE 207 (elective)	(1)
Independent Study: Dental Hygiene DH 248 (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[4] *or*	3
General Psychology Psy 201, 202, 203[4]	(3)
Supervised Field Experience FE 207 (elective)	(1)
Independent Study: Dental Hygiene DH 248 (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**[5]	3
Basic Mathematics Review Mth 20[6] *or*	3
Math Renewal Mth 20[6] *or*	(3)
Business Mathematics BA 103/2.206[7]	(3)
Supervised Field Experience FE 207 (elective)	(1)
Independent Study: Dental Hygiene DH 248 (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 Home Economics Department Course Descriptions.
[4] Refer to Social Science Department Course Descriptions.
[5] Refer to Health and PE Department Course Descriptions.
[6] Refer to Mathematics Department Course Descriptions.
[7] Refer to Business Department Course Descriptions.
\+ Refer to Health Occupations Department Course Descriptions for other courses in this curriculum.



Early Childhood Education

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

Offered by LCC's Home Economics Department

Improved job opportunities in this field 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 Judy Dresser, Home Economics Department head.

Curriculum

First Year	**Fall**
Child Care and Guidance 7.102	3
Introduction to Early Childhood Education 7.104	2
Child Development HDFS 226	3
SFE: Early Childhood Education Laboratory 1.300	3
Communication Skills 1 1.100[1] *or* higher	3
Health Elective[2] *or*	3
Physical Education PE 170/180/190[+2]	(3)
Total Credits	17

	Winter
Creative Activities for Children 7.115	3
SFE: Early Childhood Education Laboratory 1.300	5
Child Nutrition FN 230	3
Program Elective**	3
Contemporary American Families HDFS 240	3
Total Credits	17

	Spring
Early Childhood Curriculum 1 7.117	3
SFE: Early Childhood Education Laboratory 1.300	5
Infants and Toddlers 7.101	4
Physical Science (for preschool teachers) GS 106[3]	4
Total Credits	16

Second Year	**Fall**
Early Childhood Curriculum 2 7.119	3
Decision Making and the Consumer FRM 250/7.116	3
Parent-School-Community Relations 7.124	3
SFE: Early Childhood Education Laboratory 1.300	5
Basic Mathematics Review Mth 20[4] *or*	3
Math Renewal Mth 20[4] *or*	(3)
Business Mathematics BA 103/2.206[5]	(3)
Total Credits	17

	Winter
Administration of Child Care Centers 7.122	4
Decision Making and the Consumer FRM 250/7.116	(3)
Program Elective**	3
Supervised Field Experience 1.300	5
Outdoor Activities for Children 7.108	2
Total Credits	14

	Spring
Children Under Stress HDFS 227/7.123	3
Elective	3
Supervised Field Experience 1.300	5
Social Science Elective[6]	3
Art Elective[7] *or*	3
Music Elective[8] *or*	(3)
Drama Elective[8]	(3)
Total Credits	17

+ 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 Home Economics 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 Health & PE Department Course Descriptions.
[3] Refer to Science Department Course Description.
[4] Refer to Mathematics Department Course Descriptions.
[5] Refer to Business Department Course Descriptions.
[6] Refer to Social Science Department Course Descriptions.
[7] Refer to Art & Applied Design Department Course Descriptions.
[8] Refer to Performing Arts Department Course Descriptions.
[9] Refer to Home Economics 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 Home Economics 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
Introduction to Assertive Behavior HD 205[1]	3
SFE: Early Childhood Education Laboratory 1.300	4
Total Credits	18

	Winter
Professional Nanny 1 7.131	2
Creative Activities for Children 7.115	3
Child Nutrition FN 230	3
Caring for the Ill Child 7.133[2]	2
Geography of Europe Geog 201[3] *or*	3

General Psychology Psy 201[3] *or*	(3)
General Sociology Soc 204[3] *or*	(3)
Cultural Anthropology Anth 103[3] *or*	(3)
Natural Environment Geog 101[3]	(3)
Total Credits	18

	Spring
Professional Nanny 2 7.132	3
Physical Science (for preschool teachers) GS 106[4]	4
Children Under Stress HDFS 227	3
Communication Skills 1 1.100[5] *or*	3
higher level writing course	(3)
SFE: Early Childhood Education Laboratory 1.300	5
Total Credits	18

Second Year	**Fall**
Creative Cooking FN 111/7.146	3
First Year French FR 101[5] *or*	4
First Year German GER 101[5] *or*	(4)
First Year Spanish SPAN 101[5]	(4)
Physical Education PE 170/180/190[6] *or*	3
Health Elective[6]	(3)
SFE: Early Childhood Education Laboratory 1.300	5
Total Credits	15

	Winter
International Families and Cultural Considerations[3] (to be developed)	3
Planning Group Care for Infants and Toddlers 7.127	3
First Year French FR 102[5] *or*	4
First Year German GER 102[5] *or*	(4)
First Year Spanish SPAN 102[5]	(4)
SFE: Early Childhood Education Laboratory 1.300	5
Total Credits	15

	Spring
Basic Math Review Mth 20[7] *or*	3
Math Renewal Mth 20[7] *or*	(3)
Business Mathematics BA 103/2.206[8]	(3)
First Year French FR 103[5] *or*	4
First Year German GER 103[5] *or*	(4)
First Year Spanish SPAN 103[5]	(4)
Early Childhood Education Program Elective	3
SFE: Early Childhood Education Laboratory 1.300	5
Total Credits	15

[1] Refer to English and Foreign Language Department Course Descriptions.
[2] Refer to Health & PE Department Course Descriptions.
[3] Refer to Science Department Course Descriptions.
[4] Refer to Mathematics Department Course Descriptions.
[5] Refer to Business Department Course Descriptions.
[6] Refer to Social Science Department Course Descriptions.
[7] Refer to Human Development Course Descriptions.
[8] Refer to Health Occupations Department Course Descriptions.
* Refer to Home Economics 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 requisite lab skills needed for successful work in electronics. The training supplies the beginning engineering technician with a firm knowledge base from which he/she can progress into specialized areas of electronics technology.

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 aerospace electronic technician.

A technician often works under the supervision of an engineer. Successful completion of the program also qualifies a student for transfer to a four-year institution.**

Employment Trends, Salary, and Student Costs Because of the limited electronic industry in Eugene, job prospects in this area are poor. There is limited electronic industry in Oregon, with fair job prospects statewide. On a national basis, job prospects are good to excellent.

Entry-level salary for private industry is approximately $13,000 to $17,000 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
Intermediate Algebra Mth 100[1]	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
Technical Mathematics 1 6.261[1] *or*	4
College Algebra Mth 101[1]	(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
Technical Mathematics 2 6.262[1] *or*	4
Trigonometry Mth 102[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 3 6.266[1] *or*	4
Calculus with Analytic Geometry Mth 200[1]	(4)
Total Credits	20

	Winter
Microprocessor Applications 2 6.238	4
Linear Circuits 2 6.248	5
Visual Displays 1 6.249	3
Advanced Circuit Analysis 6.203	3
First Aid HE 252[3]	3
Microcomputer Systems EE 213/6.233 *or*	(1-6)
Supervised Field Experience FE 207/1.300 *or*	(1-6)
IS: Electronic Engineering Technician IS 248	(1-6)
Total Credits	18

	Spring
Microprocessor Applications 3 6.239	5
Linear Systems 6.217	4
Visual Displays 2 6.250	3
Robotics 6.232	3
Social Science Elective[4]	3
Microcomputer Systems EE 213/6.233 *or*	(1-6)
Supervised Field Experience FE 207/1.300 *or*	(1-6)
IS: Electronic Engineering Technician IS 248	(1-6)
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 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 prepares a person for employment as an electronics service technician. Emphasis is placed on the basic principles of electronic theory and on lab skills for both electronic communications and consumer electronic equipment.

This broadly based program gives a person the opportunity to work in the consumer electronic field (TV repair, video recorders) or in the communication field, such as two-way radio, telephone (fixed and mobile), and PC diagnostics.

The program is currently being revised to include a communication, computer, and consumer repair emphasis. Please see the Electronics Department for current information.

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. The starting pay is $5 to $6 per hour, with some higher specialized applications.

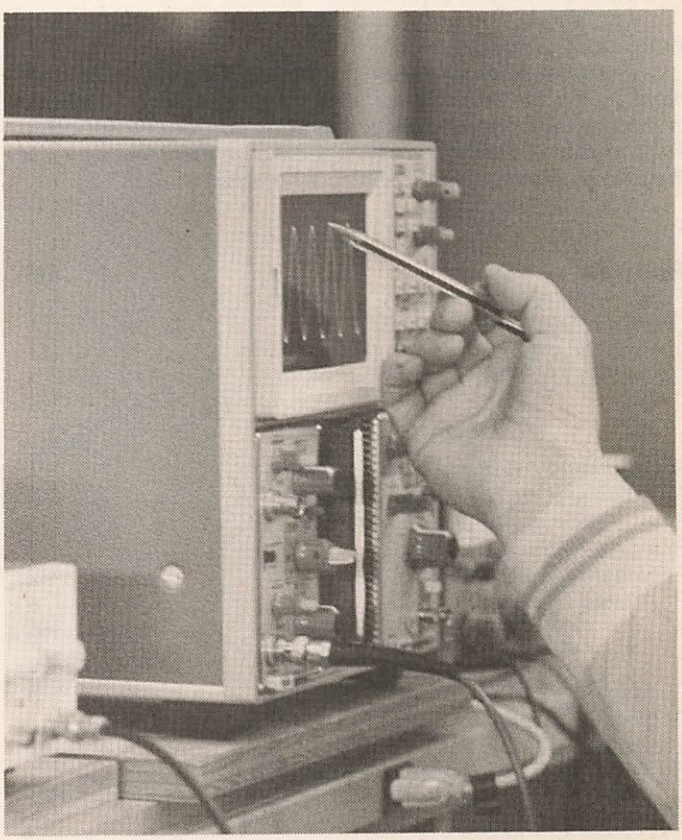
Required tools and equipment for the program will cost the student approximately $150 over the two-year period.

Curriculum

First Year	Fall
Introduction to Electronics 6.193	4
Introduction to Electronics Lab 6.194	1
Shop Practices for Electronics 4.921	1
Introduction to Digital Electronics 6.190	3
Communication Skills 1 1.100[1]	3
Intermediate Algebra Mth 100[2]	4
Total Credits	16
Winter	
Active Devices 3.472	3
Electronic Service 1 3.460	3
Electronic Service 1 Lab 3.461	3
Networks & Passive Circuits 6.195	4
Technical Math 1 6.261[2]	4
Engineering Problems 1 6.135[2]	2
Total Credits	19
Spring	
Electronic Service 2 3.462	3
Electronic Service 2 Lab 3.463	3
Electrical Drafting 4.103	2
Technical Math 2 6.262[2]	4
Engineering Problems 2 6.136[2]	2
Communication Skills 2 1.102[1]	3
Total Credits	17

Second Year	Fall
Electronic Service 3 3.464	3
Electronic Service 3 Lab 3.465	3
Radiotelephone Operator's Preparation 1 4.915	4
Transmitter Circuits 1 6.223	3
First Aid HE 252[3]	3
Total Credits	16
Winter	
Transmitter Circuits 2 6.224	4
Electronic Service 4 3.466	3
Electronic Service 4 Lab 3.467	3
Radiotelephone Operator's Preparation 2 4.917	4
Elective	3
Total Credits	17
Spring	
Electronic Service 5 3.468	3
Electronic Service 5 Lab 3.469	3
Social Science Elective[4]	3
Radiotelephone Operator's Preparation 3 4.919	4
Transmission & Propagation of Waves 6.221	4
Typical Receiver Circuits 6.227	3
Total Credits	20

[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 Electronics Department Course Descriptions for other courses in this curriculum.



Energy Management Technician

Two-Year Associate of Applied Science Degree

Offered by LCC's Science Department

The two-year associate of applied science degree program will prepare the student for employment as a residential and/or commerical building energy analyst (auditor).

In addition, successful completion of the program should provide the student with the necessary skills and knowledge for employment in an energy-related job in one of the following employment areas: drafting, business, solar-construction, or technical (i.e., support services to engineers/scientists) through the selection of restricted electives in one of the above four areas.

Upon successful completion of the program, students should understand the social, political, economic, and environmental aspects of energy production, distribution, and use. The curriculum also provides the basic communication and math skills needed for upward mobility in an energy-related field or for continued education at a four-year institution.

Supervised Field Experience is a part of the second-year curriculum and provides students with on-the-job work experience.

Program participants must be an Oregon resident, must be a high school graduate or have a GED certificate, and must have completed one year of high school algebra or its equivalent with an average grade of "C" or better.

Admission is on a first come basis and is done through the Admissions Office.

First-year students will be admitted to the Energy Management Technician program in the fall of 1988. Students interested in the program should consult the Science Department counselor to plan a program which will prepare them for entry into the Energy Management Technician program.

Curriculum

First Year	**Fall**
Fundamentals of Physics Ph 101/6.330	4
Energy in Society SSc 120/6.320[1]	3
Intermediate Algebra Mth 100[2]	4
Restricted Electives*	4
Total Credits	15
	Winter
Fundamentals of Physics Ph 102/6.331	4
Residential Energy Analysis GS 122/6.318	2
Energy Savings Products 3.105	2
Blueprint Reading 1 3.190[3]	3
Engineering Problems 1 6.135[2]	2
Restricted Electives*	6
Total Credits	19
	Spring
Fundamentals of Physics Ph 103/6.332	4
English Composition Wr 121[4]	3
Engineering Problems 2 6.136[2]	2
Supervised Field Experience FE 207/1.300	1
Building Construction 3.118[3]	2
Restricted Electives*	6
Total Credits	18

Second Year	**Fall**
Computer Aided Energy Analysis GS 126/6.326	2
Electrical Devices and Distribution GS 133/6.333	2
Air Conditioning Fundamentals GS 125/6.324[5]	4
Lighting Systems GS 134/6.334	2
Supervised Field Experience Seminar CWE 206	1
Restricted Electives*	6
Total Credits	17
	Winter
Energy Management and Planning GS 135/6.335	2
Commerical Energy Use Analysis GS 138/6.338	2
Technical Report Writing Wr 227[4]	3
Health Elective +[6]	3
Restricted Electives*	6
Total Credits	16
	Spring
Energy Conservation and Appropriate Technology GS 124/6.321	4
Energy Investment Analysis GS 166/6.336	2
Supervised Field Experience FE 207/1.300	2
Restricted Electives*	8
Total Credits	16

[1] Refer to Social Science Department Course Descriptions.
[2] Refer to Mathematics Department Course Descriptions.
[3] Refer to Industrial Technology Programs Course Descriptions.
[4] Refer to English and Foreign Language Department Course Descriptions.
[5] Refer to Electronics Department Course Descriptions.
[6] Refer to Health and PE Department Course Descriptions.

\+ Any health course with an HE prefix is acceptable. Three credits of Physical Education PE 170/180/190 may be substituted; must be taken in three different terms.

\+ + Refer to Science Department Course Descriptions for other courses in this curriculum.

* Restricted electives must be selected from one of the following:
Drafting-Design Restricted Electives
Solar-Construction Restricted Electives
Business Restricted Electives
Technical Restricted Electives

Restricted Electives

(A minimum of 36 credit hours in one of the four areas listed below.)

Drafting-Design Restricted Electives

Drafting 1 4.120	4
Mechanical Drafting 1 4.121	4
Architectural Drafting - Plans 4.137	4
Architectural Drafting - Details 4.138	4
Architectural Drafting - Development 4.139	4
Passive Solar Techniques in Local Construction 6.329	3
Solar Fundamentals GS 123/6.319	3
Architectural Design - Remodeling Arch 180	5
Architectural Design - Custom Arch 182	5
Architectural Measurement 4.114	3
Computer Aided Passive Solar Design GS 137/6.337	2
Passive Solar Design GS 127/6.327	3
Reading and Conference 6.100	2
Small Business Entrepreneurship BA 250	3
Strength of Materials Engr 213	4
Technical Math 1 6.261	4
Technical Math 2 6.262	4
Business and Professional Speech Communication Sp 230	3
Concepts of Computing CS 121	3
Independent Study: Energy Management Technician GS 248	3
Electives	3

Business Restricted Electives

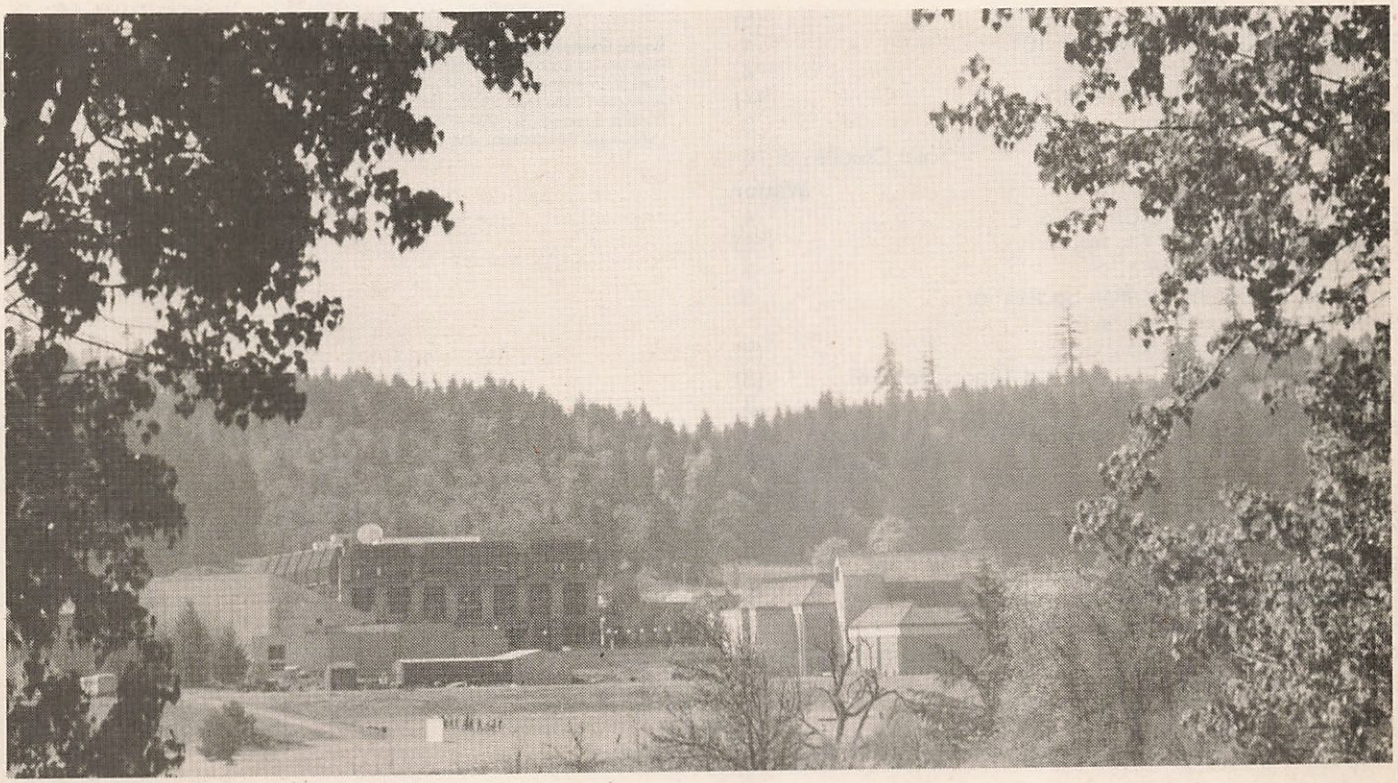
Business Environment BA 125	3
Management Fundamentals BA 206	3
Principles of Accounting BA 211	3
Principles of Accounting BA 212	3
Principles of Accounting BA 213	3
Selling BA 238	3
Business Law BA 226	3
Applied Economics BA 156	3
Introduction to Business Statistics BA 232	3
Personnel Administration BA 224	3
Marketing BA 223	3
Finance BA 222	3
Small Business Entrepreneurship BA 250	3
Business and Professional Speech Communication Sp 230	3
Concepts of Computing CS 121	3
Independent Study: Energy Management Technician GS 248	3
Electives	3

Solar-Construction Restricted Electives

Instrumentation and Controls 6.302	4
Architectural Drafting - Plans 4.137	4
Architectural Drafting - Details 4.138	4
Solar Energy Systems 6.325	3
Construction Codes 6.122	2
Solar Domestic Hot Water Systems 6.328	4
Drafting 1 4.120	4
Passive Solar Techniques in Local Construction 6.329	3
Silver Brazing 3.620	1
Small Business Entrepreneurship BA 250	3
Construction Planning 1 3.113	4
Computer Aided Passive Solar Design GS 137/6.337	2
Business and Professional Speech Communication Sp 230	3
Concepts of Computing CS 121	3
Housing Rehabilitation 3.120	6
Independent Study: Energy Management Technician GS 248	3
Electives	3

Technical Restricted Electives

Elementary Chemistry 1 Ch 101	4
Elementary Chemistry 2 Ch 102	4
Elementary Chemistry 3 Ch 103	4
Instrumentation and Controls 6.302	4
Hydraulics 6.112	3
Introduction to Digital Electronics 6.190	3
Introduction to Electronics 6.193	4
Introduction to Electronics Lab 6.194	1
Introduction to Probability and Statistics Mth 103	4
Mathematical Computing Mth 233	4
Elementary Calculus 1 Mth 106	4
Introduction to Numerical Computation CS 133	4
Solar Fundamentals GS 123/6.319	3
Technical Math 1 6.261 *or*	4
College Algebra Mth 101	(4)
Technical Math 2 6.262 *or*	4
Trigonometry Mth 102	(4)
Introduction to Computer Information Processing CS 131	4
Computer Aided Passive Solar Design GS 137/6.337	2
Heat Pumps (Reverse Cycle Refrigeration) 3.621	2
Heat Pumps Lab (Reverse Cycle Refrigeration) 3.622	1
Business and Professional Speech Communication Sp 230	3
Concepts of Computing CS 121	3
Selling BA 238	3
Drafting 1 4.120	4
Mechanical Drafting 1 4.121	4
Independent Study: Energy Management Technician GS 248	3
Electives	3



Environmental Technology

Two-Year Associate of Applied Science Degree

Offered by LCC's Science Department

This two-year program will prepare a student for work as an environmental technician in water pollution control. The environmental technician may perform biological surveys, be an operator at a water or wastewater treatment plant, be a lab technician at an environmental laboratory, or work in many other areas related to pollution control. Includes phases of water pollution and water quality management studies; field investigations, inventory and monitoring programs; biological tests and chemical analyses of water samples; methods of water and waste water treatment; effects of municipal, industrial, and agricultural waters on water quality; and preparation of technical reports.

Graduates may transfer to Oregon State University. Job opportunities exist in water purification and sewage treatment plants and as laboratory technicians in municipal, county, or state sanitation agencies and private laboratories. Many industries in the Northwest employ control technicians.

The Environmental Technology program is undergoing revision. Students should contact the Science counselor for details.

Curriculum

First Year	**Fall**
Elementary Chemistry 1 Ch 101 *or*	4
General Chemistry 1 Ch 104	(5)
Ecology and the Environment Bi 101	4
College Algebra Mth 101[1] *or*	4
Technical Mathematics 1 6.261[1]	(4)
Environmental Technology 1 6.300	3
Total Credits	15-16
	Winter
Elementary Chemistry 2 Ch 102 *or*	4
General Chemistry 2 Ch 105	(5)
English Composition Wr 121[2]	3
Interpersonal Communication Sp 214[2] *or*	3
Small Group Communication: Process and Theory Sp 215[2] *or*	(3)
Mass Communication: Process and Theory Sp 216[2]	(3)
Blueprint Reading 1 3.910[3]	3
Water Chemistry and Microbiology 6.502	4
Total Credits	17-18
	Spring
Elementary Chemisty 3 Ch 103 *or*	4
General Chemistry 3 Ch 106	(5)
Elementary Microbiology Bi 123	4
Engineering Problems 2 6.136[1]	2
Supervised Field Experience 1.300	3
Total Credits	13-14

Second Year	**Fall**
*General Biology Bi 101, 102, 103	4
Hydraulics 6.112	3
Electrical Science 4.304	4
Water Treatment and Purification 6.303	4
Community Health/Survival in Your Community HE 251[4]	3
Total Credits	18
	Winter
Instrumentation and Controls 6.302	4
Physics for Technicians 2 4.302	4
Activated Sludge and Trickling Filters 6.304	4
Water and Wastewater Mechanics 6.305	4
Total Credits	16
	Spring
Technical Report Writing Wr 227[2]	3
Supervised Field Experience 1.300	5
Social Science Electives[5] (see options below)	3
Water Treatment Plant Operation 6.306	4
Water Distribution/Wastewater Collection 6.307	4
Total Credits	19

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

Social Science Options—6 credits required
Principles of Economics Ec 201, 202, 203
Natural Environment Geog 101
American Government PS 201, 202, 203
General Sociology Soc 204, 205, 206
Landscape, Environment, and Culture Geog 103

Fire Prevention Technology

Two-Year Associate of Applied Science Degree Program

Offered by LCC's Social Science Department

The Fire Prevention Technology Program is designed to further the knowledge and skills of those firefighters currently employed or volunteering their time in the fire services. The curriculum offers a background in the social sciences plus the technical courses needed to stay abreast of the ever-changing technologies of today. The program prepares the student for advancement in the fire services and is transferable to some colleges as a major leading to a BA/BS in Fire Services Administration.

For further information, contact the Social Science Department Office.

Curriculum

First Year	**Fall**
Communication Skills 1 1.100[1] *or*	3
English Composition Wr 121[1]	(3)
Consumer Education SSc 250/2.150	3
Introduction to Fire Protection 5.254	3
Fire Service Hydraulics 5.257	3
Elective	3
Total Credits	15
	Winter
Communication Skills 2 1.102[1] *or*	3
Composition: Style Wr 122[1] *or*	(3)
Composition: Research Wr 123[1]	(3)
First Aid HE 252[2]	3
Elementary Fire Science 5.256	3
Fire Company Organization and Management 5.258	3
Elective	3
Total Credits	15
	Spring
Occupational Mathematics 1 Mth 50[3]	3
Fire Fighting Skills 1 5.250	3
Fire Science Blueprint Reading 5.265	3
Electives	6
Total Credits	15

Second Year	**Fall**
Fire Fighting Skills 2 5.251	3
Hazardous Materials 1 5.260	3
Fire Department Communications & Alert Systems 5.267	3
Fire Service Rescue Practices 5.268	4
Fire Investigation 5.273	4
Total Credits	17
	Winter
Fire Fighting Skills 3 5.252	3
Consumer Education SSc 250/2.150 *or*	3
American Government PS 203	(3)
Hazardous Materials 2 5.261	3
Water Distribution Systems 5.269	3
Fire Fighting Tactics & Strategy 5.274	3
Total Credits	15
	Spring
Fire Pump Construction & Operation 5.263	4
Building Construction for Fire Prevention 5.264	3
Fire Codes and Ordinances 5.282	3
Fixed Systems & Extinguishers 5.272	3
Elective	3
Total Credits	16

Fire prevention courses are not necessarily offered in the terms indicated. For further information contact the Social Science Department Office.

[1] Refer to English and Foreign Language Department Course Descriptions.
[2] Refer to Health and PE Department Course Descriptions.
[3] Refer to Mathematics Department Course Descriptions.
[4] Refer to Social Science Department Course Descriptions for other courses in this curriculum; consult department personnel for fire prevention courses.

Suggested Electives

Fire Apparatus & Equipment 5.253	3 credits
Fundamentals of Fire Prevention 5.262	4 credits
Fire Reports and Records 5.270	3 credits
General Psychology PSY 201, 202, 203	3 credits
General Sociology Soc 204, 205, 206	3 credits
American Government PS 201, 202, 203	3 credits
Physical Education PE 170/180/190	1 credit
Narcotics and Dangerous Drugs CJ 243	3 credits

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 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	$1,140-$2,210 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 75 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 highly 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 make 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:

Career objectives
Physical qualifications
Date of applications
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
Formatting 1 OA 121/2.101[5] *or*	3
Personal Use Typing 2.104[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.

Forest Technology

Two-Year Associate of Applied Science Degree

The Forestry Technology program is currently being revised. Students should contact the Science counselor for information and program details.

Graphic Design

▶ **Two-Year Suggested Course of Study, Vocational**
▶ **Two-Year Suggested Course of Study, College Transfer**

Offered by LCC's Art and Applied Design Department

LCC's Graphic Design curriculum teaches students to communicate visually using design, typography, symbolism, illustration and photography. It is a preparation for working in the advertising and commercial art fields. The study of graphic design involves the introduction and use of tools, advertising concepts, design and layout techniques required to be able to communicate a specific idea. The preparation of a portfolio and a resumé will be required for completion of the course.

The heart of the LCC Graphic Design curriculum is a one-year, technical study experience in graphic design. Entry into this technical year is competitive, based on the quality of art work presented in the student's portfolio; the most important factors are drawing skills, lettering, and basic design work.

Four-Year, B.F.A. Program (Lower Division, College Transfer). First two years at LCC; last two years at Oregon State University. A talented and industrious student can earn a Bachelor of Fine Arts Degree (B.F.A.) in Graphic Design from Oregon State University in four years, although most students take five. This program trains one to be a professional graphic designer. A non-professional bachelor of science (B.S.) degree is also available at OSU in Graphic Design.

Two-Year Course of Study Designed for the student with ability but little previous study of art fundamentals. This option is for the person who wants to enter the job market as an apprentice graphic designer or commercial art technician. It consists of one foundation year and one technical year of study.

Foundation Year (First Year)
The foundation year is spent in building strong basic art skills in drawing, composition, color, basic design fundamentals, photography, lettering, layout, and yes–typing! Students with previous art training and good drawing skills may be able to skip some basic courses and finish this first year in less than three terms. Placement is done by evaluating the student's portfolio and transcript. To have this done, the student should make an appointment in the Art Department Office.

Technical Year (2nd Year)
Entry into the technical year is competitive, based on the quality of artwork completed up to this time. Lettering and Layout ART 119 or its equivalent *must* be taken to be eligible for the technical year. Selection will be made at the end of each spring term for the 24 positions in the technical year. Persons interested should contact the Art Office for an appointment to have their portfolios evaluated *prior to May 10th* for entry in September. Students can expect to gain a working knowledge of the tools, technical language and skills involved in type spec'ing and copyfitting, preparation of artwork for the printer, and paste-up and mechanical requirements.

For people out of school for some years, it would be wise to enroll part-time in spring term—to brush up on drawing, and take Lettering and Layout before trying to compete for a spot in the technical year.

Job Information The graphic design/advertising art field is fast-paced and rewarding, but highly competitive. There are few job openings even at the lowest-entry skills-level, especially true in Eugene, Oregon. The most skilled can expect employment possibilities, but will probably have to leave the Eugene area to seek a graphic design related job.

For further information, contact the art counselor, Timothy Blood, Room 218, Center Building, or the Art Office on the first floor of the Math/Art Building.

Vocational Curriculum

First Year	**Fall**
Beginning Drawing ART 131* *or*	3
Drawing ART 132*	(3)
Introduction to Visual Arts ART 101 *or*	3
Survey of Visual Arts: Modern Art ART 211	(3)
Beginning Photography ART 161*[1] *or*	3
Basic Design: Fundamentals ART 115*	(3)
Elective	3
Total Credits	12

	Winter
Basic Design: Fundamentals ART 115* *or*	3
Beginning Photography ART 161*[1]	(3)
Drawing ART 132* *or*	3
Figure Drawing ART 234*	(3)
Publication Design and Production 1 3.433*[1]	3
Advertising BA 239[2] *or*	3
Survey of Visual Arts: Modern Art ART 212	(3)
Total Credits	12

	Spring
Basic Design: Color ART 116*	3
Lettering and Layout ART 119*	3
Figure Drawing ART 234*	3
Art Elective *or*	3
Survey of Visual Arts: Modern Art ART 212	(3)
Total Credits	12

Second Year	**Fall**
Graphic Design ART 221	3
Production for the Graphic Designer ART 228	3
Computer-Aided Drafting 4.110[3]	4
Beginning Watercolor ART 184 *or*	3
Watercolor ART 284 *or*	(3)
Art Elective	(3)
Supervised Field Experience: AAD 1.300	3-5
Total Credits	16-18

	Winter
Graphic Design ART 222	3
Production for the Graphic Designer ART 229	3
Airbrush Painting ART 287 *or*	3
Art Elective	(3)
History of Western Art ART 205 (Audit or P/NP)	3
Supervised Field Experience: AAD 1.300	3-5
Total Credits	15-17

▶ **These are suggested courses of study for students interested in graphic design. 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 either curriculum receive a certificate from LCC's Art and Applied Design Department. Also, courses in either curriculum may be applied toward an associate of arts degree and/or college transfer.**

	Spring
Graphic Design ART 223	3
Production for the Graphic Designer ART 230	3
History of Western Art ART 206 (Audit or P/NP)	3
Supervised Field Experience: AAD 1.300	3-5
Total Credits	12-14

*Must be taken before entry into second year.
[1] Refer to Mass Communication Department Course Descriptions.
[2] Refer to Business Department Course Descriptions.
[3] Refer to Electronics Department Course Descriptions.
** Refer to Art and Applied Design Department Course Descriptions for other courses in this suggested course of study.

Recommended Electives:

Business Department
Business English 1 1.120
Business English 2 1.122
Business Communications BA 214
Keyboarding OA 120/2.501
Formatting 1 OA 121/2.101
Keyboard Skillbuilding OA 124/2.109
Electronic Typing 2.130
Small Business Entrepreneurship BA 250

Data Processing Department
Concepts of Computing CS 121
Microcomputer Graphics CS 235

Counseling Department
Human Relations 1 1.608

English and Foreign Language Department
Interpersonal Communication Sp 214/1.104
Fundamentals of Speech: Communication Sp 111
Business and Professional Speech Communication Sp 230

Mass Communication Department
Slide/Tape Production 3.444

Curriculum for College Transfer

First Year	Fall
Beginning Drawing ART 131*	3
Beginning Photography ART 161*[1] *or*	3
Basic Design: Fundamentals ART 115*	(3)
Survey of Visual Arts: Modern Art ART 211 *or*	3
Introduction to Visual Arts ART 101	(3)
Social Science Elective[2]	3
Physical Education PE 170/180/190[3]	1
Intermediate Algebra Mth 100**[4]	(4)
Foreign Language***[5]	(5)
Total Credits	13-22

	Winter
Basic Design: Fundamentals ART 115* *or*	3
Beginning Photography ART 161*[1]	(3)
Drawing ART 132* *or*	3
Figure Drawing ART 234*	(3)
Publication Design and Production 1 3.433*[1]	3
Survey of Visual Arts: Modern Art ART 212	(3)
English Composition Wr 121[5]	3
Social Science Elective[2]	3
Physical Education PE 170/180/190[3]	1
Total Credits	16-19

	Spring
Basic Design: Color ART 116*	3
Lettering and Layout ART 119*	3
Figure Drawing ART 234*	3
Composition: Style Wr 122[5]	3
Social Science Elective[2]	3
Physical Education PE 170/180/190[3]	1
Total Credits	16

Second Year	Fall
Graphic Design ART 221	3
Production for the Graphic Designer ART 228	3
History of Western Art ART 204	3
Beginning Watercolor ART 184 *or*	3
Watercolor ART 284	(3)
Science Elective (with lab)[6]	4
Total Credits	16

	Winter
Graphic Design ART 222	3
Production for the Graphic Designer ART 229	3
Computer-Aided Drafting 4.110[7] *or*	4
Airbrush Painting ART 287	(3)
History of Western Art ART 205	3
Science Elective (with lab)[6]	4
Total Credits	16-17

	Spring
Graphic Design ART 223	3
Production for the Graphic Designer ART 230	3
History of Western Art ART 206	3
Science Elective (with lab)[6]	4
Personal Health HE 250[3]	3
Total Credits	16

*Must be taken before entry into second year.
**Math required for LCC Associate of Arts Degree
*** Two-year foreign language required for BA or BFA at both Oregon State University and University of Oregon
[1] Refer to Mass Communication Department Course Descriptions.
[2] Refer to Social Science Department Course Descriptions.
[3] Refer to Health & Physical Education Department Course Descriptions.
[4] Refer to Mathematics Department Course Descriptions.
[5] Refer to English and Foreign Language Department Course Descriptions.
[6] Refer to Science Department Course Descriptions.
[7] Refer to Electronics Department Course Descriptions.
+ Refer to Art and Applied Design Department Course Descriptions for other courses in this suggested course of study.

Insurance Adjusters

Two-Year Associate of Applied Science Degree Program

Offered by LCC's Mechanics Department

Students are trained in all the fundamentals of insurance adjusting. This includes estimating, investigations, report writing, and settlement of claims.

Entry employment as an adjuster would be with an independent adjusting firm or with an insurance company. Starting pay ranges from $14,000 to $20,000.

This two-year program consists of classroom instruction and related laboratory classes to prepare a student for employment as an adjuster. A person considering this training should be bondable and have a good driving record.

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

Books—$100 (1st yr); additional $85 (2nd yr)

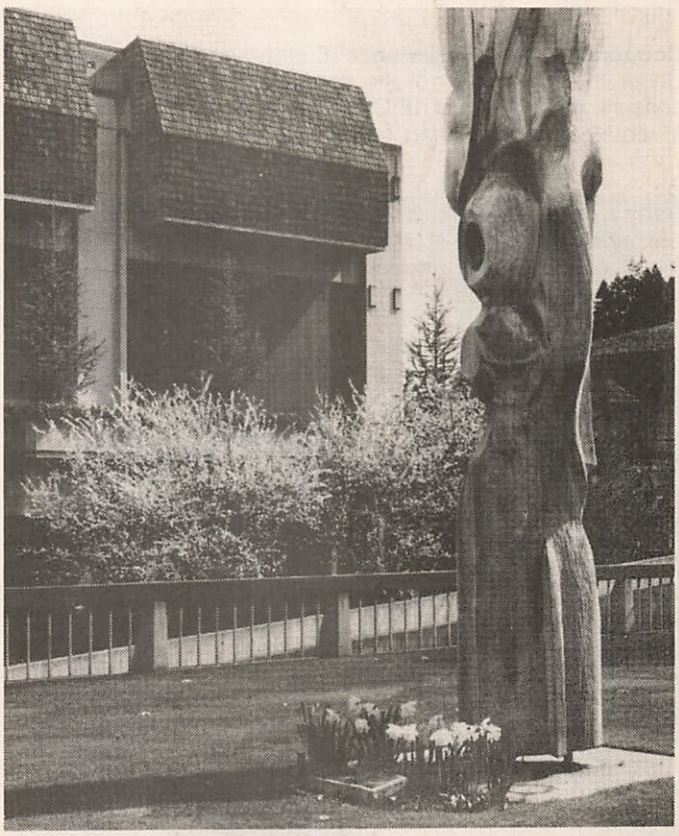
For costs in other classes, refer to the appropriate department and/or the current class schedule.

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 Insurance Adjusting course credits.

Curriculum

First Year	**Fall**
Insurance Policies 1 3.325	5
Vehicle Damage Claim Practice 1 3.254	8
Basic Mathematics Review Mth 20[1] *or*	3
Math Renewal Mth 20[1]	(3)
Industrial Safety HE 125[2]	3
Total Credits	19
	Winter
Insurance Policies 2 3.326	5
Vehicle Damage Claim Practice 2 3.255	8
Communication Skills 1 1.100[3]	3
Total Credits	16
	Spring
Insurance Policies 3 3.327	5
Vehicle Damage Claim Practice 3 3.256	8
English Composition Wr 121[3]	3
Business Law BA 226[4]	3
Total Credits	19
Second Year	**Fall**
Insurance Law 3.331	7
Vehicle Damage Claim Practice 4 3.257	1
Estimating Building Construction Costs 1 3.318	3
Technical Report Writing Wr 227[3]	3
Medical Terminology 2 5.493[5]	3
Social Science Elective	3
Total Credits	20
	Winter
Insurance Investigations 1 3.332	5
Insurance Investigations 2 3.338	5
Vehicle Damage Claim Practice 5 3.258	1
Composition: Research Wr 123[3]	3
Fundamentals of Speech: Communication Sp 111[3]	3
Total Credits	17
	Spring
Insurance Settlements: How to Conclude a Loss 3.335	5
Vehicle Damage Claim Practice 6 3.259	1
Estimating Building Construction Costs 2 3.333	5
Business Communications BA 214[4]	3
Keyboarding OA 120/2.501[4]	2
Science Elective	3
Total Credits	19

* Individual non-sequential classes may be taken with approval of Mechanics Department
[1] Refer to Mathematics Department Course Descriptions.
[2] Refer to Health & PE Department Course Descriptions.
[3] Refer to English and Foreign Language Department Course Descriptions.
[4] Refer to Business Department Course Descriptions.
[5] Refer to Health Occupations Department Course Descriptions.
[6] Refer to Mechanics 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.

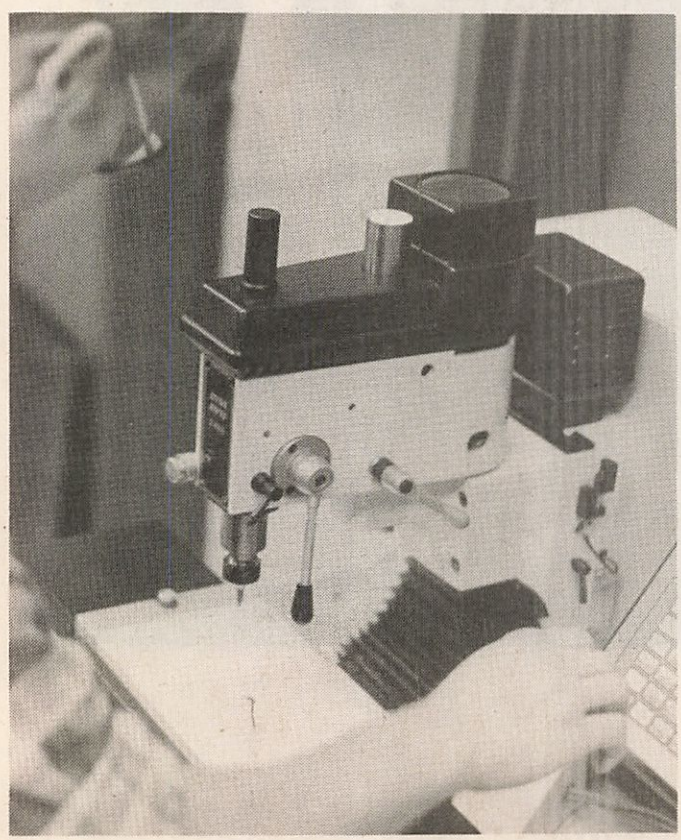
In addition to tuition, required estimated costs for manufacturing technology classes include:

Books—$45
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 $7 an hour; journeymen earn $9 to $11 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
Physics for Technicians 1 4.300[1]	4
Occupational Mathematics 1 Mth 50[2]	3
Industrial Safety HE 125[3]	3
Total Credits	22
	Winter
Manufacturing Technology 3.399	12
Occupational Mathematics 2 Mth 55[2]+	3
Gas Processes 1 3.931[4]+	4
Total Credits	19
	Spring
Manufacturing Technology 3.399	12
Drafting 1 4.120[5]	4
Physics for Technicians 2 4.302[1]+	4
Total Credits	20
Second Year	**Fall**
Manufacturing Technology 3.399	12
Arc Welding 1 3.921[4]	4
Drafting 2 4.121[5]	4
Total Credits	20
	Winter
Manufacturing Technology 3.399	12
Electrical Science 4.304[1]+	4
Communication Skills 1 1.100[6]	3
Total Credits	19
	Spring
Manufacturing Technology 3.399	12
Humanities Elective+	3
Consumer Education SSc 250/2.150[7]	3
Mechanical Design 4.132[5] *or*	4
Geometric Tolerances 4.133[5] *or*	(4)
Power Trains and Accessories Design 4.134[5]	(4)
Total Credits	22

\+ Not required for Certificate of Completion
[1] Refer to Science Department Course Descriptions.
[2] Refer to Mathematics Department Course Descriptions.
[3] Refer to Health & PE Department Course Descriptions.
[4] Refer to Industrial Technology Programs Course Descriptions.
[5] Refer to Electronics 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.

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 a clerical 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 (Nelson-Denny Reading 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 $850 to $950 per month, usually with fringe benefits.

Curriculum

First Year	Fall
Formatting 1 OA 121/2.101[1]	2
Keyboard Skillbuilding OA 124/2.109[1]	2
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	17
	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
Medical Formatting 2.124	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
Community Relationships 5.480	2
Total Credits	16

[1] Refer to Business Department Course Descriptions

\+ Refer to Health Occupations Course Descriptions for other courses in this curriculum

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 developing and implementing microcomputer information systems. 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 program includes introductory courses in computer information processing, specialized courses in microcomputer software systems, as well as courses from the Business, Mathematics, English and Foreign Language, and Social Science departments which will provide the student with a broad range of skills necessary to be an effective employee.

Curriculum

First Year	**Fall**
Concepts of Computing CS 121	3
Intermediate Algebra Mth 100[1]	4
Accounting 1 2.110[2] *or*	3
Principles of Accounting BA 211[2]	(3)
Introduction to Microcomputers CS 110	3
Elective	3
Total Credits	16

	Winter
General Purpose Microcomputer Software CS 111	3
Accounting 2 2.111[2] *or*	3
Principles of Accounting BA 212[2] *or*	(3)
Specialized Elective*	(3)
English Composition Wr 121[3] *or*	3
Communication Skills 1 1.101[3] *or*	(3)
Fundamentals of Speech: Communication Sp 111[3]	(3)
Elementary Logic Phl 221[4] *or*	3
Problem Solving 0.5271[5]	(3)
Electives	4
Total Credits	16

	Spring
Microcomputer Software Systems 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)
Introduction to Computer Information Processing CS 131 *or*	4
Introduction to Computer Science 1: Pascal CS 201	(4)
Total Credits	13

*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 should not be deterred from choosing a career in this field because the opportunities for *performance* are limited. That's only one part of the employment picture. 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
PE 170/180/190[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
PE 170/180/190[4]	1
Social Science[5]	3
Composition: Style Wr 122[6]	3
Composition: Research Wr 123[6]	3
Total Credits	24
	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
PE 170/180/190[4]	1
Math 100	4
Total Credits	20
	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
Total Credits	19
	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 Health & PE Department 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 this 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 patient 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.

The Counseling Center conducts weekly, walk-in pre-orientation sessions for individuals interested in the nursing programs. Interested applicants should check with the center for the date, hour, and location of these sessions. Individuals desiring information about the nursing programs and/or application requirements and procedures are encouraged to attend.

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 1988 admission may be picked up at the Admissions Office after December 1, 1987.

Requirements An applicant must be a high school graduate by fall 1988 or have a GED certificate, complete a Department of Health Occupations application form, take the School College Ability Verbal Test (SCAT)[1], 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 31. 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.

Students may be asked to take teacher-constructed examinations including demonstration of specified skills in the college nursing laboratory.

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	$112
NLN achievement exams	20
Uniform (minimum of one)	50
Books	375
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 1988. Second year ADN students must have tuberculin tests current through June of 1988.

Employment Trends Job prospects in Eugene and Portland are fair to good. Prospects in other parts of Oregon are excellent, especially in small community areas. Nationwide prospects are good.

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[4] *or*	3
Human Development 1 Psy 235[5]	(3)
Total Credits	17

	Winter
Elementary Microbiology Bi 123	4
Basic Nursing 1 NUR 107A	5
Basic Nursing 1 Lab NUR 107B	5
Social Science Elective**[5]	3
Total Credits	17

	Spring
Basic Nursing 2 NUR 109A	6
Basic Nursing 2 Lab NUR 109B	6
Nursing Trends and Issues NUR 204C	1
Supervised Field Experience 1.300*	(3)
Total Credits	13-16

Second Year	Fall
Advanced Nursing 1 NUR 206A	5
Advanced Nursing 1 lab NUR 206B	5
Nutrition FN 225[4]	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	5
Advanced Nursing 2 Lab NUR 207B	5
Social Science Elective**[5]	3
Supervised Field Experience 1.300*	(3)
Total Credits	13-16

	Spring
Advanced Nursing 3 NUR 209A	5
Advanced Nursing 3 Lab NUR 209B	6
Social Science Elective	3
Basic Mathematics Review Mth 20[3] *or*	3
Math Renewal Mth 20[3] *or*	(3)
Business Mathematics BA 103/2.206[6]	(3)
Nursing Trends and Issues NUR 204C	(1)
Supervised Field Experience 1.300	(3)
Total Credits	17-21

* Optional Elective
** Select from the following: Psychology, Sociology, Human Relations, 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 Home Economics Department Course Descriptions.
[5] Refer to Social Science Department Course Descriptions.
[6] 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 accep-

tance 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 The Practical Nursing program accepts one class per year beginning summer term. Selection to the program is by a point system. See nursing admissions information above.

Fees and Expenses

Tuition (resident of Oregon)	$231 per term
Miscellaneous Fees (approximate)	
Lab fees*	$ 76
NLN achievement exams	12
Uniforms	50
Books	250
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 1988.

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. Excellent prospects exist in other parts of Oregon, especially in small community areas. 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	6-10

	Fall
Nursing Fundamentals NUR 106A	5
Nursing Fundamentals Lab NUR 106B	5
Physical Science 1 5.510* *or*	3
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	16-17

	Winter
Basic Nursing 1 NUR 107A	5
Basic Nursing 1 Lab NUR 107B	5
Physical Science 2 5.512* *or*	3
Elementary Microbiology Bi 123[1]	(4)
Social Science Elective[5]	3
Total Credits	16-17

	Spring
Basic Nursing 2 NUR 109A	6
Basic Nursing 2 Lab NUR 109B	6
Nursing Trends and Issues NUR 204C	1
Supervised Field Experience 1.300*	(3)
Total Credits	13-16

*Practical Nursing students may complete either the Bi 121, 122, 123 sequence or the Physical Science 5.510 and 5.512 sequence. This option will change with the class admitted in 1988-89. Physical Science 1 5.510 and 2 5.512 will not be accepted as fulfilling the science requirement after 1987-88.

* Optional
[1] Refer to Science Department Course Descriptions.
[2] Refer to Mathematics Department Course Descriptions.
[3] Refer to English and Foreign Language 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
Office Careers Survey OA 101	3 credits
Office Procedures 1 2.116	3 credits
Records Management OA 240/2.508	3 credits
Total Core	33 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
Office Careers Survey OA 101	3 credits
Office Systems Applications 2.545	3 credits
Office Procedures 1 2.116	3 credits
Physical Education PE 170/180/190	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**
Formatting 1 OA 124/2.109**	3
Keyboard Skillbuilding OA 124/2.109	3
Accounting 1 2.110	3
Business English 1 1.120	3
Records Management OA 240/2.508	3
Office Careers Survey OA 101	3
Total Credits	18
	Winter
Formatting 2 OA 122/2.102	3
Accounting 2 2.111	3
Business English 2 1.122	3
Business Mathematics BA 103/2.206	3
Office Procedures 1 2.116	3
Total Credits	15

	Spring
Business Machines: Calculators OA 220/2.522	3
Accounting 3 2.112	3
Business Communications BA 214	3
Microcomputers: Business Applications BA 110	3
Payroll Records and Accounting BA 177	3
Office Procedures 2 2.515	3
Total Credits	18

Associate Accountant

Second Year	**Fall**
Tax Accounting BA 220	3
Fundamentals of Speech: Communication Sp 111[1]	3
Applied Economics BA 156/1.506	3
Office Management BA 251	3
Office Systems Applications 2.545	1
Elective	3
Physical Education PE 170/180/190[2]	1
Total Credits	17
	Winter
Business Law BA 226	3
Math/Science Elective*[3]	3
Personal Finance BA 218	3
Office Systems Applications 2.545	1
Physical Education PE 170/180/190[2]	1
Electives	6
Total Credits	17
	Spring
Small Business Management BA 250	3
Basic Cost Accounting BA 215	3
Office Systems Application 2.545	1
Supervised Field Experience FE 207/1.300	3
Electives	3
Physical Education PE 170/180/190[2]	1
Total Credits	14

* 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.
[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.

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
Electronic Typing 2.130
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
Business Math BA 103/2.206	3
Office Careers Survey OA 101	3
Keyboard Skillbuilding OA 124/2.109*	3
Records Management OA 240/2.508	3
Total Credits	18
	Winter
Business English 2 1.122	3
Business Machines: Calculators OA 220/2.522	3
Office Procedures 1 2.116	3
Formatting 2 OA 122/2.102	3
Elective	3
Total Credits	15
	Spring
Office Procedures 2 2.515	3
Machine Transcription OA 225/2.532	3
Office Systems Applications 2.545	3
Business Communications BA 214	3
Elective	3
Total Credits	15

* Students without knowledge of the typewriter keyboard must take Keyboarding OA 120/2.501 before starting Keyboard Skillbuilding or Formatting 1.
\+ + Refer to Business Department Course Descriptions for courses in this curriculum.

Suggested Electives
Electronic Typing 2.130
SFE: Office Administration FE 207/1.300
Keyboarding OA 120/2.501
Microcomputers: 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
Business Math BA 103/2.206	3
Records Management OA 240/2.508	3
Keyboard Skillbuilding OA 124/2.109***	3
Formatting 1 OA 121/2.101***	3
Office Careers Survey OA 101	3
Total Credits	18

	Winter
Business English 2 1.122	3
Business Machines: Calculators OA 220/2.552	3
Office Procedures 1 2.116	3
Formatting 2 OA 122/2.102	3
Accounting 1 2.110	3
Total Credits	15

	Spring
Business Communications BA 214	3
Machine Transcription OA 225/2.532	3
Applied Economics BA 156/1.506	3
Office Systems Applications 2.545	1
Speedwriting 1/Briefhand OA 114/2.108**	3
Accounting 2 2.111	3
Total Credits	16

Second Year	Fall
Legal Secretarial Procedures 1 OA 131+	4
Office Systems Applications 2.545	1
Legal Secretary Leadership Practicum BA 106	1
Fundamentals of Speech: Communication Sp 111[1]	3
Business Law BA 226	3
Physical Education PE 170/180/190[2]	1
Social Science Elective*[3]	3
Total Credits	16

	Winter
Legal Secretarial Procedures 2 OA 132+	4
Integrated Office Systems OA 256	3
Legal Secretary Leadership Practicum BA 106	1
Word Processing 2.559	3
Physical Education PE 170/180/190[2]	1
Math/Science Elective[4]	3
Total Credits	15

	Spring
Legal Secretarial Procedures 3 OA 133/2.133+	3
Law of Business Transactions BA 227	3
Physical Education PE 170/180/190[2]	1
Supervised Field Experience FE 207/1.300	3
Electives	6
Total Credits	16

* College Transfer Course Required

** Since Gregg Shorthand is a desirable elective to broaden job opportunities and to merit a higher salary, Gregg Shorthand 1 and 2 may be substituted for the Speedwriting 1/Briefhand and an elective or if student has previous Gregg Shorthand experience, s/he should take Shorthand Skill Building.

*** 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.

[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.

Electives for Specialization

Electronic Typing 2.130
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 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

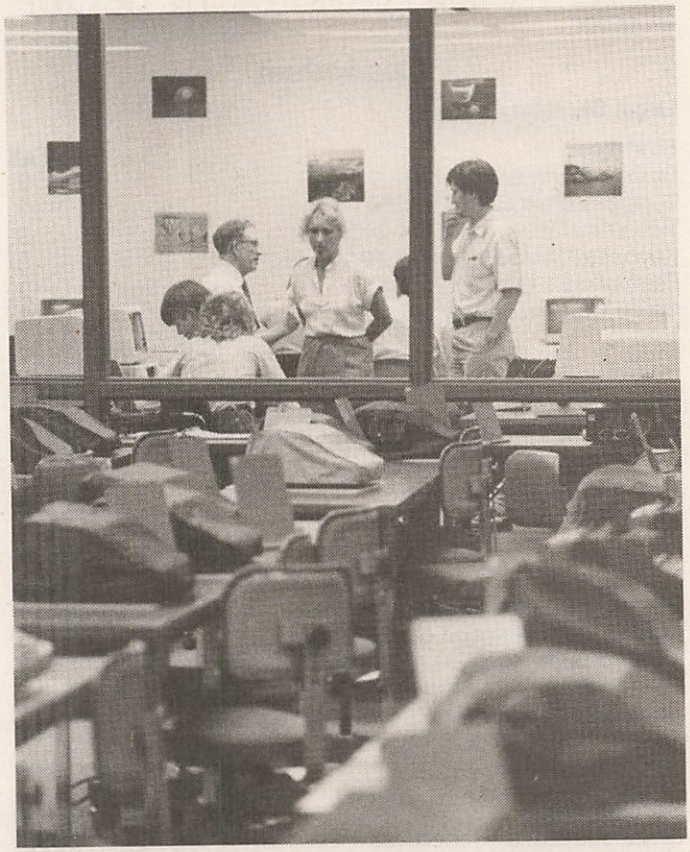
Curriculum

Professional Secretary Option

First Year	**Fall**
Business English 1 1.120	3
Business Math BA 103/2.206	3
Records Management OA 240/2.508	3
Keyboard Skillbuilding OA 124/2.109*	3
Formatting 1 OA 121/2101*	3
Office Careers Survey OA 101	3
Total Credits	18
	Winter
Business English 2 1.122	3
Business Machines: Calculators OA 220/2.522	3
Office Procedures 1 2.116	3
Speedwriting 1/Briefhand OA 114/2.108**	3
Formatting 2 OA 122/2.102	3
Total Credits	15
	Spring
Office Procedures 2 2.515	3
Business Communications BA 214	3
Machine Transcription OA 225/2.532	3
Office Systems Applications 2.545	3
Applied Economics BA 156/1.506	3
Total Credits	15

Second Year	**Fall**
Accounting 1 2.110	3
Office Systems Applications 2.545	1
Office Management BA 251	3
Fundamentals of Speech: Communication Sp 111[1]	3
Physical Education PE 170/180/190[2]	1
Word Processing 2.559	3
Total Credits	14
	Winter
Office Systems Applications 2.545	1
Integrated Office Systems OA 256	3
Accounting 2 2.111	3
Payroll Records and Accounting BA 177	3
Physical Education PE 170/180/190[2]	1
Social Science Elective***[3]	3
Elective	3
Total Credits	17
	Spring
Business Law BA 226	3
Office Systems Applications 2.545	1
Supervised Field Experience FE 207/1.300	3
Microcomputer Business Applications BA 110	3
Math/Science Elective*[4]	3
Physical Education PE 170/180/190[2]	1
Elective	3
Total Credits	17

* Students without knowledge of the typewriter keyboard must take Keyboarding OA 120 before starting Keyboard Skillbuilding or Formatting 1.
** Students interested in jobs with Federal Civil Service or in Executive Secretarial positions should take Gregg Shorthand 1, 2, 3 instead of Speedwriting. Speedwriting 1/Briefhand will be waived upon successful completion of the Gregg Shorthand sequence.
***College Transfer Course Required
[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.



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 and Games PE194	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[1]	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
Dynamics Engr 212[1]	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
Strength of Materials Engr 213[1]	4
Engineering Graphics GE 116	3
Social Science Elective[3]	3
Health Elective[4]	3
Total Credits	13

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

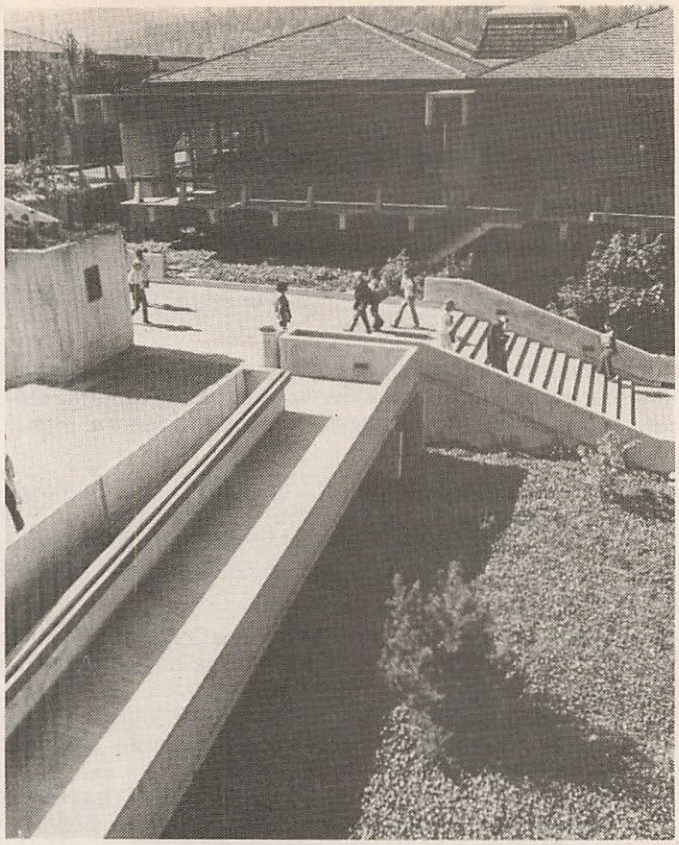
Real Estate Office Management and Supervision of Sales Personnel BA 265	3
Total Credits	15

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

* College Transfer Course Required
[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.

Electives (Real Estate)
Real Estate Exchange & Taxation BA 298
Real Estate Escrow 1 BA 260
Cooperative Work Experience FE 207



Residential Energy Analyst

One-Year Certificate Program

Offered by LCC's Science Department

The Residential Energy Analyst program is a one-year certificate program designed to train people for employment as residential energy assessors (auditors) and in the installation and marketing of weatherization products.

Students who successfully complete the program will be able to perform a Class-A residential energy assessment that includes on-premise inspection; simple, pay-back calculations of the viable weatherization options; verbal instructions to the homeowner pertaining to weatherization options, potential moisture and fire hazards, financing, and tax incentives; and solar-energy site analysis.

Program participants must be an Oregon resident, must be a high school graduate or have a GED certificate, and must have completed one year of high school algebra or its equivalent with an average grade of "C" or better.

Admission is on a first come basis and is done through the Admissions Office.

Students will be admitted to the Residential Energy Analyst program in the fall of 1988. Students interested in the program should consult the Science Department counselor to plan a program which will prepare them for entry into the Residential Energy Analyst program.

Curriculum

Fall	
Fundamentals of Physics Ph 101/6.330	4
Energy in Society SSc 120/6.320[1]	3
Intermediate Algebra Mth 100[2]	4
Occupational Mathematics 2 (Trig) Mth 55[2]	1
Communication Skills 1 1.100[3] *or*	3
English Composition Wr 121[3]	(3)
Total Credits	15
Winter	
Building Construction 3.118[4]	2
Energy Saving Products 3.105	2
Residential Energy Analysis GS 122/6.318	2
Fundamentals of Physics Ph 102/6.331	4
Technical Report Writing Wr 227[3]	3
Supervised Field Experience Seminar CWE 206	1
Total Credits	14
Spring	
Supervised Field Experience 1.300	2
Solar Fundamentals GS 123/6.319	3
Concepts of Computing CS 121[5]	3
Blueprint Reading 1 3.910[4]	3
Electives	6
Total Credits	17

[1] Refer to Social Science Department Course Descriptions.
[2] Refer to Mathematics Department Course Descriptions.
[3] Refer to English and Foreign Language Department Course Descriptions.
[4] Refer to Industrial Technology Programs Course Descriptions.
[5] Refer to Data Processing Department Course Descriptions.
\+ Refer to Science Department Course Descriptions for other courses in this curriculum.

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 at the high school level or one term at the college level.

The admissions process includes a screening examination, the Sequential Test of Educational Progress (STEP), and submission of transcripts from all high school and college work. Personal interviews are required of the most qualified applicants. 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 and the Eugene Clinic, Eugene, Oregon, and the McKenzie-Willamette Hospital, Springfield, Oregon.

Employment Trends Job prospects in Eugene/Lane County are fair; in Oregon and nationwide they are fair. Beginning pay is usually from $1,400 to $1,500/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. Starting salary ranges from approximately $550 to $650 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 238/2.238	3
Marketing BA 223	3
Total Credits	15

* Students that have a touch typing speed of 25 words per minute or more should challenge Keyboarding OA 120/2.501.

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

\+ Refer to Business Department Course Descriptions for other courses in this curriculum.

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 a Mechanical Design and Architectural Design curriculum. Each emphasis has a strong component in Computer-Aided Drafting (CAD), with coursework available in structural and electronic drafting. The department has 18 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. 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 $5 to $8 per hour.

Required drafting equipment and supplies cost approximately $150 for the two-year period.

Curriculum

First Year	**Fall**
Drafting Fundamentals 4.135	3
Drafting 1 4.120	4
Introduction to Fabrication Practices 4.136	2
Concepts of Computing CS 121[1]*** *and*	3
Special Studies in Computer Lab CS 199[1]*** *or*	1
Introduction to Microcomputers CS 110[1]	(3)
Elementary Algebra Mth 65[2] *or*	4
Occupational Mathematics 1 Mth 50[2]	(3)
Total Credits	15-17

	Winter
Mechanical Drafting 1 4.121* *or*	4
Architectural Drafting - Plans 4.137**	(4)
Computer-Aided Drafting 4.110	4
Communication Skills 1 1.100[3] *or*	3
Preparatory English Composition Wr 120[3]	(3)
Intermediate Algebra Mth 100[2] *or*	4
Occupational Mathematics 2 Mth 55[2]	(3)
Industrial Safety HE 125[4] *or*	3
First Aid HE 252[4] *or*	(3)
Personal Health HE 250[4]	(3)
Total Credits	17-18

	Spring
Computer-Aided Drafting - Mechanical 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**
Mechanical Design 4.113* *or*	4
Blueprint Reading for Drafters/Architects 4.144**	(3)
Computer-Aided Drafting - Architectural 4.142** *or*	4
Elective*	(3)
Structural Drafting: Steel 4.140	4
Physics for Technicians 1 4.300[6] *or*	4
Fundamentals of Physics Ph 101[6]	(4)
Total Credits	15

	Winter
Geometric Tolerancing 4.133* *or*	4
Architectural Measurement 4.114**	(3)
Architectural Design - Remodeling Arch 180** *or*	5
Elective*	(3)
Structural Drafting: Wood 4.141	4
Physics for Technicians 2 4.302[6] *or*	4
Fundamentals of Physics Ph 102[6]	(4)
Total Credits	15-16

	Spring
Power Trains and Accessories Design 4.134* *or*	4
Construction Literature 4.145**	(2)
Architectural Design - Solar Residence Arch 181** *or*	5
Electrical Drafting 4.103* *and*	(2)
Elective*	(3)
Manufacturing Orientation 3.395[7]	3
Communication Skills 3 6.126[3] *or*	3
Composition: Style Wr 123[3]	(3)
Total Credits	13-15

*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, business people, and skilled workers as stage and lighting designers, sound technicians, carpenters and cabinetmakers, electricians, scenery 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, wigmakers, mechanics, teachers, secretaries, and of course, writers 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
Stage Makeup TA 270	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
Technical Theatre Workshop TA 265*	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

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
Total Credits	16
	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	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
Total Credits	16

- **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.**

Second Year	**Fall**
Technical Theatre Workshop TA 265	3
Acting 1 TA 230	3
Math or Science[1]	4
Social Science[2]	3
Costume Workshop TA 261	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
Total Credits	16
	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.*

Curriculum

First Year	**Fall**
Arc Welding 1 3.921	4
Gas Processes 1 3.931	4
Occupational Mathematics 1 Mth 50[1]	3
Manufacturing Orientation 3.395[2]	3
Communication Skills 1 1.100[3]	3
Total Credits	17
	Winter
Arc Welding 2 3.922	4
Gas Processes 2 3.932	4
Drafting 1 4.120[4]	4
Blueprint Reading 1 3.910	3
Industrial Safety HE 125[5]	3
Total Credits	18
	Spring
Shop Fabrication Practices 3.938	10
Blueprint Reading 2 3.911	3
Communication Skills 2 1.102[3]	3
Total Credits	16
Second Year	**Fall**
Advanced Welding Practices 1 (GTAW) 3.942	3
Advanced Welding Practices 2 (GMAW) 3.943	3
Welding Theory 1 3.945	3
Estimating for Welders 3.928	3
Elective* (Welding Technology Electives)	3
Total Credits	15
	Winter
Advanced Welding Practice 3 3.946	4
Welding Theory 2 3.947	3
Senior Welding Projects 1 3.908	4
Applied Welding Metallurgy 3.951	4
Total Credits	15
	Spring
Advanced Welding Practice 4 3.948	4
Welding Theory 3 3.949	3
Senior Welding Projects 2 3.909	4
Social Science Elective[6]	3
Total Credits	14

* **Welding Technology Electives**
Welding Lab 3.939
CWE 1.300
Drafting 2 4.121
Physics for Technicians 1 4.300
Physics for Technicians 2 4.302
Others as approved by department head or counselor

[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 Electronics Department Course Descriptions.
[5] Refer to Health and PE Department Course Descriptions.
[6] Refer to Social Science Department Course Descriptions.
** Refer to Industrial Technology Programs Course Descriptions for all other courses in this curriculum.

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

This noncredit program offers nine small business workshops which can be taken in any order over a period of two years. The workshops are designed to provide business owners and potential business owners the basic skills to operate a small business. A certificate is awarded at the completion of six of the nine workshops. Consult the LCC class schedule or contact the Small Business Development Center, 726-2255, for workshop titles and dates.

Certified Financial Planner (CFP)

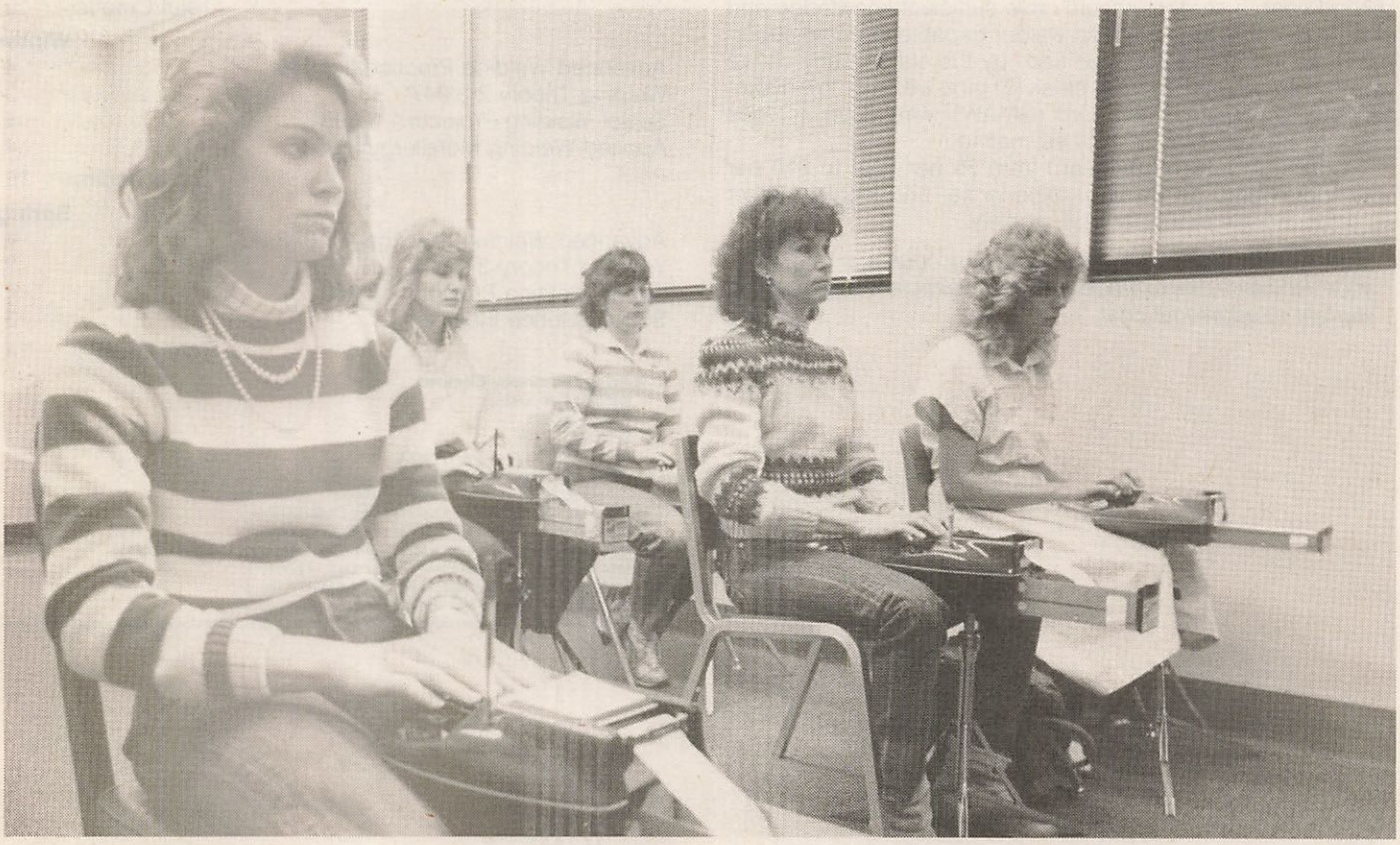
This professional education program is a six-term series of classes covering comprehensive written examinations required for CFP certification. College of Financial Planning catalogs and applications for those wishing to become certified (cost $1,575 plus LCC tuition), are available by calling 726-2252, ext. 2908.

Court Reporting

This is a two-year vocational open-entry/open-exit program. 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 Med-



ical 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 management operations and learn better business management concepts in farm operations.

The program is based on a design developed by the University of Minnesota and presently is used at community colleges in Oregon and throughout the nation. The instructor travels to farm sites giving technical recordkeeping assistance to participants. In addition, the instructor provides classroom instruction once each month. Individual records are confidential.

Participants are provided an annual computer analysis of farm operations. This analysis provides information designed to maximize profits for each farm enterprise.

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

This state-approved program prepares students to be Nursing Assistants, Home Health Aides and Medication Aides. All classes are by application only; all classes except the basic Nursing Assistant/Home Health Aide have prerequisites. Classes include:

Nursing Assistant/Home Health Aide (166 Hours) Includes class, laboratory, and practicum.

Nursing Assistant (100 Hours) Prerequisites include previous experience and/or certification.

Nursing Assistant By Exemption Prerequisites include previous training program comparable to Oregon requirements and out-of-state certification.

Home Health Aide (60 Hours) Prerequisites include current Oregon Nursing Assistant Certificate; offered once a year.

Medication Aide (60 Hours) Includes class and laboratory. State-administered examination required. Prerequisites include one year experience as Certified Oregon Nursing Assistant.

For more information, call Adult Education, 726-2252.

Small Business Management

This is a three-year, noncredit program designed to bring the benefits of instruction in business management to small business operators.

It offers a small business the opportunity to develop the records system best suited for that business, analyze records for management information, plan for greater profits, and develop a plan for sound growth or expansion. Individual records and record summaries are confidential.

This program includes class meetings once a month, monthly visits by the instructor to individual businesses, and an annual computer analysis for each business enrolled.

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 (30 hrs), Physiology (30 hrs), Kinesiology (30 hrs), Pathology (30 hrs), Hydrotherapy (10 hrs), Beginning Massage (30 hrs). Intermediate and Advanced Massage are optional. 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 Roger McAlister, department head, 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

Basic Design: Fundamentals ART 115 . . . . . 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.

Basic Design: Color ART 116 . . . . . 3 credits
(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.

Basic Design: 3 Dimensional ART 117 . . . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 6 lecture/lab hrs/wk
It is recommended Basic Design: Fundamentals ART 115 be taken prior to Basic Design: 3 Dimensional ART 117. Studio problems in basic principles of three-dimensional design; the basic elements of mass, space, delineation of space, planes in space and physical texture. Emphasis on three simple sculptural materials and processes. A fundamental course for students interested primarily in ceramics, sculpture, architecture and other 3-D design fields.

Lettering and Layout ART 119 . . . . . 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.

Graphic Design ART 221 . . . . . 4 credits
(Fall Term) . . . . . 8 lecture/lab hrs/wk
Prerequisites: Basic Design: Fundamentals ART 115 and Basic Design: Color 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.

Graphic Design ART 222 . . . . . 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.

Graphic Design ART 223 . . . . . 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.

Applied Design: Moving Images and Sound
ART 225 . . . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 6 lecture/lab hrs/wk
Prerequisite: Beginning Photography ART 161/2.207. Practical experience in the area of design for moving images and sound. An introductory course in design fundamentals as they apply to the design and production of moving images with sound, including theory and proper operation of related equipment used in this field of visual design. (Course is primarily for Mass Communication majors in TV production)

***Applied Design: Furniture** ART 226 . . . . . 3 credits
(Spring Term) . . . . . 2 class, 2 lecture/lab hrs/wk
Prerequisite: One term of drafting, one term of woodworking (any LCC course) or equivalent experience. Introduction to the functional design process as applied to the designing of wood furniture. Classroom experience in planning, sketching ideas, applying functional and aesthetic tests, intuitive engineering, drafting plans to scale from which the student or any similarly experienced woodworker can construct the furniture piece without surprises. Non-sequential. This course may be repeated. Basic Design: Fundamentals ART 115 and Basic Design: 3 Dimensional ART 117 desired, but not mandatory.

Production for the Graphic Designer
ART 228, 229, 230 . . . . . 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

***Beginning Drawing** ART 131 . . . . . 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.

Drawing ART 132 . . . . . 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.

***Figure Drawing** ART 234 . . . . . 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 of $3 required.

Printmaking

Printmaking ART 271 . . . . . 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.), relief (woodcut or lino-cut), and collagraphy (mixed-media). Lectures, demonstrations, and studio experience. Recommend Printmaking ART 271, 272, 273 be taken sequentially. Class fee of $4 required.

Printmaking ART 272 . . . . . 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 serigraphy (silkscreen). Lectures, demonstrations, and studio experience. Recommend Printmaking ART 271, 272, 273 to be taken sequentially. Class fee of $4 required.

Printmaking ART 273 . . . . . 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 (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 of $4 required.

Painting

***Beginning Painting** ART 181 . . . . . 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.

***Painting: Oils** ART 281 . . . . . 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.

***Beginning Watercolor** ART 184 . . . . . 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.

Watercolor ART 284 . . . . . 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.

Airbrush Painting ART 287 . . . . . 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 of $5 required.

Special Studies: Painting
ART 299 . . . . . (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.

Special Studies: Airbrush
ART 299 . . . . . 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 of $5 required.

Sculpture

***Beginning Sculpture** ART 191 . . . . . 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 of $3 required.

Sculpture: Welding ART 192 . . . . . 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 of $3 required.

***Sculpture: Wood** ART 193 . . . . . (variable) 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 of $3 required.

***Sculpture: Metal Casting** ART 293 . . . . . 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 of $8 required.

Ceramics

Beginning Ceramics (Hand Building)
ART 154 . . . . . 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 of $3 required.

Ceramics (Wheel Throwing) ART 155 . . . . . 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. $3 lab fee.

***Ceramics: Intermediate** ART 254 . . . . . 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 of $3 required.

Special Studies: Ceramics ART 299 . . . . . 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 of $3 required.

Weaving

***Beginning Weaving (Off-Loom)** ART 151 . . . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 6 lecture/lab hrs/wk
A beginning weaving course designed to enable the student to become familiar with several elementary techniques of weaving and their materials. The student will design and complete a simple woven project in any one of several processes. Non-sequential. This course may be repeated.

Fiber Spinning and Dyeing ART 152 . . . . . 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.

Weaving: Loom ART 251 . . . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 6 lecture/lab hrs/wk
Prerequisite: Beginning Weaving ART 151. An exploration of loom processes as compared to off-loom processes. Warping a loom, understanding basic mechanical weaves, and exploring the basic weaves are all important considerations for the student.

***Weaving** ART 252 . . . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 6 lecture/lab hrs/wk
Prerequisite: Loom Weaving ART 251 or equivalent and instructor permission. A basic course designed to teach the student some of the technical aspects of floor-loom weaving. The student will become familiar with the basic mechanical possibilities of the four-harness loom; how to design for it and use it. Students will complete a simple woven project. This course may be repeated.

Jewelry

***Beginning Jewelry and Metalsmithing**
ART 157 . . . . . 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 of $6 required.

Jewelry and Metalsmithing ART 257 . . . . . 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 of $6 required.

Stained Glass

Stained/Leaded Glass ART 244 . . . . . 3 credits
(Winter & Spring Terms) . . . . . 6 lecture/lab hrs/wk
Prerequisite: Beginning Drawing ART 131 or Basic Design: Fundamentals ART 115 (both preferred). A basic course in the craft of stained and leaded glass. Student will learn techniques of copper foil, staining, cutting, soldering, and finishing. Materials fee of $6 required.

Woodart

Woodworking Arts ART 246 . . . . . 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 course descriptions under Mass Communication.

ART 161 Beginning Photography
ART 162 Photography
ART 261 Photography/Shooting/Editing 16mm Film
ART 262 Photography/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

Introduction to Visual Arts ART 101 . . . . . 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.

History of Oriental Art ART 207 . . . . . 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.

History of Oriental Art ART 208 . . . . . 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.

History of Oriental Art ART 209 . . . . . 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.

History of Western Art ART 204, 205, 206 . . . . . 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.

Survey of Visual Arts: Modern Art ART 211 . . . . 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.

Survey of Visual Arts: Modern Art Art 212 . . . . 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.

Independent Study: Topical
ART 298* . . . . . (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 as follows: Ceramics, $3; Jewelry and Metalsmithing, $6; Sculpture, $8
*Abbreviated in class schedule as "I.S."

Special Studies: Art Survival Skills
ART 299 . . . . . 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.

Color Theory for Auto Refinishing 3.986 . . . . . 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.

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.

Accounting 1 2.110 . . . . . 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.

Accounting 2 2.111 . . . . . 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.

Accounting 3 2.112 . . . . . 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.

Advertising BA 239 . . . . . 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.

Analyzing Financial Statements BA 271 . . . . . 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.

Applied Economics BA 156/1.506 . . . . . 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.

Bank Investments BA 279 . . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
This course discusses the funds available for investment and how their uses are determined. It also analyzes the primary and secondary reserve needs of commercial banks, the sources of reserves, random and cyclical fluctuations of reserves, and the influence of these factors on investment policies. This analysis is followed by a study of yield changes as they affect a bank's long-term holdings.

Bank Management BA 275 . . . . . 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.

Bank Public Relations and Marketing BA 273 . . 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.

Basic Cost Accounting BA 215 . . . . . 3 credits
(Spring Term) . . . . . 3 class hrs/wk
Prerequisite: Accounting 1 2.110, 2 2.111. 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.

Business Communications BA 214 . . . . . 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.

Business English 1 1.120 . . . . . 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.

Business English 2 1.122 . . . . . 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.

Business Environment BA 125 . . . . . 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.

Business Law BA 226 . . . . . 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.

Business Machines—Calculators
OA 220/2.522 . . . . . (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.

Business Mathematics BA 103/2.206 . . . . . 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.

Business Trends BA 299 . . . . . (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.

Civil Service Preparation 2.540 . . . . . 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.

Consumer Lending BA 281 . . . . . 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.

Credit Administration BA 283 . . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
This course is designed to assist the student in preparation of loans and discount. Directed toward the executive level, it concerns itself with a statement and a discussion of factors influencing and determining loan policy. Methods of credit investigation and analysis, credit techniques, specific credit problems, regular and unusual types of loans are discussed.

CRT Microprocessor — See Formatting 1, Formatting 2, Word Processing

Electronic Typing 2.130 . . . . . 1 credit
(All Terms) . . . . . 3 lab hrs/wk
Prerequisite: Typing 45 wpm on a three-minute timed writing. A course providing hands-on experience on a limited text-editing electronic typewriter. Training on the machine includes machine capabilities such as: phrase storage, repetitive documents and tables, stop coding, and automatic centering.

Finance BA 222 . . . . . 3 credits
(Fall & Spring Terms) . . . . . 3 class hrs/wk
Prerequisite: Principles of Accounting BA 212. Problems encountered in the financial management of the business organization. The emphasis is on the decision-making area of managerial finance. The student is initially exposed to the finance function and elements of financial analysis and control. Planning and forecasting of future needs and directions are stressed. Units on budgeting; short-, intermediate-, and long-term financing; debt vs. equity financing for optimal capital structure; sources, uses, and the flow of funds.

Financial Institutions BA 240 . . . . . 3 credits
(Offered by Student Request) . . . . . 3 class hrs/wk
Financial institutions operating in the American economy. History and analysis of the economic significance of the major financial institutions that serve the consumer, the government, and the business community.

Formatting 1 OA 121/2.101 . . . . . (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. Introduction to basic word processing on microcomputers will also be included.

Formatting 2 OA 122/2.102 . . . . . 3 credits
(All Terms) . . . . . 1 class, 4 lec/lab hrs/wk
Prerequisites: Formatting 1 OA 121/2.101 or instructor consent and 45 wpm. 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 and the continued development of skill on the typewriter.

General Aviation Management BA 254 . . . . . 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.

Gregg Shorthand 1 OA 111/2.105 . . . . . 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.

Gregg Shorthand 2 OA 112/2.106 . . . . . 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.

Gregg Shorthand 3 OA 113/2.107 . . . . . 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.

Improving Managerial Performance BA 107 . . . . . (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. The course is the American Management Association's Extension Institute series of 15 one-credit courses.

Independent Study BA 198 . . . . . (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 248 is available in Management and Real Estate.

Inside Commercial Banking BA 269 . . . . . 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.

Integrated Office Systems OA 256 . . (variable) 1-3 credits
(Winter Term) . . . . . 3 class hrs/wk
Prerequisite: Second-year standing in Office Administration Degree options or instructor approval. This course examines office information and decision support systems as individual one-credit offerings. Students study policies and procedures applicable to the operations of each system.The course content also analyzes supporting electronic technology, leadership techniques, and the management of equipment and procedures. Individual office systems will be studied in areas such as telecommunications, networks, electronic equipment and software, reprographics, and storage of office information.

International Banking BA 274 . . . . . 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.

Introduction to Business BA 101 . . . . . 4 credits
(Summer Term) . . . . . 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.

Introduction to Business Statistics BA 232 . . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
Prerequisite: Intermediate Algebra Mth 100 or College Algebra Mth 101. Elementary statistics techniques to aid decision-making in the business environment. Emphasis is on statistical inference, probability, sampling, estimation, and hypothesis testing. Other topics such as operations research may be introduced. Use of resident computer programs. Students planning to transfer to a four-year institution should take College Algebra Mth 101.

Introduction to Careers in Management BA 105 . . . . . 1 credit
(See Term Schedule) . . . . . (6 weeks) 2 class hrs/wk
Designed to provide participants with an opportunity to become aware of the diversity in management careers, to be exposed to the information of opportunities in those areas and of the support services at Lane Community College which will enhance their career preparations.

Introduction to Purchasing BA 160 . . . . . 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.

Introduction to Real Estate BA 285 . . . . . 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.

Investments BA 242 . . . . . 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.

Keyboarding OA 120/2.501 . . . . . (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.

Keyboard Skillbuilding OA 124/2.109 . (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.

Law of Business Transactions BA 227 . . . . . 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 for 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.

Legal Secretary Leadership Practicum
BA 106 . . . . . (variable) 1-2 credits
(Fall, 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.

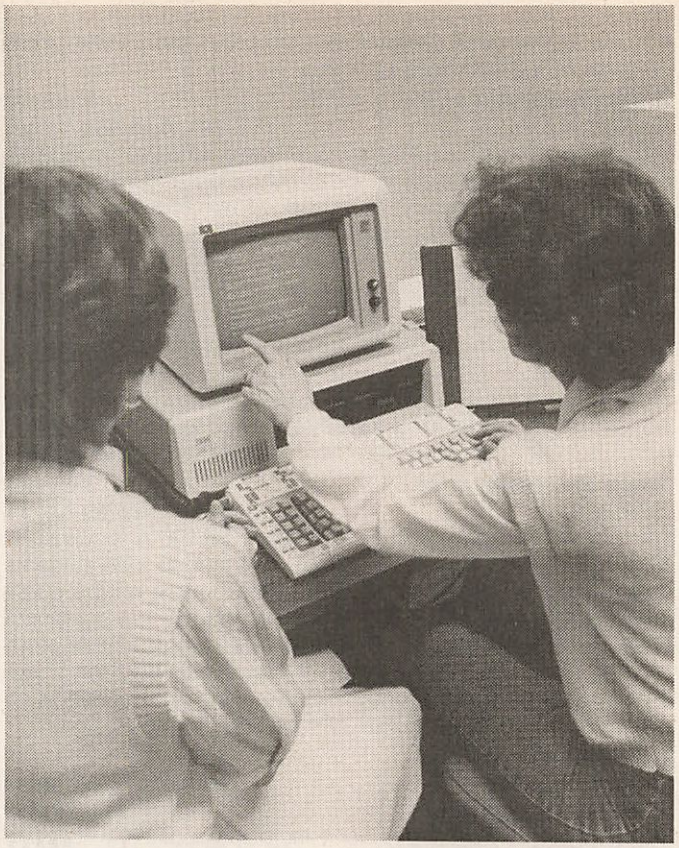
Legal Secretarial Procedures 1
OA 131 . . . . . 4 credits
(Winter Term) . . . . . 3 class, 2 lec/lab hrs/wk
Prerequisite: Typing 50 wpm or instructor consent. This course introduces the student to the law office, to the courts, and to the law library; ethics and duties of the legal secretary; familiarization 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.

Legal Secretarial Procedures 2
OA 132 . . . . . 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.

Legal Secretarial Procedures 3 OA 133/2.133 . . . 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.

Machine Transcription OA 225/2.532 . . . . . 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.

Management Fundamentals BA 206 . . . . . 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.



Marketing BA 223 . . . . . 3 credits
(Fall Term) . . . . . 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.

Marketing Research BA 233 . . . . . 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.

Medical Formatting 2.124 . . . . . 3 credits
(Winter Term) . . . . . 3 class, 2 lab hrs/wk
Prerequisite: Keyboard Skillbuilding OA 124/2.109, Formatting 1 OA 121/2.101 and entrance into the Medical Office Assistant Program. Students learn to type medical correspondence which is similar to business letters but with intricacies uniquely its own. They learn to type case histories, clinical analyses and similar organized reports, and to arrange articles and experience reports for publication in professional medical journals.

Medical Office Accounting 1 2.119 . . . . . 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.

Medical Office Accounting 2 2.120 . . . . . 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.

Medical Typing 2 — See Medical Formatting

Microcomputers Accounting Applications
BA 209 . . . . . (variable) 1-6 credits
(See Term Schedule) . . . . . 1 class hr 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.

Microcomputer: Business Applications
BA 110 . . . . . (variable) 1-6 credits
(All Terms) . . . . . 1 class hr 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.

Money and Banking BA 270 . . . . . 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.

Office Careers Survey OA 101 . . . . . 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.

Office Management BA 251 . . . . . 3 credits
(Fall, Winter, & 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.

Office Procedures 1 2.116 . . . . . 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.

Office Procedures 2 2.515 . . . . . (variable) 1-4 credits
(Fall, Winter, & Spring Terms) . . . 2 class, 4 lec/lab hrs/wk
Prerequisites: Typing 45 words per minute, Office Procedures 1 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.

Office Systems Applications 2.545 . (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.

Payroll Records & Accounting BA 177 . . . . . 3 credits
(Fall, Winter, & 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.

Personal Finance BA 218 . . . . . 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, social security, stock market, and mutual funds. The course is designed for non-business, vocational, or college transfer students and for business students who wish an additional course dealing primarily with personal financial problems.

Personal Use Typing 2.104 . . . . . (variable) 3 credits
(Fall, Winter, & Spring Terms) . . . . . 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.

Personnel Administration BA 224 . . . . . 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.

Principles of Accounting BA 211 . . . . . 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.

Principles of Accounting BA 212 . . . . . 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.

Principles of Accounting BA 213 . . . . . 3 credits
(All Terms) . . . . . 3 class hrs/wk
Prerequisites: Principles of Accounting BA 211, 212. The third

course in the accounting sequence is designed to acquaint students with ways in which accounting information can be used by managers to operate a business more efficiently. Emphasis is placed on current planning and control, evaluation of performance, special decisions, and long range planning.

Production BA 221 . . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
Prerequisite: Intermediate Algebra Mth 100 or equivalent. 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.

Real Estate Appraisal BA 290 . . . . . 3 credits
(See Term Schedule) . . . . . 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.

Real Estate Escrow 1 BA 260 . . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
This course is a survey of the methods for closing a real estate transaction. Emphasis is placed on legal documents, title insurance, estates and legal descriptions, closing a cash transaction, closing a conventional loan, closing a government-insured loan, closing an assumption of an existing loan, and closing a land sales contract.

Real Estate Exchange and Taxation BA 298 . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 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).

Real Estate Finance 1 BA 288 . . . . . 3 credits
(All 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. Pass/no-pass option only.

Real Estate Investments BA 297 . . . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 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. Pass/no-pass option only.

Real Estate Law 1 BA 287 . . . . . 3 credits
(See Term Schedule) . . . . . 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. Pass/no-pass option only.

Real Estate Practice 1 BA 289 . . . . . 3 credits
(See Term Schedule) . . . . . 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. Pass/no-pass option only.

Records Management OA 240/2.508 . . . . . 3 credits
(Fall, Winter, & Spring 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.

Retailing BA 249 . . . . . 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.

Risk & Insurance BA 241 . . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
Concepts of risk, probability, and insurance; role of insurance in the management of risk. An examination of the underlying legal principles and common elements of most insurance contracts. Special emphasis on the role of insurance from the viewpoint of the consumer; business and personal applications of the major types of property and liability insurance and life and health insurance, with emphasis on the underlying economic need each is designed to meet.

Selling BA 238/2.238 . . . . . 3 credits
(Fall, Winter, & 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.

Shorthand Skill Building OA 214/2.115 . . . . . 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.

Small Business Entrepreneurship BA 250 . . . . 3 credits
(Spring Term) . . . . . 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.

Speedwriting 1/Briefhand OA 114/2.108 . . . . . 3 credits
(See Term Schedule) . . . . . 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.

Supervisory Management BA 255 . . . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 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.

Tax Accounting BA 220 . . . . . 3 credits
(See Term Schedule) . . . . . 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.

Typing 1-Beginning — See Keyboarding and Formatting 1

Typing 1A-Skill Building — See Keyboard Skillbuilding

Typing 2 — See Formatting 2

Word Processing 2.559 . . . . . (variable) 1-3 credits
(All Terms) . . . . . 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.

Data Processing

The Data Processing Department offers two, two-year training programs leading to associate of applied science degrees. Course work is designed to prepare students for jobs as computer programmers or as data processing machine operators. Data Processing offers a one-year certificate in Microcomputer Information Systems. A two-year transfer program can be planned to apply toward the computer science major at four-year colleges and universities.

Data Processing Courses

Advanced Assembler Language CS 291 . . . . . 4 credits
(Spring & Summer Terms) . . . . . 3 class, 3 lab hrs/wk
Prerequisite: Assembler Language Programming CS 290. This course is a continuation of Assembler Language Programming CS 290. Topics include decimal instruction set, edit and edit and mark instructions, reporting, direct access input-output instruction, and assembly language programming for microcomputers.

Assembler Language Programming CS 290 . . . 4 credits
(Winter & Spring Terms) . . . . . 3 class, 3 lab hrs/wk
Prerequisite: Introduction to Computer Information Processing CS 131. Topics will include arithmetic operations, data manipulations, branching instructions, and editing of data into report format. Interpretation of object code and debugging techniques will be emphasized.

Business Data Processing CS 242 . . . . . 5 credits
(Winter Term) . . . . . 4 class, 5 lab hrs/wk
Prerequisite: Recommend Introduction to Business Data Processing CS 241 or second-year standing in Data Processing. A programming course in a business language, usually COBOL. Fundamental course of business data processing, problems, and analysis.

***Concepts of Computing** CS 121 . . . . . 3 credits
(All Terms) . . . . . Taught as a telecourse
Students will examine a wide range of computer/data processing concepts and principles. This is generally a survey course; however, enough detail will be presented to allow the student to understand the effect of computers on problem-solving techniques in various application areas.

Data Processing Computer Operations 1 2.617 . . . . . 5 credits
(Winter Term) . . . . . 3 class, 6 lab hrs/wk
Prerequisite: Second year standing. Students will operate digital computing equipment with a console device or auxiliary control panel. They will learn to prepare the computer for program processing and operate the equipment for the completion of scheduled programs.

Data Processing Computer Operations 2 2.618 . . . . . 5 credits
(Spring Term) . . . . . 3 class, 6 lab hrs/wk
Prerequisite: Data Processing Computer Operations 1 2.617. Students will perform computer operation quality control functions for input/output and will examine and dispatch reports based on quality criteria defined by operations control. They will store and circulate program documentation, materials, and data files kept on cards, disks, and tapes.

General Purpose Microcomputer Software CS 111 . 3 credits
(Winter Term) . . . . . 2 class, 2 lec/lab hrs/wk
A study of software packages available in areas, such as data base systems, educational software, and graphics displays, focusing on capabilities and evaluation of such packages.

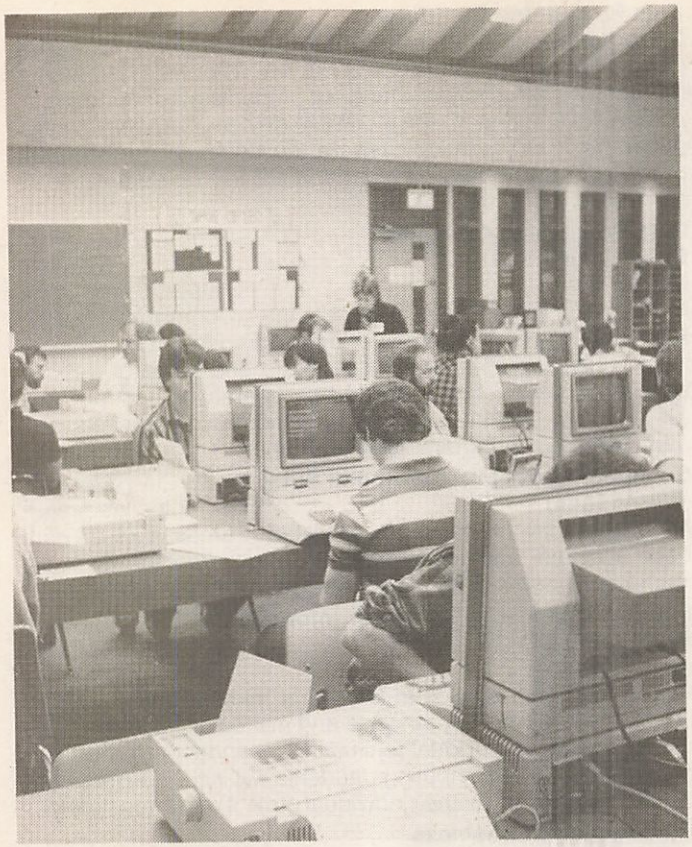
Independent Study: Computer Information Processing CS 198 . . . . . (variable) 1-3 credits
(See Schedule) . . . . . .
Prerequisite: Introduction to Computer Information Processing CS 131 or equivalent knowledge and instructor's consent. This course will allow a student to study independent areas of concern in the field of computing. Students will initiate an independent study contract for their individual project with the instructor.

Introduction to Business Data Processing CS 241 . . . . . 5 credits
(Fall Term) . . . . . 4 class, 5 lab hrs/wk
Prerequisite: Second year in major. Structure, capabilities, and use of an information system. Topics included are retrieval, updating, security, backup and controls. Example systems will be studied with emphasis on the purpose of each system and how its processing fulfills its purpose.

Introduction to Computer Information Processing CS 131 . . . . . 4 credits
(See Schedule) . . . . . 3 class, 3 lab hrs/wk
Prerequisite: Recommend Concepts of Computing CS 121 and Elementary Algebra Mth 65. Students will learn the basic principles of computer data processing including hardware configuration, system design, programming and operations. All programs and examples will be taken from the area of business. BASIC will be used as the programming language.

Introduction to Computer Science 1: Pascal CS 201 . . . . . 4 credits
(Fall & Winter Terms) . . . . . 8 lec/lab hrs/wk
Prerequisite: College Algebra Mth 101. Problem-solving methods, algorithm design, and structure of computers; programming in PASCAL. Introductory course for students seriously interested in computer science.

Introduction to Computer Science 2: Advanced Pascal CS 203 . . . . . 4 credits
(Spring Term) . . . . . 8 lec/lab hrs/wk
Prerequisite: Introduction to Computer Science 1: Pascal CS 201. Problem-solving methods, algorithm design, structure of computers, advanced data structures, pointers and recursion; programming in PASCAL. Introductory course for students seriously interested in computer science.



Introduction to Microcomputers CS 110 . . . . . 3 credits
(Fall Term) . . . . . 2 class, 2 lec/lab hrs/wk
This course is a series of experiences designed to demonstrate the application of general purpose software on microcomputers.

Introduction to Numerical Computation
CS 133 . . . . . 4 credits
(See Schedule) . . . . . 8 lec/lab hrs/wk
Prerequisite: College Algebra Mth 101 or equivalent. Basic concepts of problem analysis and computation; programming in a current computer language.

Introduction to Operating Systems CS 245 . . . . 4 credits
(Fall Term) . . . . . 3 class, 2 lab hrs/wk
Prerequisite: Second year standing in Data Processing and assembly language programming or equivalent experience. Study of the functions of supervisors, compilers, job control, and utility programs as used by application programmers. The creation and maintenance of program and data libraries and the basic concepts of programming systems generation will be covered.

Introduction to Systems Analysis CS 244 . . . . . 3 credits
(Winter Term) . . . . . 3 class hrs/wk
Prerequisite: Second year standing in Data Processing curriculum. Techniques and principles of automated systems are taught through flow charting, forms design and control, design record layouts, decision tables, file organization and management, control techniques, and procedures documentation.

Microcomputer Graphics CS 235 . . . . . 4 credits
(See Schedule) . . . . . 8 lec/lab hrs/wk
Prerequisite: College Algebra Mth 101, Introduction to Computer Information Processing CS 131. Presents drawing three-dimensional shapes and moving and changing two-dimensional graphs and three-dimensional graphs and objects.

Microcomputer Software Systems CS 112 . . . . 3 credits
(Spring Term) . . . . . 2 class, 2 lec/lab hrs/wk
Prerequisite: General Purpose Microcomputer Software CS 111. This class covers the steps necessary to implement a microcomputer software system: needs analysis, hardware selection, software selection, and system implementation.

Programming Information Systems CS 270 . . . 5 credits
(Spring Term) . . . . . 3 class, 6 lab hrs/wk
Prerequisite: Second year standing in Data Processing; Business Data Processing CS 242. Advanced programming concepts with stress on computer business applications. The base language will be COBOL. Other languages may be arranged individually with the instructor.

Special Studies in Computer Science
CS 199 . . . . . (variable) 1-5 credits
(All Terms) . . . . . 3-15 lab hrs/wk
Prerequisite: By department permission. Credits, hours and topics will be arranged. Topics offered will vary with interest and needs of students. Typical subjects include: Micro Computer Programming, Micro Computer Systems, Languages, and Modeling and Simulation. This course will be offered on a pass/no-pass basis. Credit will be given based on the number of hours of completed lab work.

Electronics

The Electronics Department offers an Associate of Applied Science degree in Appliance-Refrigeration Technician, Electronics Technician, Electronic Engineering Technician, and Technical Drafting: Mechanical Emphasis/Architectural Emphasis.

Courses for the Appliance-Refrigeration Technician program include refrigeration, heat pumps, electrical motors, motor and industrial control devices, and appliances.

The Electronics Technician program emphasizes two-way radio communication, radio telephone operations, and licensing, repair, and troubleshooting of electronics equipment.

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

Active Devices 3.472 . . . . . 3 credits
(Winter Term) . . . . . 2 class, 2 lab hrs/wk
Prerequisite: Introduction to Electronics 6.193 or equivalent. Fundamentals of solid state devices with typical applications; power supplies, amplifiers, oscillators, and regulators.

Advanced Circuit Analysis 6.203 . . . . . 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.

Air Conditioning Fundamentals
GS 125/6.324 . . . . . 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 re-

frigeration cycle, HVAC system types, combustion and steady state, efficiency testing of oil and gas furnaces, air-duct design, psychrometrics, and energy-conserving retrofit options.

Digital Electronics 1 6.206 . . . . . 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.

Digital Electronics 2 6.207 . . . . . 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.

Digital Electronics 3 6.208 . . . . . 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.

Electric Motors 3.470 . . . . . 2 credits
(Winter Term) . . . . . 2 class hrs/wk
Maintenance and repair of motors used in home appliances. Emphasis on the use of test equipment in checking appliance motors. Basic motor theory. Safety considerations.

Electrical Drafting 4.103 . . . . . 2 credits
(Winter & Spring Terms) . . . . . 4 lab hrs/wk
Techniques required for the electrical and electronic fields. Charts, graphs; schematic, wiring and routing diagrams; location drawings.

Electrical Theory 1 6.229 . . . . . 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.

Electrical Theory 2 6.230 . . . . . 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.

Electrical Theory 3 6.231 . . . . . 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.

Electronic Service 1 3.460 . . . . . 3 credits
(Winter Term) . . . . . 3 class hrs/wk

Electronic Service 1 Lab 3.461 . . . . . 3 credits
(Winter Term) . . . . . 6 lab hrs/wk
Prerequisite: Second-term standing (see core courses) or the equivalent. Various types of electronic assemblies, chassis, and component parts, transistor amplifiers, and audio circuits. Use of service manuals and catalogs.

Electronic Service 2 3.462 . . . . . 3 credits
(Spring Term) . . . . . 3 class hrs/wk

Electronic Service 2 Lab 3.463 . . . . . 3 credits
(Spring Term) . . . . . 6 lab hrs/wk
Prerequisite: Third-term standing in the Electronics Technician program or the equivalent. R-F circuits, oscillators, power supplies, principles of superheterodyne receivers.

Electronic Service 3 3.464 . . . . . 3 credits
(Fall Term) . . . . . 3 class hrs/wk

Electronic Service 3 Lab 3.465 . . . . . 3 credits
(Fall Term) . . . . . 6 lab hrs/wk
Prerequisite: Fourth-term standing in the Electronics Technician program or the equivalent. The television system, how it works, TV test equipment. Basic service procedures. Basic circuits.

Electronic Service 4 3.466 . . . . . 3 credits
(Winter Term) . . . . . 3 class hrs/wk

Electronic Service 4 Lab 3.467 . . . . . 3 credits
(Winter Term) . . . . . 6 lab hrs/wk
Prerequisite: Fifth-term standing in the Electronics Technician program or the equivalent. Active circuits in television. Color television analysis of set performance.

Electronic Service 5 3.468 . . . . . 3 credits
(Spring Term) . . . . . 3 class hrs/wk

Electronic Service 5 Lab 3.469 . . . . . 3 credits
(Spring Term) . . . . . 6 lab hrs/wk
Prerequisite: Sixth-term standing in the Electronics Technician program or the equivalent. Transistors in television receivers. Advanced service procedures. Responsibility of the technician to his/her employer and the public.

Heat Pumps (Reverse Cycle Refrigeration) 3.621 . . . . . 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.

Heat Pumps Lab (Reverse Cycle Refrigeration) 3.622 . . . . . 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.

IS: Appliance-Refrigeration Technology IS 248
IS: Electronic Engineering Technology IS 248
IS: Electronics Technician IS 248 . . . . . 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.

Industrial Instrumentation 6.201 . . . . . 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.

Introduction to Appliance-Refrigeration 3.625 . . 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.

Introduction to Digital Electronics 6.190 . . . . . 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.

Introduction to Electronics 6.193 . . . . . 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.

Introduction to Electronics Lab 6.194 . . . . . 1 credit
(Fall Term) . . . . . 2 lab hrs/wk
Experiments dealing with color codes—series, and parallel circuits—Ohm's law and Kirchhoff's laws.

Linear Circuits 1 6.247 . . . . . 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.

Linear Circuits 2 6.248 . . . . . 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.

Linear Systems 6.217 . . . . . 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.

Logic Analyzer Techniques 6.241 . . . . . 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.

Major Appliance Service 1 3.600 . . . (variable) 1-5 credits
(Winter Term) . . . . . 5 class hrs/wk

Major Appliance Service 1 Lab 3.601 . (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.

Major Appliance Service 2 3.602 . . . (variable) 1-5 credits
(Spring Term) . . . . . 5 class hrs/wk

Major Appliance Service 2 Lab 3.603 . (variable) 1-8 credits
(Spring Term) . . . . . 20 lab hrs/wk
Prerequisite: Major Appliance Service 1 3.600. Diagnosis of both mechanical and electrical faults in such modern domestic appliances as washers, dryers, ranges, dishwashers, and waste disposals. Development of ability to locate cause of equipment malfunction by deduction and reasoning ability. Perform service operations on modern home appliances.

Microprocessor Applications 1 6.237 . . . . . 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 some simple machine codes and demonstrates their execution.

Microprocessor Applications 2 6.238 . . . . . 4 credits
(Winter Term) . . . . . 3 class, 3 lab hrs/wk
Prerequisite: Microprocessor Applications 1 6.237. An introduction to the process of interfacing a central processing unit to memory and input/output devices with emphasis on proper timing and loading considerations.

Microprocessor Applications 3 6.239 . . . . . 5 credits
(Spring Term) . . . . . 3 class, 6 lab hrs/wk
Prerequisite: Microprocessor Applications 2 6.238. An introduc-

tion to the process of interfacing various peripheral devices to the central processing unit.

Microcomputer Systems
EE 213/6.233 . . . . . (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.

Motor Control Devices 3.471 . . . . . 2 credits
(Spring Term) . . . . . 2 class hrs/wk
Prerequisite: Electric Motors 3.470 or equivalent. ON-OFF controls. Variable speed methods. Motor reversing. Motor steppers and clamping. Protective devices.

Networks & Passive Circuits 6.195 . . . . . 4 credits
(Winter Term) . . . . . 3 class, 2 lab hrs/wk
Prerequisite: Introduction to Electronics 6.193 or equivalent, Technical Math 1 6.261 or equivalent with Technical Mathematics 2 6.262 or equivalent taken concurrently. Application of network analysis techniques to passive AC/DC circuits; mesh analysis and two-terminal network techniques. Use of graphical techniques and elementary waveform analysis.

Oscilloscope Techniques 6.209 . . . . . 2 credits
(On Student Demand) . . . . . 1 class, 2 lec/lab hrs/wk
An elective course covering oscilloscope functions, controls, and performance specifications including sophisticated features such as delayed sweeps and trace storage. Measurement techniques, the instrument's limitations, and minor maintenance adjustment will be discussed and demonstrated.

Radiotelephone Operator's Preparation 1
4.915 . . . . . 4 credits
(Fall Term) . . . . . 4 class hrs/wk
Prerequisite: Second-year standing or consent of department. This course, together with Radiotelephone Operator's Preparation 2, is designed to prepare the student for the FCC second class radiotelephone operator's license. Review of basic electrical theory and practice relating to transmitter operation types and typical operating conditions of vacuum tubes and transistors, power supplies, indicating instruments, oscillators and study of questions similar to those used in FCC examinations.

Radiotelephone Operator's Preparation 2 4.917 . . . . . 4 credits
(Winter Term) . . . . . 4 class hrs/wk
Prerequisite: Radiotelephone Operator's Preparation 1 4.915. This course, together with Radiotelephone Operator's Preparation 1, is designed to prepare the student for the FCC second class radiotelephone operator's license. It includes radio frequency amplifiers, transmitters and receivers, antenna systems, microwave equipment, troubleshooting techniques, and study of questions similar to those used in FCC examinations.

Radiotelephone Operator's Preparation 3 4.919 . . . . . 4 credits
(Spring Term) . . . . . 4 class hrs/wk
Prerequisite: Radiotelephone Operator's Preparation 2 4.917. This course is designed to prepare the student for the FCC first class radiotelephone operator's license. It includes advanced circuit theory, typical circuits, television techniques and standards, regulations governing the operation of broadcast transmitters, and study of questions similar to those used in FCC examinations.

Reading & Conference 6.100 . . . . . (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.

Refrigeration and Air Conditioning 1 3.606 . . . . . (variable) 1-5 credits
(Fall Term) . . . . . 5 class hrs/wk

Refrigeration and Air Conditioning 1 Lab 3.607 . . . . . (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.

Refrigeration and Air Conditioning 2 3.608 . . . . . (variable) 1-5 credits
(Winter Term) . . . . . 5 class hrs/wk

Refrigeration and Air Conditioning 2 Lab 3.609 . . . . . (variable) 1-8 credits
(Winter Term) . . . . . 16 lec/lab hrs/wk
Prerequisite: Refrigeration and Air Conditioning 1 3.606. Effect of temperature and pressure on gasses and liquids; theoretical operation of expansion valves; floats and receivers, and condensers; purging systems of air and moisture; charging refrigeration systems; lubrication problems; testing the refrigeration system after repairs have been made.

Refrigeration and Air Conditioning 3 3.610 . . . . . (variable) 1-5 credits
(Spring Term) . . . . . 5 class hrs/wk

Refrigeration and Air Conditioning 3 Lab 3.611 . . . . . (variable) 1-8 credits
(Spring Term) . . . . . 16 lec/lab hrs/wk
Prerequisite: Refrigeration and Air Conditioning 2 3.608. Types of compressors used in mechanical refrigeration systems, non-mechanical refrigeration systems, metering devices, supplementary system controls, electrical circuits in typical modern refrigeration units. Shop experience in repairing and servicing modern domestic refrigeration units.

Robotics 6.232 . . . . . 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.

Semiconductor Devices 1 6.245 . . . . . 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.

Semiconductor Devices 2 6.246 . . . . . 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.

Shop Practices for Electronics 4.921 . . . . . 1 credit
(Fall Term and on demand) . . . . . 2 lab hrs/wk
Basic hand and power tools use. Soldering techniques. Chassis construction. Safety procedures.

Silver Brazing 3.620 . . . . . 1 credit
(Winter Term) . . . . . 2 lec/lab hrs/wk
The art of silver brazing, bonding copper-to-copper, copper-to-steel and steel-to-steel tubing.

Switching and Wave Generation Circuits 6.219 . 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.

Transmission & Propagation of Waves 6.221 . . . 4 credits
(Spring Term) . . . . . 3 class, 2 lab hrs/wk
Prerequisite: Sixth-term standing in Electronics Technician program. Principles involved in the transmission and propagation of electromagnetic radiation; application of these principles to practical problems; use of such instruments as the shielded bridge and field strength meter.

Transmitter Circuits 1 6.223 . . . . . 3 credits
(Fall Term) . . . . . 2 class, 3 lab hrs/wk
Prerequisite: Fourth-term standing in Electronics Technician program. Circuits, theory, construction and practical operation of transmitters; master oscillators, buffers, power amplifiers, modulation theory.

Transmitter Circuits 2 6.224 . . . . . 4 credits
(Winter Term) . . . . . 3 class, 3 lab hrs/wk
Prerequisite: Transmitter Circuits 1 6.223. Circuits, theory, construction, and practical operation of transmitters, amplitude modulation, frequency and phase modulation, single sideband modulation, typical communication systems, two-way equipment.

Typical Receiver Circuits 6.227 . . . . . 3 credits
(Spring Term) . . . . . 2 class, 2 lab hrs/wk
Prerequisite: Sixth-term standing in Electronics Technician program. An introduction to typical circuits, principles of operation, and technical adjustments of radio receivers employed for the reception of audio, video, pulse or other forms of intelligence.

Visual Displays 1 6.249 . . . . . 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.

Visual Displays 2 6.250 . . . . . 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.

Technical Drafting Courses

Architectural Design - Custom Arch 182 . . . . . 5 credits
(Spring Term) . . . . . 2 class, 6 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.

Architectural Design - Remodeling Arch 180 . . . 5 credits
(Fall Term) . . . . . 2 class, 6 lec/lab hrs/wk
Remodel and redesign of a conventional builder residence house with emphasis on energy conservation and efficient use of space.

Architectural Design - Solar Residence Arch 181 . 5 credits
(Winter Term) . . . . . 2 class, 6 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.

Architectural Drafting - Details 4.138 . . . . . 4 credits
(Winter 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.

Architectural Drafting - Development 4.139 . . . . 4 credits
(Spring Term) . . . . . 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.

Architectural Drafting - Plans 4.137 . . . . . 4 credits
(Fall 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.

Architectural Measurement 4.114 . . . . . 3 credits
(Spring Term) . . . . . 3 class hrs/wk
Corequisite: Architectural Design - Remodeling Arch 180. Fundamentals of architectural measurement and layout: basic land description, site topography, tape triangulation, machine bearings.

Blueprint Reading for Drafters/Architects 4.144 . . . . . 3 credits
(Fall Term) . . . . . 2 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.

Cartography 4.118 . . . . . 4 credits
(Spring Term) . . . . . 2 class, 4 lec/lab hrs/wk
Prerequisites: Drafting 1 4.120 and Mechanical Drafting 1 4.121. Elementary mapping; government system, independent grids, metes and bounds. Map reproduction copying, tracing, materials, inking, sources of information.

Computer-Aided Drafting 4.110 . . . . . 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.

Computer-Aided Drafting - Architectural 4.142 . . . . . 4 credits
(Spring Term) . . . . . 2 class, 4 lec/lab hrs/wk
Prerequisites: Computer-Aided Drafting 4.110, Architectural Drafting - Plans 4.137, and Architectural Drafting - Details 4.138. Use of personal computers and software for architectural drafting applications.

Computer-Aided Drafting - Mechanical 4.143 . . . . . 4 credits
(Spring Term) . . . . . 2 class, 4 lec/lab hrs/wk
Prerequisites: Computer-Aided Drafting 4.110. Use of personal computers and software for mechanical drafting applications.

Construction Literature 4.145 . . . . . 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.

Drafting 1 4.120 . . . . . 4 credits
(Fall, Winter, & Spring Terms) . . . . . 6 lec/lab hrs/wk
Elementary drafting: instruments, style, lettering, technique. Major emphasis on orthographic projection. Includes sectioning, reproduction, geometry, scaling, sketching, and developments.

Drafting Fundamentals 4.135 . . . . . 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.

Electrical Drafting 4.103 . . . . . 2 credits
(Winter & Spring Terms) . . . . . 4 lab hrs/wk
Techniques required for the electrical and electronic fields. Charts, graphs; schematic, wiring and routing diagrams; location drawings.

Geometric Tolerancing 4.133 . . . . . 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.

IS: Technical Drafting IS 248 . . . . . 3 credits
(All Terms)
Prerequisites: Drafting 1 4.120, 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.

Introduction to Fabrication Practices 4.136 . . . . . 2 credits
(Fall Term) . . . . . 1 class, 3 lab hrs/wk
Exposure to fabrication practices by visit to manufacturing facilities.

Mechanical Design 4.132 . . . . . 4 credits
(Fall Term) . . . . . 6 lec/lab hrs/wk
Prerequisite: Drafting 1 4.120 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.

Mechanical Drafting 1 4.121 . . . . . 4 credits
(Fall, Winter, & Spring Terms) . . . . . 6 lec/lab hrs/wk
Prerequisite: Drafting 1 4.120. Introduction to the third dimension. Oblique, isometric, and perspective. Measure-up and shop drawing.

Passive Solar Design GS 127/6.327 . . . . . 3 credits
(Winter Term) . . . . . 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.

Power Trains and Accessories Design 4.134 . . . 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.

Strength of Materials 1 6.107 . . . . . 4 credits
(Taught upon student's request) . . . . . 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.

Structural Drafting—Steel 4.140 . . . . . 4 credits
(Winter 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.

Structural Drafting—Wood 4.141 . . . . . 4 credits
(Spring Term) . . . . . 2 class, 4 lec/lab hrs/wk
Structural drafting procedures and standards based on *Western Woods Use Book.* Select structural members; design connections, details; prepare structural plans and sections for a heavy timber building.

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.

Modern Languages Courses

Modern languages are provided to allow students to study the written and spoken languages of French, German, and Spanish speaking countries, as well as to learn some elements of the cultures of these countries.

Modern language courses with 100 numbers may be used to meet elective requirements at the state public four-year institutions. Modern 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.

Conversational French FR 211, FR 212, FR 213 . . 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.

French, First Year FR 101, FR 102, FR 103 . . . . 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.

French, First Year FR 150, FR 151 . . . . . 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.

French, Second Year FR 201, FR 202, FR 203 . . . 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.

German, First Year GER 101, GER 102, GER 103 . 4 credits
(GER 101 Fall; GER 102 Winter;
GER 103 Spring Terms) . . . . . 4 class hrs/wk
Introduction to spoken and written German. Conversation practice, grammar study, contemporary culture.

German, Second Year GER 201, GER 202, GER 203 . 4 credits
(See Term Schedule) . . . . . 4 class hrs/wk
Prerequisite: First Year German GER 101, GER 102, GER 103 or equivalent. Review and expansion of basic language skills

and grammar. Conversation and composition practice; readings from selected cultural and literary sources. Must be taken in sequence.

Spanish, First Year
SPAN 101, SPAN 102, SPAN 103 . . . . . 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.

Spanish, First Year
SPAN 150, SPAN 151 . . . . . 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.

Spanish, Second Year
SPAN 201, SPAN 202, SPAN 203 . . . . . 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.

American Literature, Survey of Eng 253,
Eng 254, Eng 255 . . . . . 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.

Black American Literature Eng 151 . . . . . 3 credits
(Winter & Spring Terms) . . . . . 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.

Children's Literature Eng 100 . . . . . 3 credits
(Fall Term) . . . . . 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.

Detective Fiction Eng 121 . . . . . 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.

English Literature, Survey of Eng 101,
Eng 102, Eng 103 . . . . . 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.

Film as Literature Eng 195,
Eng 196, Eng 197 . . . . . 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 and Eng 196 explore the nature of the film medium through a study of key directors and/or various genres such as the western, musicals, horror films, detective films, war movies, etc. Eng 197 is a study of films currently playing in movie theatres in Eugene-Springfield.

Images of Women in Literature Eng 222 . . . . . 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.

Introduction to Folklore and Myth
Eng 250 . . . . . 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.

Introduction to Literature Eng 104, Eng 105,
Eng 106 . . . . . 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.

Introduction to Native American Literature Eng 240 . . . . . 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.

Introduction to Women Writers Eng 260 . . . . . 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.

Science Fiction: Studies in Speculative Literature
Eng 112, Eng 113, Eng 114 . . . . . 3 credits
(Eng 112 Fall; Eng 113 Winter;
Eng 114 Spring Terms) . . . . . 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.

Shakespeare Eng 201, Eng 202, Eng 203 . . . . . 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.

World Literature, Survey of Eng 107,
Eng 108, Eng 109 . . . . . 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.

Speech Communication Courses

Speech courses are designed to help students develop an appreciation of speech communication and 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.

Business and Professional Speech Communication
Sp 230 . . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
Prerequisite: Fundamentals of Speech: Communication Sp 111.
This course is designed for the person who intends to work in a business or professional setting, and who wishes to enhance his/her presentational and briefing skills. Special attention is given to using visual aids and the audio-visual equipment commonly used in the business and professional world. Students will be required to prepare and use a variety of visual aids during the term in presenting five briefings on a variety of topics. Emphasis will be on clarity, presentational style and organization, all of which will be integrated into the course, class discussions, student briefings, and readings.

Fundamentals of Speech: Communication
Sp 111 . . . . . 3 credits
(All Terms) . . . . . 3 class hrs/wk
The first of a three-course sequence. The basics of communication, message preparation, organization, audience analysis, listening and factors of delivery are among the topics emphasized.

Fundamentals of Speech: Persuasion Sp 113 . . 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.

Fundamentals of Speech: Styles Sp 112 . . . . . 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.

Interpersonal Communication Sp 214/1.104 . . . 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 "incidental" relationships (salespersons, neighbors, groups, landlords, etc.) *Students are urged to take Listening before taking Interpersonal Communication.*

Listening Sp 105 . . . . . 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.*

Mass Communication: Process and Theory
Sp 216/1.106 . . . . . 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, critical consumption skills.

Small Group Communication: Process and Theory
Sp 215/1.105 . . . . . 3 credits
(Winter & Spring Terms) . . . . . 3 class hrs/wk
Prerequisite: Interpersonal Communication Sp 214/1.104. 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, presen-

tation planning, and knowledge of group process. Some major concepts included are cooperation, conformity, persuasive use of information, and community action.

Voice and Articulation Sp 110 . . . . . 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.

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.

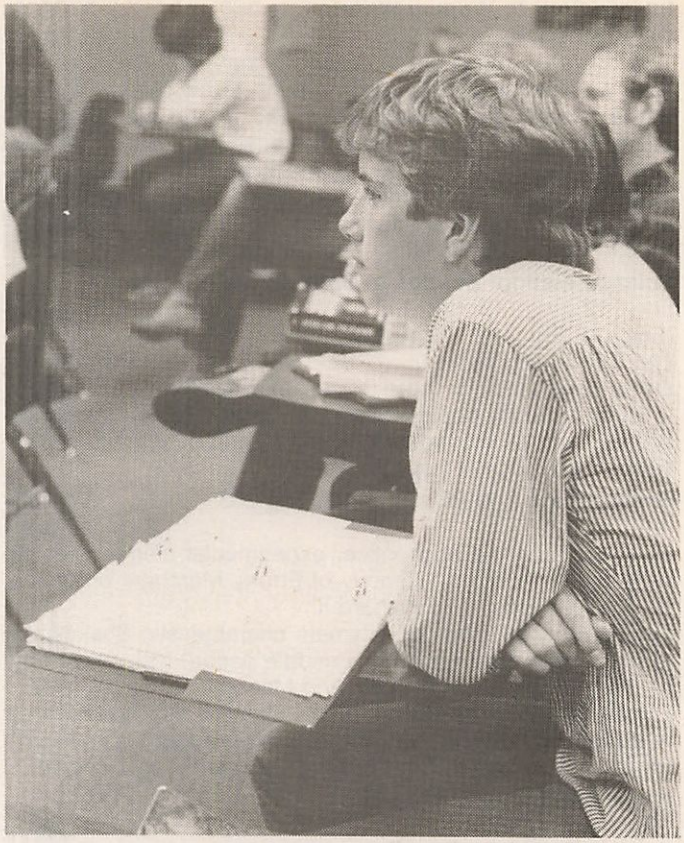
Communication Skills 1, 2, 3
1.100, 1.102, 6.126 . . . . . 3 credits each
(See Term Schedule) . . . . . Minimum 3 clinic hrs/wk
A sequence course in improving skills in communication through writing, listening, and reading. Introduction through individualized subject units and personal discussion with 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.

Composition: Research Wr 123 . . . . . 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.

Composition: Style Wr 122 . . . . . 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.

English Composition Wr 121 . . . . . 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 Written English Expression Test.

Introduction to Imaginative Writing
Wr 241, Wr 242, Wr 243 . . . . . 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.



Preparatory English Composition Wr 120 . . . . 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.

Technical Report Writing Wr 227 . . . . . 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, Room 479A, to determine registration procedures and enroll.

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

Flight 1 6.431 . . . . . (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.

Flight 2 6.433 . . . . . (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.

Flight 3 6.435 . . . . . (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.

Flight 4 6.439 . . . . . (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.

Flight 5 6.441 . . . . . (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.

Flight 6 6.443 . . . . . (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.

Flight 7 6.445 . . . . . (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.

Flight 8 6.447 . . . . . (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.

Flight 9 6.449 . . . . . (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.

Flight 10 9.610 . . . . . (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.

Flight 12 6.451
(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.

Flight 20 6.453
(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.

Flight 21 6.454
(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.

Ground School Courses

Aerodynamics FT 254 . . . . . 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.

Aircraft Development FT 103 . . . . . 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.

Aircraft Structures and Systems 6.415 . . . . . 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.

Aviation Safety Review 6.455 . . . . . 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.

Commercial Pilot Ground School FT 251 . . . . . 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.

Flight Instructor—Airplane Ground School FT 256 . . . . . 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.

Fundamentals & Flight Instructor—Instrument Ground School FT 255 . . . . . 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.

General Aviation Careers FT 102 . . . . . 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.

Helicopter Fundamentals 6.452 . . . . . 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.

Instrument Ground School FT 252 . . . . . 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.

***Meteorology** GS 107 . . . . . 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.

Multiengine Ground School 6.428 . . . . . 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.

Primary Flight Briefing 6.430 . . . . . 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.

***Private Pilot Ground School** FT 250 . . . . . 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.*

Health Occupations

The Health Occupations Department offers six programs: Associate Degree Nursing, Practical Nursing, Dental Assisting, Dental Hygiene, Medical Office Assistant, and Respiratory Care. 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

Advanced Chairside Procedures 5.400 . . . . . 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.

Chairside Procedures 1 5.395 . . . . . 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.

Chairside Procedures 2 5.396 . . . . . 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.

Dental Anatomy 5.415 . . . . . 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.

Dental Health Education 1 5.407 . . . . . 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.

Dental Health Education 2 5.408 . . . . . 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.

Dental Health Education 3 5.409 . . . . . 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.

Dental Materials 5.397 . . . . . 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.

Dental Materials 2 5.398 . . . . . 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.

Dental Office Procedures 5.399 . . . . . 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.

Health Sciences 5.410 . . . . . 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.

Introduction to Dentistry 5.403 . . . . . 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.

Oral Pathology 5.435 . . . . . 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.

Oral Roentgenology 2 DH 210 . . . . (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.

Oral Roentgenology 3 DH 211 . . . . . 2 credits
(Winter Term) . . . . . 4 class 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.

Oral Roentgenology 4 DH 212 . . . . . 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.

IS: Dental Assisting IS 248 . . . . . 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.

Dental Hygiene

Community Dental Health DH 235 . . . . . 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.

Community Dental Health DH 236 . . . . . 2 credits
(Fall Term) . . . . . 2 class hrs/wk
Dental Health education in the schools, working with administration and classroom teachers, organizing a dental health pro-

gram. Students will become involved in dental surveys of school children in selected geographic locations. Continued emphasis on instructional materials.

Community Dental Health DH 237 . . . . . 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.

Clinical Dental Hygiene 1 DH 118 . . . . . 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.

Clinical Dental Hygiene 2 DH 119 . . . . . 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.

Clinical Dental Hygiene 3 DH 120 . . . . . 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.

Clinical Dental Hygiene 4 DH 220 . . . . . 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.

Clinical Dental Hygiene 5 DH 221 . . . . . 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.

Clinical Dental Hygiene 6 DH 222 . . . . . 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.

Dental Anatomy DH 113 . . . . . 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.

Dental Anesthesia and Analgesia DH 233 . . . . . (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.

Dental Materials and Procedures DH 132 . . . . . 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 Biology 1 DH 228 . . . . . 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.

Oral Biology 2 DH 229 . . . . . 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.

Oral Biology 3 DH 230 . . . . . 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.

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.

Oral Roentgenology 2 DH 210 . . . . (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.

Oral Roentgenology 3 DH 211 . . . . . 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.

Oral Roentgenology 4 DH 212 . . . . . 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.

Pharmacology DH 254 . . . . . 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.

IS: Dental Hygiene DH 248 . . . . . 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.

Trends and Issues in Dental Hygiene DH 234 . . 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.

Medical Office Assistant

Clinical Assistant 1 5.482 . . . . . 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.

Clinical Assistant 2 5.492 . . . . . 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.

Clinical Terminology 5.498 . . . . . 2 credits
(Spring Term) . . . . . 2 class hrs/wk
Prerequisites: Medical Transcription 1 5.495. This course is designed to present an overview of specialty areas, such as lab, pharmacology, etc., encountered by a medical transcriptionist.

Community Relationships 5.480 . . . . . 2 credits
(Spring Term) . . . . . 2 class hrs/wk
Prerequisite: Admission to the Medical Office Assistant program. Aimed to acquaint the student with human relations and community resources available to the ill and with health agencies which may assist the patients or which may help maintain the health and welfare of the community.

IS: Medical Office Assistant IS 248 . . . . . 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.

Introduction to Medical Records Technology 5.499 . . . . . 3 credits
(Spring Term) . . . . . 3 class hrs/wk
Prerequisite: Medical Terminology 1 5.483 or consent of instructor. This course will introduce the student to procedures of reviewing medical records for completeness and accuracy; indexing and classifying diagnoses and treatments; retrieving information for health care facilities for statistics, quality of care studies, and in response to authorized inquiries for insurance and legal purposes and for research.

Laboratory Orientation 5.485 . . . . . 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.

Medical Filing and Records Management 2.507 . 3 credits
(Fall Term) . . . . . 3 class hrs/wk
For medical office assistants. Rules and principles of filing and records management as it relates specifically to the medical office. Areas covered include methods and terminology used in the medical office, coding of diseases and procedures, legal significance of medical records, and records confidentiality.

Medical Law and Ethics 5.484 . . . . . 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.

Medical Office Procedures 1 2.512 . . . . . 3 credits
(Winter Term) . . . . . 3 class hrs/wk
Prerequisite: Medical Typing 1 2.122. This first course in medical office procedures is designed to introduce the student to general medical office duties. It prepares the student to be self-reliant and follow directions, to be proficient in telephone and reception techniques, to transcribe medical dictation, to complete insurance forms, and to possess an advanced knowledge of medical terminology.

Medical Office Procedures 2 2.514 . . . . . 3 credits
(Spring Term) . . . . . 3 class hrs/wk
Prerequisites: Medical Office Procedures 1 2.512 and Medical Typing 2 2.124. This is a continuation of Medical Office Procedures 1 and prepares the student to complete multi-medical insurance forms, transcribe advanced medical dictation, interpret patient's charts, and to function as an administrative medical assistant.

Medical Terminology 1 5.483 . . . . . 2 credits
(All Terms) . . . . . 2 class hrs/wk
A programmed course covering medical terminology, derivation, pronunciation and meaning.

Medical Terminology 2 5.493 . . . . . 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.)

Medical Transcription 1 5.495 . . . . . 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.

Medical Transcription 2 5.496 . . . . . 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.)

Medical Transcription Laboratory 5.497 . . . . . (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.

Physical Science 1 5.510 . . . . . 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.

Physical Science 2 5.512 . . . . . 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.

Survey of Health Occupations 5.525 . . . . . (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.

Nursing

Advanced Nursing 1 NUR 206A . . . . . 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. Content designed to increase the student's depth of knowledge in the use of the nursing process to care for patients of all ages who are experiencing selected common medical/surgical health care problems and resultant disturbances in basic human needs. Content also includes high risk or abnormal physiological and psychosocial aspects of the child bearing cycle. Pharmacology and mental health concepts are integrated.

Advanced Nursing 1 Lab NUR 206B . . . . . 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 meeting basic human physiological and psychosocial needs of children and adults in a health care setting. 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 increasing and maintaining nursing competencies in nursing process and skills essential to therapeutic nursing interventions. Students plan, give and evaluate care for designated patients. Pharmacology, nutrition, psychosocial and patient education concepts are integrated.

Advanced Nursing 2 NUR 207A . . . . . 5 credits
(Winter Term) . . . . . 5 class hrs/wk
Prerequisites: Advanced Nursing 1 NUR 206A and Lab NUR 206B, Corequisites: Advanced Nursing 2 Lab NUR 207B. Continuation of NUR 206A with introduction to threats to the integrity of additional physiological systems and subsequent health care problems of adults and children. The mental health component of this course includes advanced nursing skills for the care of persons with disturbed family relationships, neuroses, psychoses, alcoholism, and substance abuse. Integration of pharmacology and nutrition is continued. The role of the nurse as a coordinator of patient care in institutional settings is examined with principles and techniques of patient care coordination presented. Description of differing health care delivery systems is presented with implications on the nursing role.

Advanced Nursing 2 Lab NUR 207B . . . . . 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 meeting basic human physiological and psychosocial needs of children and adults in a health care setting. 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 increasing and maintaining competencies in nursing process and skills essential to therapeutic nursing intervention. Students plan, give and evaluate care for designated patients. Pharmacology, nutrition, psychosocial and patient education concepts are integrated.

Advanced Nursing 3 NUR 209A . . . . . 5 credits
(Spring Term) . . . . . 5 class hrs/wk
Prerequisites: Advanced Nursing 2 NUR 207A and Lab NUR 207B, Corequisites: Advanced Nursing 3 Lab NUR 209B. Continuation of NUR 207A with introduction to threats to the integrity of additional physiological systems and subsequent health care problems of adults and children. Integration of pharmacology, nutrition, and mental health concepts is continued.

Advanced Nursing 3 Lab NUR 209B . . . . . 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. Emphasis is placed on the coordination of nursing care for a group of patients. Continued emphasis is placed on the application of the nursing process in meeting basic human needs of patients of all ages in a health care setting. Clinical experiences are selected to assist students in the application of theoretical concepts learned in NUR 209A and previous nursing courses, and to provide opportunities for increasing and maintaining nursing competencies in nursing process and skills essential to therapeutic nursing intervention. Students plan, give, and evaluate care for designated patients. Pharmacology, nutrition, psychosocial and patient education concepts are integrated.

Basic Nursing 1 NUR 107A . . . . . 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 or Physical Science 1 5.510, CPR Certification. Corequisites: Elementary Microbiology Bi 123 or Physical Science 2 5.512, Basic Nursing 1 Lab NUR 107B, Child Development HDFS 226. Continued emphasis is placed upon meeting needs of children and adults as emphasized in Maslow's Hierarchy. The content focus is on principles of pharmacology, the physiological and psychological adaptations of the woman and family during pregnancy and the birth process, and characteristics of the normal neonate. Nursing care of the child or adult undergoing surgical interventions, threats to oxygenation, and cardiovascular functioning are also included.

Basic Nursing 1 Lab NUR 107B . . . . . 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 or Physical Science 1 5.510, Dosage Computation Math 5.606, CPR Certification. Corequisites: Basic Nursing 1 NUR 107A, Elementary Microbiology Bi 123 or Physical Science 2 5.512, Child Development HDFS 226. Continued implementation in the laboratory of theory related to nursing skills. Pharmacology integration is begun. Laboratory experiences are selected to assist students in application of theoretical concepts of NUR 107A in the clinical setting. Emphasis is placed upon meeting of needs as described in Maslow's Hierarchy.

Basic Nursing 2 NUR 109A . . . . . 6 credits
(Spring Term) . . . . . 6 class 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 Lab NUR 109B. Continued emphasis is placed on nursing care of children and adults. Content includes a study of the threats to the integrity of selected physiological systems. Pharmacology, nutrition, and psychosocial concepts are integrated.

Basic Nursing 2 Lab NUR 109B . . . . . 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. Emphasis is placed on continued application of the nursing process in the care of children and adults. Laboratory experiences are selected to assist students in the application of the theoretical concepts of NUR 109A. Pharmacology, nutrition, and psychosocial concepts are integrated throughout.

Caring for the Ill Child 7.133 . . . . . 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.

IS: ADN & PN IS 248 . . . . . 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.

Introduction to Nursing NUR 100 . . . . . 2 credits
(Summer Term) . . . . . 2 class hrs/wk
Provides an overview of introductory concepts and values basic to contemporary nursing. Emphasis is placed on the role of the nurse in the health-illness continuum. The student is introduced to the concepts of stress and illness, cultural diversity, aging, death and grief, as related to basic human needs.

Nursing Administration in Long-Term Care Facilities 1 NUR 220 . . . . 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.

Nursing Administration in Long-Term Care Facilities 2 NUR 221 . . . . 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.

Nursing Fundamentals NUR 106A . . . . . 5 credits
(Fall Term) . . . . . 5 class hrs/wk
Prerequisites: Admission to the nursing program, Elementary Human Anatomy and Physiology 1 Bi 121 unless taking the Physical Science sequence, Introduction to Nursing NUR 100. Corequisites: Elementary Human Anatomy and Physiology 2 Bi 122 or Physical Science 1 5.510, Dosage Computation Math 5.606, Nursing Fundamentals Lab NUR 106B. Builds upon content of Introduction to Nursing NUR 100 and begins introductory nursing skills and concepts of patient care communication. Emphasizes care of the child and adult in areas of personal hygiene, activity, vital signs, nutrition and elimination. Introduces basics of the nursing process.

Nursing Fundamentals Lab NUR 106B . . . . . 5 credits
(Fall Term) . . . . . 15 lab hrs/wk
Prerequisites: Admission to the nursing program, Elementary Human Anatomy and Physiology 1 Bi 121 unless taking the Physical Science sequence, Introduction to Nursing NUR 100. Corequisites: Elementary Human Anatomy and Physiology 2 Bi 122 or Physical Science 1 5.510, Dosage Computation Math 5.606, Nursing Fundamentals NUR 106A. Implementation in the laboratory of theory related to beginning nursing skills. Princi-

ples and skills related to medical and surgical asepsis, personal hygiene, activity and exercise, vital signs, nutrition and elimination are included.

Nursing Trends and Issues NUR 204C . . . . . 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.

Pharmacology for Nurses NUR 298 . . . . . 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.

Physical Science 1 5.510 . . . . . 3 credits
(Fall Term) . . . . . 3 class hrs/wk
Prerequisite: Acceptance into the Practical Nursing or Medical Office Assistant programs. Designed to help the student identify selected fundamental concepts of the anatomy and physiology of the cell and skin, musculoskeletal, nervous sensory, endocrine, and circulatory-lymphatic systems. These concepts will be applied as the basis of practical nursing and medical office assisting practice.

Physical Science 2 5.512 . . . . . 3 credits
(Winter Term) . . . . . 3 class hrs/wk
Prerequisite: Physical Science 1 5.510. 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 practical nursing and medical office assisting practice.

Respiratory Care

Advanced Placement Clinical Practice RT 148 . 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.

Cardiopulmonary Physiology RT 123 . . . . . 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.

Clinical Practice 1 RT 236 . . . . . 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.

Clinical Practice 2 RT 248 . . . . . 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.

Clinical Practice 3 RT 258 . . . . . 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.

Clinical Practice 4 RT 268 . . . . . 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.

Fundamentals of Respiratory Care
RT 114 . . . . . 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.

Fundamentals of Respiratory Care Lab RT 111 . . . . . 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.

IS: Respiratory Care IS 248 . . . . . (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.

Introduction to Clinical Respiratory Care
RT 146 . . . . . 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.

Medical Terminology 1 5.483 . . . . . 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.

Neonatal/Pediatric Respiratory Care
RT 262 . . . . . 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.

Pharmacology RT 233 . . . . . 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.

Principles of Mechanical Ventilation
RT 244 . . . . . 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.

Principles of Mechanical Ventilation Lab
RT 241 . . . . . 1 credit
(Fall Term) . . . . . 3 lab hrs/wk
Corequisite: Principles of Mechanical Ventilation RT 244. Emphasis is placed on analysis and understanding of functional mechanical ventilator characteristics, the assembly of patient circuits, ventilator monitoring, and weaning procedures. Also included is analysis of arterial blood gas parameters, respiratory patient assessment and airway management, and chest physiotherapy techniques.

Principles of Respiratory Care
RT 144 . . . . . 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.

Principles of Respiratory Care Lab
RT 141 . . . . . 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.

Pulmonary Diagnostics and Monitoring
RT 254 . . . . . 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.

Pulmonary Diagnostics and Monitoring Lab
RT 251 . . . . . 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.

Pulmonary Pathology RT 223 . . . . . 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.

Rehabilitation and Organizational Development
RT 264 . . . . . 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.

Respiratory Care Nursing RT 133 . . . . . 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.

Respiratory Care Nursing Lab
RT 131 . . . . . 1 credit
(Winter Term) . . . . . 3 lab hrs/wk
Corequisite: Respiratory Care Nursing RT 133. An introduction to hospital equipment and resource materials for demonstra-

tions and practice. Technique practices include body mechanics, isolation and handwashing, assessing vital signs, airway maintenance, and chest physiotherapy.

Respiratory Care Trends and Issues
RT 271 . . . . . 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.

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)

Archery PE 170 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.

Badminton PE 170 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.

Basketball PE 170 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.

Basketball Conditioning PE 170 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.

Bicycle Touring PE 170 Beg . . . . . 1 credit
(Fall & Spring Terms) . . . . . 3 class hrs/wk
Introduction to the techniques and benefits of bicycle touring. Includes the fundamentals of riding techniques, safety, equipment, and basic repairs. Short rides of 20 to 30 miles will be taken as a part of this course.

Bowling PE 170 . . . . . 1 credit
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
Additional Fees . . . . . Off Campus
Fundamentals, techniques, rules, scoring, and game etiquette.

Circuit Weight Training PE 170 . . . . . 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.

Conditioning PE 170 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.

Correctives PE 170 . . . . . 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.

Exercise Walking PE 170 . . . . . 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.

Exercise and Weight Loss PE 170 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.

Fencing PE 170 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.

Fit for Life/Conditioning PE 170 . . . . . 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.

Flag Football PE 170 Beg . . . . . 1 credit
(See Term Schedule) . . . . . 3 class hrs/wk
Fundamentals, rules, strategy, team play.

Golf PE 170 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.

Gymnastics PE 170 Beg-Int . . . . . 1 credit
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
Beg–Instruction and practice of gymnastic skills at beginning and intermediate level. Men's events: tumbling, floor exercise, vaulting, trampoline, horizontal bar, parallel bars, still rings, and side horse. Women's events: floor exercise, balance beam, vau-

lting, and uneven bars. Conditioning exercises. Mastery of routines.
Int–A continuation of beginning gymnastics. Instruction is given at intermediate level in tumbling, vaulting, trampolining, and apparatus work.

Jogging PE 170 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.

Karate PE 170 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.

Racquetball PE 170 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.

Relaxation/Stress Reduction PE 170 . . . . . 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.

Ski Conditioning PE 170 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.

Soccer-Indoor PE 170 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.

Soccer-Outdoor PE 170 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.

Softball PE 170 Beg . . . . . 1 credit
(Fall & Spring Terms) . . . . . 3 class hrs/wk
Fundamental skills and rules taught through team play.

Sports Conditioning PE 170 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.

Strength Training PE 170 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.

Swimming PE 170 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.

Tai Chi Chuan PE 170 . . . . . 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.

Tennis PE 170 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.

Volleyball PE 170 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.

Weight Training PE 170 . . . . . 1 credit
(Fall, Winter, and Spring Terms) . . . . . 3 class hrs/wk
Introduction to weight training with an emphasis on Olympic/Power Lifting, as well as strength training.

Yoga PE 170 Beg . . . . . 1 credit
(Fall, Winter and 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 180

Designed primarily for, but not restricted to, women

Personal Defense for Women PE 180 . . . . . 1 credit
(See Term Schedule) . . . . . 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 190

Designed primarily for, but not restricted to, men

Baseball Conditioning PE 190 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.

Basketball PE 190 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.

Refer to Physical Education Major Courses for description of Independent Study: Physical Education PE 248.

Dance Classes

Ballet PE 170 Beg-Int . . . . . 1 credit
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
Beg–A basic course in ballet techniques and terminology with an emphasis on barre work and beginning center floor combination.
Int–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.

Dance Aerobics PE 170 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.

Dance Conditioning and Mechanics D 256 . . . . 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.

Dance Performance PE 170 Beg-Int-Adv . . . . . 1 credit
(See Term Schedule) . . . . . 3 class hrs/wk
Beg–Prerequisites: Consent of instructor is required. Students must have one term each of ballet, contemporary, and jazz dance. Focuses on the performance aspects of dance. Students will be involved in the creative aspects of putting movement together for the stage. They will also be involved in the production aspects of a performance.
Int–Prerequisites: Consent of instructor is required. Students must have at least two terms each of ballet, modern, and jazz dance at the intermediate level. Continues to develop performance skills and group cohesiveness. Solo compositions and group choreography will be developed for the stage. The class will also be involved in production aspects of the performances.
Adv—Prerequisites: Consent of instructor and at least three terms of dance classes at the intermediate-advanced level. This course is geared to the intermediate-advanced dancer to increase individual effectiveness as a performer. The class will rehearse and produce studio concerts and one major concert.

Dance Practicum D 266 . . . . . 2 credits
(Winter Term) . . . . . 1 class, 3 lab hrs/wk
Prerequisite: Dance Conditioning and Mechanics 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.

Dance Techniques PE 170 Beg-Int-Adv . . . . . 1 credit
(See Term Schedule) . . . . . 3 class hrs/wk
Beg-To introduce techniques of ballet, modern, and jazz dance and to establish an understanding of each idiom, thereby giving the beginning student a broader knowledge of dance in general.
Int-Adv Prerequisites: Student must have successfully completed three terms of beginning dance including at least two of the following: ballet, jazz, or modern dance. This class will incorporate ballet, jazz, and modern dance techniques for the intermediate dancer. The class will move from an intermediate to advanced pace to challenge the dancers. Elements of improvisation and composition will be utilized to enhance individual and group creativity.

Folk Dance PE 170 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.

Introduction to Teaching Dance D 276 . . . . . 3 credits
(Spring Term) . . . . . 2 class, 2 lec/lab hrs/wk
Prerequisites: Dance Conditioning and Mechanics D 256 and Dance Practicum 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.

Jazz Dance PE 170 Beg-Int . . . . . 1 credit
(See Term Schedule) . . . . . 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.

Modern Dance PE 170 Beg-Int . . . . . 1 credit
(Fall, Winter, & Spring Terms) . . . . . 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.

Outdoor Education Classes

Backpacking PE 170 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.

Canoeing PE 170* . . . . . 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.

Cross Country Skiing PE 170 Beg* . . . . . 1 credit
(Winter Term) . . . . . 3 class hrs/wk
Additional Fees
Fundamentals of cross country skiing, techniques of waxing,

selecting equipment, care of equipment, and basic winter survival. Two trips into the Cascade Wilderness Area.

Downhill Skiing PE 170 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.

Kayaking PE 170 . . . . . 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.

Trap and Skeet Shooting PE 170 . . . . . 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.

Winter Camping/Survival PE 170 . . . . . 1 credit
(Winter Term) . . . . . 3 class hrs/wk
Additional Fees . . . . . Off-Campus
Learn survival techniques, equipment repair, proper clothing and equipment, cross country skiing, etc. Overnight trip into Cascades during the term.

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.

Introduction to Care and Prevention of Athletic Injury PE 299 . . . . . 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.

Introduction to Physical Education
PE 131 . . . . . 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.

Sports Officiating PE 207 . . . . . 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.

Supervised Field Experience FE 207/1.300
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.

Independent Study

Independent Study:
Physical Education PE 248 . . . . . 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.

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, quadriplegia, paraplegia, nerve injuries, post-fractures, joint sprains, arthritis, obesity, and temporary conditions which restrict regular physical education for one to two weeks.

Correctives PE 170 . . . . . 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

Advanced Emergency Care HE 254 . . . . . 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.

Community Health HE 251 . . . . . 3 credits
(Spring Term) . . . . . 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.

Consumer Health HE 222 . . . . . 3 credits
(Winter Term) . . . . . 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.

Death and Dying HE 201 . . . . . 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.

First Aid HE 252* . . . . . 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.

Health and Cardiovascular Disease HE 199 . . . . 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.

Health in Later Years HE 202 . . . . . 3 credits
(Winter Term) . . . . . 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.

Human Sexuality HE 199 . . . . . 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.

Industrial Safety HE 125 . . . . . 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.

Personal Health HE 250 . . . . . 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.

Self Concept: Origins & Change HE 199 . . . . . 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.

Wellness and Health Assessment HE 275 . . . . 3 credits
(Fall, Winter & Spring Terms) . . . . . 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.

Home Economics

The Home Economics Department offers vocational programs, lower division college transfer courses, and other related courses. Some classes can be applied toward majors in home economics. Four vocational programs are offered through the department: Early Childhood Education; Nanny Option; Culinary, Food Service and Hospitality; and Culinary Option.

Early Childhood Education and Nanny Option Courses

Administration of Child Care Centers 7.122 . . . 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.

Child Care and Guidance 7.102 . . . . . 3 credits
(Fall, Winter, & Spring 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. Instruction on how to observe and record behavior accurately will be offered through programmed packets, lectures, discussions, and films.

Child Nutrition FN 230 – See Foods and Nutrition course descriptions.

Child Development HDFS 226 – See Child and Family Studies course descriptions.

Children Under Stress HDFS 227/7.123 – See Child and Family Studies course descriptions.

Contemporary American Families HDFS 240 – See Child and Family Studies course descriptions.

Creative Activities for Children 7.115 . . . . . 3 credits
(Winter and Spring Terms) . . . . . 3 class hrs/wk
Introduces students to creative activities suitable for pre-

school 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.

Creative Cooking FN 111/7.146 – See Foods and Nutrition course descriptions.

Decision Making and the Consumer FRM 250/7.116 – See Family Resource Management course descriptions.

Developmental Kindergarten, The
HDFS 250/7.121 . . . . . 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.

Early Childhood Curriculum 1 7.117 . . . . . 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.

Early Childhood Curriculum 2 7.119 . . . . . 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.

Early Childhood Education Laboratory 1.300
(Fall, Winter, & Spring Terms)
Supervised practical experience with young children in LCC Child Development Center laboratory schools.

Exceptional Child, The HDFS 228 . . . . . 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.

Infants and Toddlers 7.101 . . . . . 4 credits
(Fall Term) . . . . . 3 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.

Introduction to Early Childhood Education 7.104 . . . . . 2 credits
(Fall & Winter Terms) . . . . . 2 class hrs/wk
Beginning course in Early Childhood Education focusing on facilities, staffing, and program content for preschool programs. Lecture, films, field assignments, and group discussions will be major methods. Non-majors may enroll if space is available.

Nanny: An Overview, The 7.130 . . . . . 1 credit
(Fall & Winter Terms) . . . . . 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 and domestic and international job opportunities.

Outdoor Activities for Children 7.108 . . . . . 2 credits
(Winter Term) . . . . . 2 class hrs/wk
Introduces student to methods and materials for guiding outdoor activities for young children—games, field trips, science activities, types of playgrounds, value of play, playground supervision and safety. Designed specifically for workers with preschool and early primary-age children.

Parenting HDFS 233/7.126 – See Child and Family Studies course descriptions.

Parent-School-Community Relations 7.124 . . . . . 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.

Planning Group Care for Infants and Toddlers 7.127 . . . . . 3 credits
(See Term Schedule) . . . . . 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.

Professional Nanny 1 7.131 . . . . . 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 coping skills for dealing with isolation and homesickness are examined.

Professional Nanny 2 7.132 . . . . . 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, home emergencies and security, parent communications and family relations, and life after being a nanny, are examined.

Culinary, Food Service, and Hospitality
Culinary Option Courses

Buffets and Banquets 7.179 . . . . . 1 credit
(Fall, Winter, & Spring Terms)
. . . . . 6 class, 12 lec/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 total of 6 credits.

Classical Cuisine and Service 1 7.290 . . . . . 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. 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 set-

ting, and different table services. Students will prepare and serve a six- course meal and an international buffet.

Classical Cuisine and Service 2 7.291 . . . . . 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.

Classical Cuisine and Service 3 7.292 . . . . . 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.

Dining Room Supervision and Service 7.186 . . . 3 credit
(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.

Equipment Layout & Interior Design 7.178 . . . . 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.

Financial and Operational Analysis in the Food Service Industry 7.192 . . . . . 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.

Food and Beverage Controls 7.177 . . . . . 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.

Food Preparation 1 7.170 . . . . . 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.

Food Preparation 2 7.171 . . . . . 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.

Food Preparation 3 7.172 . . . . . 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.

Food Service Fundamentals 7.185 . . . . . 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.

Innkeeping and Front Office Management 7.188 . 3 credits
(Spring Term) . . . . . 3 class hrs/wk
An introduction and discussion of innkeeping and front office management in the hospitality industry. Management principles and techniques of innkeeping, front office operations, reservation process and night audit procedures will be covered. Additional information will be given on tourism and the travel industry, its relationship and integration in the hotel business.

Introduction to Nutrition 7.151 . . . . . 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.

Menu Planning and Promotion 7.147 . . . . . 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 discussd.

Purchasing and Records Analysis 7.183 . . . . 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.

Restaurant Lab (Renaissance Room) 7.184 . . . . 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.

Home Economics
Lower Division College Courses

Home Economics lower division courses are offered for majors and non-majors as elective courses which transfer to four-year colleges and universities. Students wishing to transfer should consult the most recent catalog for the college or university to which they will transfer. Counselors and Home Economics faculty will also be of assistance.

Careers as professional home economists are open to both men and women. Career opportunities are available in many

areas including education, research, merchandising, hospital dietetics and food service management, communications, and social and community service agencies.

Additional information on home economics careers is available from Home Economics faculty or Judy Dresser, department head.

General Home Economics Courses

Orientation to Home Economics HEc 101 . . . . . 1 credit
(Spring Term) . . . . . 2 class hrs/wk
Survey of the professional/paraprofessional employment opportunities in the various areas of home economics. Includes some history of the profession. Guest speakers, field trips, and personal interviews.

Trends in Home Economics HEc 199 . (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.

Family Resource Management Courses

Decision Making and the Consumer
FRM 250/7.116 . . . . . 3 credits
(Fall & Winter Terms) . . . . . 3 class hrs/wk
Concepts associated with management in the home and in preparation for employment. Includes values, goals, standards, and processes of decision making and management. Use of time, energy, money, and talents to meet personal, family, and vocational needs.

Personal Money Management FRM 120 . . . . . 1 credit
(Fall, Winter, & Spring Terms) . . . . . 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.

Child and Family Studies Courses

Child Development HDFS 226 . . . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
Study of the physical, social-emotional, and intellectual development 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.

Children Under Stress
HDFS 227/7.123 . . . . . 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.

Contemporary American Families
HDFS 240 . . . . . 3 credits
(Winter Term) . . . . . 3 class hrs/wk
Study of the present day American family as an influence in socialization and development of individuals, and in relation to changing values. Introduction to family theories and various approaches to study of the family. Alternative marriage and family models, past and present.

Independent Study: Child Development
HDFS 248 . . . . . (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.)

Parenting HDFS 233/7.126 . . . . . 3 credits
(See Term Schedule) . . . . . 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.

Partner Relationships HDFS 222 . . . . . 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.

Foods and Nutrition Courses

Breads 0.875 . . . . . 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.

Child Nutrition FN 230 . . . . . 3 credits
(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.

Cooking for Health and Fitness FN 110 . . . . . 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.

Creative Cooking FN 111/7.146 . . . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 2 class, 2 lab hrs/wk
Practical course including all phases of meal preparation; menu planning; management of time, energy, and money; food buying; sanitation and safety in food handling; use of kitchen equipment and appliances; basic food preparation.

Independent Study: Foods FN 248 . . . . . 1-3 credits
(See Term Schedule) . . . . . 1-3 hrs/wk
Prerequisite: Creative Cooking FN 111 or Introduction to Nutrition 7.151. This is a course designed for in-depth study and the application of learnings of food preparation methods and food buying principles from FN 111 or 7.151, encompassing actual

food purchasing, food preparation demonstrations, and assisting students currently enrolled in FN 111.

Nutrition FN 225 . . . . . 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.

Soups and Stews 0.870.1 . . . . . 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.

Clothing and Textiles Courses

Advanced Clothing Construction CT 212 . . . . . 3 credits
(See Term Schedule) . . . . . 2 class, 3 lab hrs/wk
Prerequisite: Clothing Construction CT 210 or permission of instructor. Principles of pattern alteration and fitting through use of a basic fitting garment. Transfer of knowledge from fitting garment to final project. Techniques of tailoring as they apply to the garment appearance. Techniques for sewing new fashion fabrics; also, care of the fabrics. Introduction to basic flat pattern techniques for altering and adapting patterns.

Blazer Construction 0.960 . . . . . 1 credit
(See Term Schedule) . . . . . Total of 8 class,8 lec/lab hrs
Comparative techniques of traditional and contemporary tailoring in construction of the blazer jacket.

Clothing Construction CT 210 . . . . . 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.

Clothing and Culture CT 211 . . . . . 3 credits
(Fall Term) . . . . . 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.

Flat Pattern Drafting 0.968 . . . . . 4 credits
(See Term Schedule) . . . . . 1 class, 6 lec/lab hrs/wk
Prerequisite: Advanced Clothing Construction CT 212 or consent of instructor. Principles of flat pattern drafting for making patterns. Use of a simple pattern which is changed by specific directions to create a pattern for a chosen design. Students design and construct a garment in class. Satisfactory completion of the course will enable the students to design their own patterns.

Independent Study: Clothing CT 248 . . . . . 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.

Sewing as a Business 9.250 . . . . . 4 credits
(See Term Schedule) . . . . . 3 class, 3 lab hrs/wk
The course is designed to assist students to operate a small sewing business or to provide sewing services to a retail operation. The course will include information on the opportunities in sewing, line and design in relation to the customer, color, fitting, alterations of patterns and ready made garments, understanding various fabrics, speed sewing techniques, and business procedures as they apply to small business.

Sewing for Beginners CT 110 . . . . . 3 credits
(See Term Schedule) . . . . . 2 class, 3 lab hrs/wk
The course is designed for people wanting to start from the beginning in sewing. The class is graded on a pass/no-pass basis so that students will not have to be concerned with a grade while they are learning to sew. Students with sewing experience are not encouraged to enroll in the course.

Tailoring 0.959 . . . . . 3 credits
(See Term Schedule) . . . . . 6 lec/lab hrs/wk
Prerequisites: Good basic sewing skills; Advanced Clothing Construction CT 212 or permission of the instructor. Tailoring methods applied to construction of a jacket or coat. Selection and preparation of fabric, tailoring equipment, pressing, preparing a test muslin, underconstruction, linings, special techniques for unusual fabrics, skirt and slacks to complete the costume.

Textiles CT 250 . . . . . 3 credits
(Spring Term) . . . . . 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.

Interior Decorating Courses

Introduction to Interior Decorating 9.180 . . . . . 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.

Interior Decorating Materials 9.181 . . . . . 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.

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.

Career and Life Planning HD 208 . . (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.

Coping Skills for Stress and Depression HD 206 . . . . . (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.

Dreikursian Principles of Parent-Child Relationships 1 HD 211 . . . . . (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.

Dreikursian Principles of Parent-Child Relationships 2 HD 212 . . . . . (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.

Eliminating Self-Defeating Behavior HD 204 . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 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.

Human Relations 1 1.608 . . . . . 3 credits
(All Terms) . . . . . 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.

Human Relations 2 1.609 . . . . . (variable) 1-3 credits
(Fall, Winter, & Spring Terms) . . . . . 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.

Introduction to Assertive Behavior HD 205 . . . . . (variable) 1-3 credits
(Fall, Winter, & Spring Terms) . . . . . 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 determining what is 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.

Introduction to Social Skills HD 203 . (variable) 1-3 credits
(Winter Term) . . . . . 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.

Life Transitions HD 202 . . . . . (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.

Orientation to College 0.771 . . . . . (variable) 1-2 credits
(All Terms) . . . . . 2 class hrs/wk
This course studies the role of students and their opportunities at LCC. Activities focus on college services, procedures, and practices which affect the student at LCC.

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, Landscape Development, and Welding Technology. 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.

Auto Tech for Beginners 3.174 . . . . . 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.

Basic House Wiring and Minor Repairs 3.170 . . 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.

Basic Plumbing and Minor Repairs 3.171 . . . . . 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.

Beginning Blueprint Reading 3.181 . . . . . 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.

Careers/Trends in Robotics 3.179 . . . . . 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.

Computer Aided Drafting/Design 3.175 . . . . . 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.

Essentials of Drafting 3.176 . . . . . 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.

Industrial/Technical Career Survey 3.180 . . . . 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.

Introduction to Bricklaying 3.183 . . . . . 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.

Introduction to Construction 3.169 . . . . . 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.

Introduction to Electronics 3.172 . . . . . 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 prevous experience.

Introduction to Machine Shop 3.173 . . . . . 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.

Meet a Microcomputer 3.182 . . . . . 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.

Welding for Beginners 3.178 . . . . . 1 credit
(See Schedule) . . . . . 2 lec/lab hrs/wk
Fundamental principles of MIG, TIG, arc, and gas welding of-

fered 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.

Woodshop Fundamentals 3.177 . . . . . 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.

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.

Woodworking 3.196 . . . . . 3 credits
(Fall, Winter, & Spring 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.

Cabinet and Furniture Making 1, 2, 3
3.192, 3.193, 3.194 . . . . . (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.

Construction Technology Courses

Active Solar Systems 6.322 . . . . . 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.

Blueprint Reading 1 3.910 . . . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 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.

Blueprint Reading 2 3.911 . . . . . 3 credits
(Winter, Spring, & upon
student's request) . . . . . 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.

Building Construction 3.118 . . . . . 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.

Building Construction Surveying 3.119 . . . . . 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.

Construction Codes 6.122 . . . . . 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.

Construction Estimating 3.116 . . . . . 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.

Construction Orientation & Environment 3.111 . . . . . (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.

Construction Planning 1 3.113 . . . . . 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.

Construction Planning 2 3.114 . . . . . 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.

Construction Planning 3 3.115 . . . . . 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.

Housing Rehabilitation 3.120 . . . . . 2-6 credits
(All Terms) . . . . . 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.

Independent Study: Construction Estimating IS 248 . . . . . 1-3 credits
(Fall, Winter, & Spring Terms)
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.

Passive Solar Techniques in Local Construction 6.329 . . . . . 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.

Solar Energy Systems 6.325 . . . . . 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.

Landscape Development Courses

Independent Study: Landscape IS 248 . . . . . 1-3 credits
(Fall, Winter, & Spring Terms) . . 2 contact hours per credit
Prerequisite: Landscape Design Principles 8.134. This course will involve site visitation, analysis and evaluation of actual landscape projects in the Willamette Valley. Students may be requested to submit written or class reports on their field trips. Independent Study: Landscape may be taken in conjunction with Landscape Design Principles or as its follow-up. Individual study projects will be arranged with the course instructor.

Irrigation and Drainage 8.160 . . . . . 3 credits
(Fall Term) . . . . . 3 class hrs/wk
A course of study of modern irrigation and drainage systems. Topics covered include philosophy, maintenance and installation techniques, familiarization with materials available, cost analysis of options available, soil/plant relationships relative to irrigation and drainage system use.

Landscape Administration 8.136 . . . . . 4 credits
(Winter Term) . . . . . 4 class hrs/wk
A study in the basic knowledge needed to own or manage a landscape business, including a discussion of wages, taxes, contracts, insurance, and general business practice.

Landscape Construction 8.135 . . . . . 4 credits
(Spring Term) . . . . . 1 class, 4 lab hrs/wk
Instruction in the fundamentals of construction as applied to landscape projects and the care and use of tools needed in landscape work. Hands-on experience on a project is featured.

Landscape Design Principles 8.134 . . . . . 3 credits
(Winter Term) . . . . . 2 class, 1 lab hr/wk
The major objectives of this course are to provide an introduction to the theory and principles of landscape design and to develop an understanding of the importance of planning to good design. The course promotes the art of appropriate planting, i.e. selection of the right plant for the right location. Students learn how to interpret a two-dimensional plan and to carry it out at the proposed landscape site. Each student must also design and present to the class a landscape plan. This course includes local and regional field trips.

Landscape Maintenance 1 8.137 . . . . . 3 credits
(Fall Term) . . . . . 1 class, 3 lab hrs/wk
Basic, practical information on insects and their control, plant diseases and their control, weed classifications and their controls, nutrient deficiencies in plants, and fertilizers and their application.

Landscape Maintenance 2 8.138 . . . . . 3 credits
(Spring Term) . . . . . 1 class, 3 lab hrs/wk
Basic practical skills necessary for determining drainage problems and prescribing corrective drainage; planning, preparation, planting and caring for shrubs, trees, lawns and ground covers. Includes pruning, cabling and bracing.

Landscape Plant Identification 1 8.130 . . . . . 3 credits
(Fall Term) . . . . . 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.

Landscape Plant Identification 2 8.131 . . . . . 3 credits
(Winter Term) . . . . . 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.

Landscape Plant Identification 3 8.132 . . . . . 3 credits
(Spring Term) . . . . . 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.

Landscaping with Food Plants 8.127 . . . . . 3 credits
(Fall Term) . . . . . 6 lec/lab hrs/wk
Classroom instruction and slide presentation; focus on vegetables, herbs, fruits and nuts for landscaping use and on ornamentals that are easy and beautiful to grow with food plants. This class also includes field trips to local edible landscapes and independent work on several landscape designs.

Oregon Certified Nurserypersons Exam Preparation 8.129 . . . . . 2 credits
(Winter Term) . . . . . 1 class, 2 lec/lab hrs/wk
This course is designed to help the student/nurseryperson prepare for certification by the Oregon Association of Nurserymen. Plant identification, retailing and salesmanship will be covered. All phases of nursery operations will be reviewed, including common cultural practices, laws and regulations.

Principles of Nursery Operations 8.128 . . . . . 3 credits
(Spring Term) . . . . . 2 class, 2 lec/lab hrs/wk
This course is designed to introduce to landscape students all phases of nursery operations. Subjects to be covered will include propagation, container growing, field stock, and floriculture. The operation of a retail garden center will also be discussed.

Soils and Drainage 8.133 . . . . . 3 credits
(Winter Term) . . . . . 3 class hr/wk
This is a course involving soil characteristics and management. Also included in this course is a study of plant food elements and the relationships between the nutrients and soil.

Welding Technology First Year Courses

Arc Welding 1 3.921 . . . . . (variable) 1-4 credits
(Fall, Winter, & Spring 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.

Arc Welding 2 3.922 . . . . . (variable) 1-4 credits
(Fall, Winter, & Spring 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.

Blueprint Reading 1 3.910 . . . . . 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.

Blueprint Reading 2 3.911 . . . . . 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.

Gas Processes 1 3.931 . . . . . (variable) 1-4 credits
(Fall, Winter, & Spring 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.

Gas Processes 2 3.932 . . . . . (variable) 1-4 credits
(Fall, Winter, & Spring 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.

Shop Fabrication Practices 3.938 . . . . . 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; Drafting 1 4.120. 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

Advanced Welding Practices 1 (GTAW) 3.942 . . 3 credits
(Fall Term) . . . . . 6 lab hrs/wk
Prerequisite: Completion of Gas Processes 2 3.932, or instructor approval. Corequisite: Welding Theory 1 3.495; Advanced Welding Practices 1 3.942 and 2 3.943 must be taken concurrently. 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.

Advanced Welding Practices 2 (GMAW) 3.943 . . 3 credits
(Fall Term) . . . . . 6 lab hrs/wk
Prerequisite: Completion of Shop Fabrication Practices 3.938 or instructor approval. Corequisite: Welding Theory 1 3.495; Advanced Welding Practices 1 3.942 and 2 3.943 must be taken concurrently. 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.

Advanced Welding Practices 3 3.946 . . . . . 4 credits
(Winter Term) . . . . . 8 lab hrs/wk
Prerequisite: Arc Welding 2 3.922. Corequisite: Welding Theory 2 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.

Advanced Welding Practices 4 3.948 . . . . . 4 credits
(Spring Term) . . . . . 8 lab hrs/wk
Prerequisite: Advanced Welding Practice 3 3.946. Corequisite: Welding Theory 3 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.

Applied Welding Metallurgy 3.951 . . (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.

Estimating For Welders 3.928 . . . . . 3 credits
(Fall 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.

Senior Welding Projects 1 3.908 . . . . . 4 credits
(Winter Term) . . . . . 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.

Senior Welding Projects 2 3.909 . . . . . 4 credits
(Spring Term) . . . . . 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.

Welding Lab 3.939 . . . . . 1-6 credits
(Fall Term) . . . . . 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.

Welding Theory 1 3.945 . . . . . 3 credits
(Fall Term) . . . . . 3 class hrs/wk
Corequisite: Advanced Welding Practices 1 3.942 or 2 3.943. Research and preparation of studies on gas metal arc and gas tungsten arc welding; welding low-carbon steel, aluminum and other commercial alloys; troubleshooting welding problems and defects.

Welding Theory 2 3.947 . . . . . 3 credits
(Winter Term) . . . . . 3 class hrs/wk
Corequisite: Advanced Welding Practices 3 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.

Welding Theory 3 3.949 . . . . . 3 credits
(Spring Term) . . . . . 3 class hrs/wk
Corequisite: Advanced Welding Practices 4 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.

Library

Explore the world of information. Learn how to find what you need from the library.

Course

Library Class
Use of the Library LIB 127 . . . . . 3 credits
(All Terms) . . . . . 3 class hrs/wk
Training and practice in using library resources and services effectively. Students will also learn research strategy and bibliographic form. 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. 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.

Advanced Audio Production 3.457 . . . . . 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.

Advanced Field Production 3.445 . . . . . 4 credits
(Fall Term) . . . . . 4 class hrs/wk
Prerequisite: Electronic Field Production 3.435 and Applied Design: Moving Images and Sound ART 225. 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.

Announcing and Narration 3.436 . . . . . 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.

Audio Production 3.401 . . . . . 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.

Beginning Photography ART 161 . . . . . 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.

Computerized Video Editing 3.449 . . . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
Prerequisites: Electronic Studio Production 3.430, Electronic Field Production 3.435, 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.

Creating/Selling Advertising for Broadcasting 3.439 . . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
Prerequisite: Writing for Visuals and Sound 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.

Electronic Field Production 3.435 . . . . . 4 credits
(Winter & Spring Terms) . . . . . 3 class, 3 lab hrs/wk
Prerequisites: Beginning Photography ART 161/2.207 and Applied Design: Moving Images and Sound ART 225. 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.

Electronic Studio Production 3.430 . . . . . 4 credits
(All Terms) . . . . . 2 class, 6 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.

Fundamentals of Lighting Art 264 . . . . . 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.

Fundamentals of Media Sp 241 . . . . . 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.

Media and the Law 3.434 . . . . . 3 credits
(See Term Schedule) . . . . . 3 class hrs/wk
Non-transfer 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.

Media Production: Entertainment 3.447 . . . . . 3 credits
(Winter Term) . . . . . 3 class hrs/wk
Prerequisites: Electronic Studio Production 3.430, Beginning Photography ART 161/2.207, Audio Production 3.401, Applied Design: Moving Images and Sound ART 225, Electronic Field Production 3.435, Slide/Tape Production 3.444, and Writing for Visuals and Sound 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.

Media Production: Information 3.448 . . . . . 3 credits
(Spring Term) . . . . . 3 class hrs/wk
Prerequisites: Electronic Studio Production 3.430, Beginning Photography ART 161/2.207, Audio Production 3.401, Applied Design: Moving Images and Sound ART 225, Electronic Field Production 3.435, Slide/Tape Production 3.444, and Writing for Visuals and Sound 3.442.. A study of the formats and techniques used in producing commercial, documentary, promotional, and information productions. Serving the needs of clients. Audience analysis. Students complete production projects outside of class.

Media Production: Instruction 3.446 . . . . . 3 credits
(Fall Term) . . . . . 3 class hrs/wk
Prerequisites: Electronic Studio Production 3.430, Beginning Photography ART 161/2.207, Audio Production 3.401, Applied Design: Moving Images and Sound ART 225, Electronic Field Production 3.435, Slide/Tape Production 3.444, and Writing for Visuals and Sound 3.442. This course is designed to provide students with a fundamental understanding of the production of instructional media in both educational and business environments. Topics discussed are not limited to the practical considerations of production but include learning theory, training, evaluation and instructional design plans. This is the first in a sequence of three production courses offered for second-year students which may be taken in any sequence.

News & Public Affairs for Television 3.404 . . . . 4 credits
(Spring Term) . . . . . 3 class, 3 lab hrs/wk
Prerequisites: Audio Production 3.401, Electronic Field Production 3.435, and Writing for Visuals and Sound 3.442. Writing, reporting, and producing for television news. Includes writing for tape/film, use of wire services, and interviews.

Photography ART 162 . . . . . 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.

Photography-Film Production 2 ART 262 . . . . . 4 credits
(Spring Term) . . . . . 3 class, 3 lab hrs/wk
Prerequisites: Beginning Photography ART 161/2.207, Photography/Shooting/Editing 16mm Film ART 261/3.408 and Applied Design: Moving Images and Sound ART 225. Shooting and editing 16mm color film. Single system sync sound.

Photography/Shooting/Editing 16mm Film ART 261 . . . . . 4 credits
(Fall & Winter Terms) . . . . . 2 class, 4 lab hrs/wk
Prerequisite: Beginning Photography ART 161/2.207 and Applied Design: Moving Images and Sound ART 225. Fundamentals of Shooting/Editing 16mm Film—Black/white and color; non-sync sound.

Slide/Tape Production 3.444 . . . . . 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.

Video Production Unit 3.437 . . . . . 1 credit
(See Term Schedule) . . . . . 3 lab hrs/wk
Prerequisites: Electronic Studio Production 3.430, Audio Production 3.401, Electronic Field Production 3.435, GPA of no less than 2.0 in the three courses listed, and instructor consent. This course gives students an opportunity to observe video, film, slide/tape production in the LCC Mass Communication Department. Then students will be given the chance to participate as members of production units and to practice skills in camera operating, production technical directing, production audio operating, lighting, floor directing, video editing, media script writing, directing, and producing. Repeatable for a total of 8 credits.

Writing for Visuals & Sound 3.442 . . . . . 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. Non-print media writing.

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 Department.

Newswriting 1 J 216 . . . . . 2 credits
(Fall & Winter Terms) . . . . . 2 class hrs/wk
Corequisite: Newswriting Lab J 215. Study and practice of news-gathering, 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.

Newswriting 2 J 217 . . . . . 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.

Newswriting Lab J 215 . . . . . 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.

Publication Design and Production 1 3.443 . . . . 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.

Publication Design and Production 2 2.211 . . . . 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.

Public Relations J 205 . . . . . 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.

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

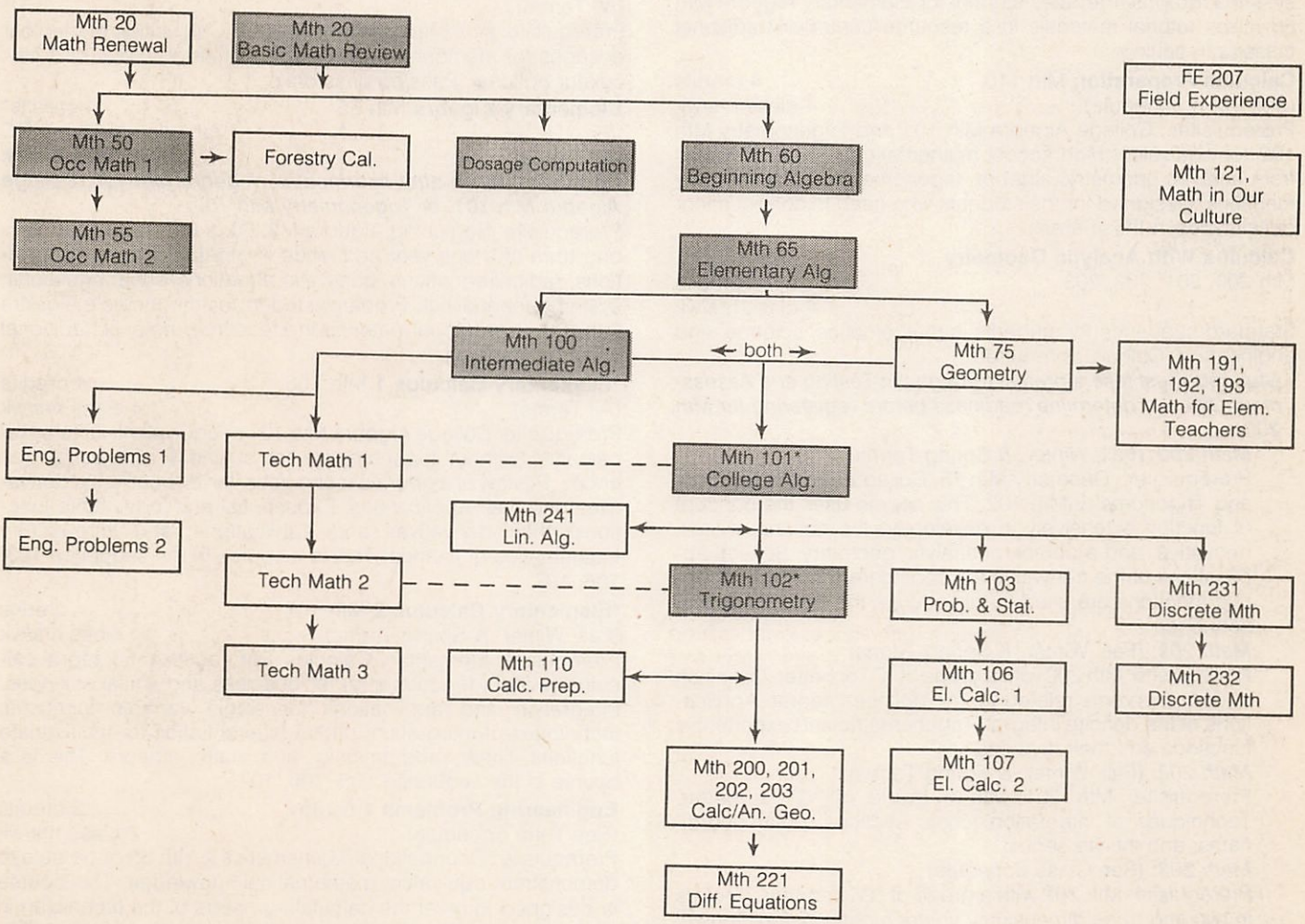
Two principal modes of instruction are offered by the Mathematics Department: individualized instruction and group instruction.

Individualized instruction in the Math Resource Center (MRC) and the Downtown Center (DTC) 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 1, 2, and 3; Dosage Computation Math; Beginning, Elementary, Intermediate, and College Algebra; and Trigonometry are offered every term by individualized instruction. Individualized instruction for College Algebra and Trigonometry is under review and may not be available when the student registers.

These courses also are available in the group mode in conventional classrooms except for Math 1, 2, and 3, and Dosage Computation Math. Math Renewal, taught through group instruction, is equivalent to Math 1. 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 below 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.



* Individualized instruction for Mth 101 & 102 is under review and may not be available when the student registers.

Mathematics Courses

Applied Differential Equations

Mth 221 . . . . . 4 credits
(See Term Schedule) . . . . . 4 class hrs/wk
Calculator Strongly Recommended.
Prerequisite: Calculus with Analytic Geometry Mth 203. This

course covers methods of solving ordinary differential equations and includes three types of solutions—elementary methods, convergent power series and numerical methods, with applications to physical and engineering science.

Basic Mathematics Review Mth 20 . . (variable) 1-3 credits
(All Terms)
No credit if taken after Occupational Mathematics 1 Mth 50 or any more advanced course.

Whole Numbers, Estimation . . . . . 1 credit
Arithmetic operations.

Fractions, Decimals, Calculator Usage . . . . . 1 credit
Arithmetic operations with fractions and decimals.

Ratio, Percent, Measurement . . . . . 1 credit
Arithmetic operations with percent using ratio, proportion. Finding area, surface area, and volume.

Beginning Algebra Mth 60 . . . . . 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. 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.

Calculus Preparation Mth 110 . . . . . 4 credits
(See Term Schedule) . . . . . 4 class hrs/wk
Prerequisites: College Algebra Mth 101 and Trigonometry Mth 102 (or equivalent high school mathematics). Selected topics from analytic geometry, algebra, trigonometry and elementary functions. Designed for the students who need to correct minor deficiencies in these areas.

Calculus With Analytic Geometry
Mth 200, 201, 202, 203 . . . . . 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, but only algebraic functions are used in this course, the first of a 4-term sequence.

Math 201: (Fall, Winter, & Spring Terms)
Prerequisite: Mth 200 with a grade of "C" or better. Definition of, and theorems related to, the definite integral. Applications of the definite integral. Trigonometric and exponential functions and their inverses.

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.

College Algebra Mth 101 . . . . . 4 credits
(All Terms) . . . . . 4 class hrs/wk
Students 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. 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.

Discrete Mathematics Mth 231 . . . . . 4 credits
(See Term Schedule) . . . . . 4 class hrs/wk
Prerequisite: College Algebra Mth 101 or equivalent. Sets and operations on sets, propositional logic, mathematical induction. Functions, sequences and recursive definitions. Elementary matrix operations. Introduction to graphs.

Discrete Mathematics Mth 232 . . . . . 4 credits
(See Term Schedule) . . . . . 4 class hrs/wk
Prerequisite: Discrete Mathematics Mth 231 or equivalent. Combinatorics, elementary counting techniques; relations and order relations, partially ordered sets, adjacency matrices; graphs and directed graphs.

Dosage Computation Math 5.606 . . . . . 1 credit
(All Terms)
Prerequisite: Arithmetic skills of Math 1. Calculation of medical dosages for members of the health professions. Use of a calculator optional. Pass/no-pass only.

Elementary Algebra Mth 65 . . . . . 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 the equivalent. Second term of a one-year sequence in algebra; fractional equations, radical equations, quadratic equations, linear equations, systems, inequalities. Prepares student for Intermediate Algebra Mth 100. Uses tutorial materials in a resource center or traditional classroom setting.

***Elementary Calculus 1** Mth 106 . . . . . 4 credits
(All Terms) . . . . . 4 class hrs/wk
Prerequisite: College Algebra Mth 101 or equivalent. 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 103, 106, 107.

***Elementary Calculus 2** Mth 107 . . . . . 4 credits
(Fall, Winter, & Spring Terms) . . . . . 4 class hrs/wk
Prerequisite: Elementary Calculus 1 or equivalent. 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 103, 106, 107.

Engineering Problems 1 6.135 . . . . . 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.

Engineering Problems 2 6.136 . . . . . 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.

Forestry Calculations 6.140 . . . . . 2 credits
(See Term Schedule) . . . . . 2 class hrs/wk
Prerequisite: Occupational Mathematics 1 Mth 50 or be able to demonstrate equivalent mathematical knowledge. This course is designed to meet the forestry technician's calculating and computing needs. Major emphasis will be placed on the use of computer software and surveying computations involving trigonometry. Problem solution will be structured in terms of analysis, formulation, calculation, and clear presentation. Electronic calculator required.

Geometry Mth 75 . . . . . 4 credits
(See Term Schedule) . . . . . 4 class hrs/wk
Prerequisite: Elementary Algebra Mth 65 or equivalent. 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.

Intermediate Algebra Mth 100 . . . . . 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 the equivalent. 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. Prepares student for College Algebra Mth 101. Uses tutorial materials in a resource center or traditional classroom setting. Scientific type calculator required.

Introduction to Linear Algebra Mth 241 . . . . . 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.

***Introduction to Probability and Statistics**
Mth 103 . . . . . 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. This is a course in the sequence 103, 106, 107. Calculator required.

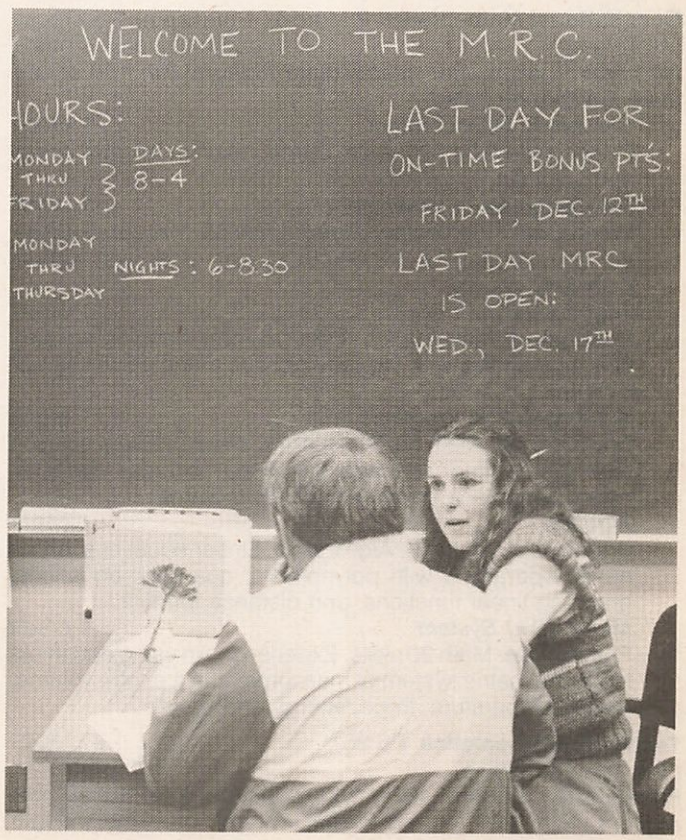
***Introduction to Probability and Statistics Mth 103, Elementary Calculus 1 Mth 106, and Elementary Calculus 2 Mth 107 if all taken at Lane Community College will satisfy:**
1. **The University of Oregon Business School requirements of Mth 207, 208, 209.**
2. **The University of Oregon general graduation requirements for a science cluster.**

Learning Skills Laboratory 0.593 . . . . . 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.*

Math in Our Culture Mth 121 . . . . . 4 credits
(See Class Schedule) . . . . . 4 class hrs/wk
Mathematics approached from a cultural/historical viewpoint. The primary goal of this course is to develop an understanding of mathematics and an appreciation of the relationship of mathematics to other branches of knowledge. The techniques of doing mathematics are not stressed. Topics covered include: probability, logic, art, music, the computer, statistics. Recommended for the Liberal Arts major.

Mathematics for Elementary Teachers
Mth 191 . . . . . 3 credits
(Fall & Winter Terms) . . . . . 2 class, 2 lec/lab hrs/wk
Students must take a pretest through the Testing and Assessment Office. A study list is available at the Testing Office.
Prerequisites: Elementary Algebra Mth 65 and Geometry Mth 75 or equivalent. (Intermediate Algebra Mth 100 is recommended.) Pass the pretest. Mathematics for Elementary Teachers: 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.

Mathematics for Elementary Teachers
Mth 192 . . . . . 3 credits
(Winter & Spring Terms) . . . . . 2 class, 2 lec/lab hrs/wk
Prerequisites: Mathematics for Elementary Teachers Mth 191. Second term of a three-term sequence for elementary teachers. Continued application of problem-solving methods calculators,



and computers to rational numbers and geometry: fractions, decimals, percents, ratios, exponential notation, and nonmetric geometry.

Mathematics for Elementary Teachers
Mth 193 . . . . . 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 are probability, statistics, measurement, and use of computers in mathematics. Students will do a term project on geometry.

Math Renewal Mth 20 . . . . . 3 credits
(Fall, Winter, & Spring Terms) . . . . . 3 class hrs/wk
No credit if taken after Math 2 4.203 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.

Occupational Mathematics 1 Mth 50 . (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.

Occupational Mathematics 2 Mth 55 . (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.

Technical Mathematics 1 6.261* . . . . . 4 credits
(See Term Schedule) . . . . . 4 class hrs/wk
Prerequisite: Current skills and concepts of Intermediate Algebra Mth 100 or equivalent. 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.

Technical Mathematics 2 6.262* . . . . . 4 credits
(See Term Schedule) . . . . . 4 class hrs/wk
Prerequisite: Technical Mathematics 1 or equivalent. 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.

Technical Mathematics 3 6.266 . . . . . 4 credits
(See Term Schedule) . . . . . 4 class hrs/wk
Prerequisite: Technical Mathematics 2 or equivalent. 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 and Trigonometry.*

Trigonometry Mth 102 . . . . . 4 credits
(All Terms) . . . . . 4 class hrs/wk
Prerequisite: College Algebra Mth 101 or equivalent. This is a one-term course prerequisite to Calculus with Analytic Geometry. The course is a study of angle measure relationships involving sides and angles in right triangles and oblique triangles, trigonometric functions, circular functions, trigonometric identities, solution of trigonometric equations, and applications. The course also includes a treatment of conic sections.

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, Insurance Adjusters, and Manufacturing Technology.

Grading and Attendance 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. A minimum of 80 percent attendance per credit hour is required except for open-entry/open-exit performance-based courses which require attendance until proficiency is achieved.

Courses

Agricultural and Industrial Equipment Technology 8.155 . . . . . (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.

Airframe 3.280 . . . . . (variable) 24 credits
(Fall, Winter, & Spring Terms) . . . . . 12 lec/lab hrs/section

Powerplant 3.281 . . . . . (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.

Airframe Return to Service 3.282 . . . (variable) 6 credits
(Fall, Winter, & Spring Terms) . . . . . 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.

Auto-Diesel 1 Chassis
3.131 (half term) . . . . . (variable) 1-6 credits
(Fall, Winter, & Spring Terms) . . . . . 24 lecture/lab hrs/wk
Theory and laboratory experiences in suspension systems, steering geometry and alignment, brakes, wheel balancing, and miscellaneous components.

Auto-Diesel 1 Engines
3.130 (half term) . . . . . (variable) 1-6 credits
(Fall, Winter, & Spring Terms) . . . . . 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.

Auto-Diesel 2 Applied Fluids
3.132 (half term) . . . . . (variable) 1-6 credits
(Fall, Winter, & Spring Terms) . . . . . 24 lecture/lab hrs/wk
Corequisite: Basic Hydraulics 3.137. 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.

Auto Diesel 2 Power Trains
3.133 (half term) . . . . . (variable) 1-6 credits
(Fall, Winter, & Spring Terms) . . . . . 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.

Auto-Diesel 3 Electricity
3.134 (half term) . . . . . (variable) 1-6 credits
(Fall, Winter, & Spring Terms) . . . . . 24 lecture/lab hrs/wk
Corequisite: Basic Electricity 3.136. 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.

Auto-Diesel 3 Fuel Systems
3.135 (half term) . . . . . (variable) 1-6 credits
(Fall, Winter, & Spring Terms) . . . . . 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.

Automotive Painting 3.235 . . . . . (variable) 36 credits
(Fall, Winter, & Spring Terms) . . . . . 24 lecture/lab hrs/wk

Auto Metal Work 3.237 . . . . . (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.

Auto Technology 4 3.306 . . . . . 8 credits
(Fall Term) . . . . . 8 class hrs/wk
Auto Technology 4 Lab 3.307 . . . . (variable) 1-5 credits
(Fall Term) . . . . . 15 lab hrs/wk
Prerequisite: Second-year standing.
This section covers the procedures on diagnosing, testing, and repairing automobile engines and accessories relating to engine performance. Also, it involves repair estimating, service, maintenance, and repair of the chassis, power trains, engines, emission controls, and accessories of automobiles.

Auto Technology 5 3.308 . . . . . 8 credits
(Winter Term) . . . . . 8 class hrs/wk
Auto Technology 5 Lab 3.309 . . . . (variable) 1-5 credits
(Winter Term) . . . . . 15 lab hrs/wk
Prerequisite: Second-year standing.
This section covers the procedures and techniques involved when diagnosing ignition, electrical, fuel systems, engine malfunction, and airconditioning troubles. Also included is diagnosing suspension, steering, brake, and power train troubles.

Auto Technology 6 3.310 . . . . . 8 credits
(Spring Term) . . . . . 8 class hrs/wk
Auto Technology 6 Lab 3.311 . . . . (variable) 1-5 credits
(Spring Term) . . . . . 15 lab hrs/wk
Prerequisite: Second-year standing.
This course involves developing skills and proper work habits in the maintaining of automatic transmissions, repair and overhaul of automotive engines, and instruction in all phases of service management which involves the auto mechanic.

Basic Electricity 3.136 . . . . . 2 credits
(Fall, Winter, & Spring Terms)(half-term) . . . . 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.

Basic Hydraulics 3.137 . . . . . 2 credits
(Fall, Winter, & Spring Terms)(half-term) . . . . 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.

Diesel Technology 4 3.312 . . . . . 8 credits
(Fall Term) . . . . . 8 class hrs/wk
Prerequisite: Second-year standing.
Fuel Injection
Diesel fuel systems, fuel oil transfer pumps, injection systems, fuel injection, pumps, and nozzles. Service and repair of injection equipment. Safety and proper handling of fuel injection and testing equipment. The principles, specifications, installations, adjustments, and maintenance of various types of fuel injection systems.

Diesel Tune-Up and Diagnosis
Various troubles encountered in diagnosis and tune-up of diesel engines with emphasis on accurate and systematic procedures.

Diesel Technology 5 3.314 . . . . . 8 credits
(Winter Term) . . . . . 8 class hrs/wk
Prerequisite: Second-year standing.
Auxiliary Systems
Specialized study in the areas of the cooling, fuel supply, lubrication, air intake, exhaust, and starting systems of typical diesel engines in use today. Starting aids, blowers, superchargers, governors, compressors, and air brakes and controls (both single and double systems).

Hydraulics, Heavy Equipment
Principles of hydraulics in power transmission as used on heavy duty equipment. Basic principles of hydraulics and the troubleshooting, servicing, and overhauling of hydraulic system components.

Power Trains, Heavy Equipment
Developing skills in servicing, overhauling, and adjusting units in heavy equipment power trains.

Service Management, Heavy Equipment
Duties and responsibilities of the service manager. Methods of organizing service personnel, shop facilities, and instruction in shop layout and buildings. Appreciation of good relationship with customers, labor and management groups, and individuals.

Diesel Technology 6 3.316 . . . . . 8 credits
(Spring Term) . . . . . 8 class hrs/wk
Prerequisite: Second-year standing.
Diesel Engines
Types and construction of engines with emphasis on the fundamentals, also cooling and lubricating systems. Valve operating mechanism, air intake systems, piston and connecting rod servicing, crankshaft servicing, cylinder and block servicing, engine performance, superchargers and blowers, and hydraulic and mechanical governors.

Diesel Engine Repair
Shop and/or laboratory course for development of additional abilities and understandings through the diagnosis and repair of operating diesel equipment and components. Overhaul and maintenance procedures and practices as they relate to the removal, disassembly, overhaul, reassembly, installation, and testing of component parts. Inspection, servicing, and repair of systems.

Diesel Technology Lab 3.319 . . . . . (variable) 1-15 credits
(Fall, Winter & Spring Terms) . . . . . 15 lab hrs/wk
Corequisites: Diesel Technology 4 3.312, 5 3.314, or 6 3.316. This course includes lab projects necessary for the application and understanding of theories and principles in diesel technology. Students enroll in 5 credits per term (15 lab hrs/wk).

Estimating Building Construction Costs 1
3.318 . . . . . 3 credits
(Fall Term) . . . . . 3 class hrs/wk
Fundamentals of estimating building repairs with emphasis on the correct use of estimate forms and of proper nomenclature.

Estimating Building Construction Costs 2
3.333 . . . . . 5 credits
(Spring Term) . . . . . 5 class hrs/wk
Prerequisite: Instructor approval only. Practice in estimating all types and severity of building losses.

General 1 3.284 . . . . . (variable) 6 credits
(Fall & Winter Terms) . . . . . 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.

General 2 3.285 . . . . . (variable) 6 credits
(Fall & Winter Terms) . . . . . 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 cleaning and corrosion control, materials and processes, maintenance forms and records, publications, and mechanics privileges.

General 3 3.286 . . . . . (variable) 6 credits
(Fall & Winter Terms) . . . . . 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.

General 4 3.287 . . . . . (variable) 6 credits
(Fall & Spring Terms) . . . . . 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.

General 5 3.288 . . . . . (variable) 6 credits
(Fall & Spring Terms) . . . . . 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 airframe and engine inspection, ground operation and servicing, and weight and balance.

Helicopter Maintenance 3.289 . . . . (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.

Insurance Investigations 1 3.332 . . . . . 5 credits
(Winter Term) . . . . . 5 class hrs/wk
Prerequisite: Instructor approval only. Corequisite: Insurance Investigations 2 3.338. An introduction to the fundamentals of investigation. The course teaches the proper approach prior to the interview. It includes written statements, telephone reports, and use of a recorder in statement taking.

Insurance Investigations 2 3.338 . . . . . 5 credits
(Winter Term) . . . . . 5 class hrs/wk
Prerequisite: Instructor approval only. Corequisite: Insurance Investigations 1 3.332. A study of claim files from inception to conclusion. Covers the role of the adjuster and management. The need for clear, concise reporting is demonstrated.

Insurance Law 3.331 . . . . . 7 credits
(Fall Term) . . . . . 7 class hrs/wk
A study of negligence law as related to insurance claims. Covers motor vehicle laws, comparative negligence, and the fundamentals of tort law.

Insurance Policies 1 3.325 . . . . . 5 credits
(Fall Term) . . . . . 5 class hrs/wk
A detailed treatment of the reading and interpretation of insurance policies. Deals with the theory of policies in general and offers specific treatment of auto policies.

Insurance Policies 2 3.326 . . . . . 5 credits
(Winter Term) . . . . . 5 class hrs/wk
Prerequisite: Instructor approval only. A detailed treatment of the reading and interpretation of insurance policies. Deals with the theory of policies and will offer specific treatment of standard fire policies.

Insurance Policies 3 3.327 . . . . . 5 credits
(Spring Term) . . . . . 5 class hrs/wk
Prerequisite: Instructor approval only. Specific interpretation of standard and deluxe homeowners policy. The course covers the dwelling, contents, and personal liability divisions of the policy.

Insurance Settlements: How to Conclude a Loss
3.335 . . . . . 5 credits
(Spring Term) . . . . . 5 class hrs/wk
Prerequisite: Instructor approval only. Instruction in dealing with insureds and claimants. The course will deal with the role of management, supervisors, and the adjuster in final settlements.

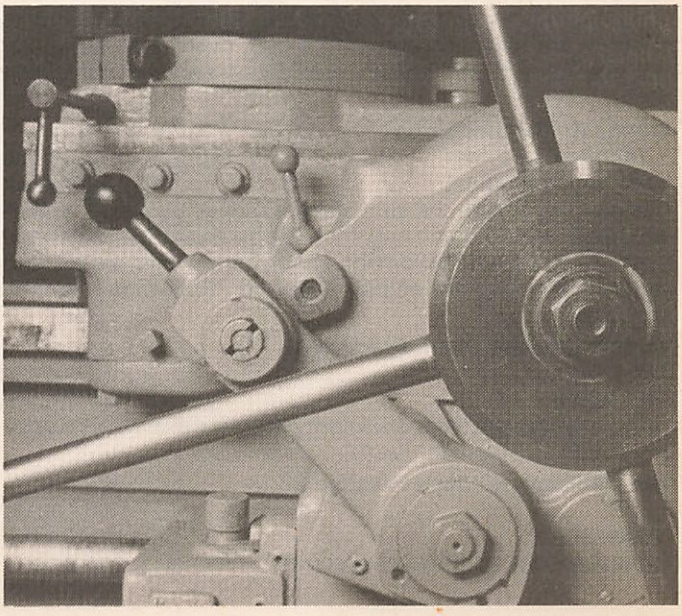
Manufacturing Orientation 3.395 . . . (variable) 3-6 credits
(Fall, Winter, & Spring Terms) . . . 2-4 class, 3-6 lab hrs/wk
Identification of various machine tools and their uses. Use and care of measuring and hand tools. Basic metallurgy. Basic machine shop practice with drill press, lathe, and grinder that a person may need to know to set up and operate machines in fields other than the machinist's trade. (A lab fee will be required: $2 per credit.)

Manufacturing Technology 3.399 . . (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.

Powerplant 3.281 (See Airframe 3.280)

Powerplant Return to Service
3.283 . . . . . (variable) 6 credits
(Fall, Winter, & Spring Terms) . . . . . 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.



Trends in Agricultural and Industrial Equipment Technology 8.156 . . . (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.

Trends in Auto Body and Fender Technology 3.236 . . . . . (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.

Trends in Automotive Technology 3.128 . . . . . (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 Automotive Technology. Examples of general topics of study are equipment and/or components, systems, employment and industry predictions, service management, and parts operation.

Trends in Aviation Maintenance 3.290 . . . . . (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.

Trends in Diesel Technology 3.129 . . . . . (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.

Trends in Insurance Adjusting 3.347 . . . . . (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 Insurance Adjusting. Examples of general topics of study are estimating, investigations, policies, settlements, law, employment and industry predictions, and communication skills.

Trends in Manufacturing Technology 3.398 . . . . . (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.

Vehicle Damage Claim Practice 1
3.254 . . . . . 8 credits
(Fall Term) . . . . . 8 class hrs/wk
This course covers technical information necessary in the handling of vehicle damage claims.

Vehicle Damage Claim Practice 2
3.255 . . . . . 8 credits
(Winter Term) . . . . . 8 class hrs/wk
This course covers advanced technical information and laboratory projects necessary for the understanding of vehicle construction, repair, and the estimating of damages.

Vehicle Damage Claim Practice 3
3.256 . . . . . 8 credits
(Spring Term) . . . . . 8 class hrs/wk
This course covers repairing of extensive damage and sectioning with used parts and mechanical problems of vehicle claims handling.

Vehicle Damage Claim Practice 4
3.257 . . . . . 1 credit
(Fall Term) . . . . . 1 class hr/wk
This course covers an update on any new material and serves as a review for Vehicle Damage Claim Practice 1, 2, and 3.

Vehicle Damage Claim Practice 5
3.258 . . . . . 1 credit
(Winter Term) . . . . . 1 class hr/wk
This course covers an update on any new material and serves as a review for Vehicle Damage Claim Practice 1, 2, and 3.

Vehicle Damage Claim Practice 6
3.259 . . . . . 1 credit
(Spring Term) . . . . . 1 class hr/wk
This course covers an update on any new material and serves as a review for Vehicle Damage Claim Practice 1, 2, and 3.

Performing Arts

The Performing Arts Department offers courses of study and performance experience in music, theatre, and technical theatre. 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.

Acting 1 (Beginning) TA 230, 231, 232 . . . . . 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 cuttings from plays are the basic teaching approaches. The course is designed for any level of competence; no prior acting experience is required. The course is for transfer, career, or vocational students. Individual instruction is provided.

Acting 2 TA 244, 245, 246 . . . . . 3 credits
(Fall, Winter, Spring) . . . . . 6 class hrs/wk
Prerequisite: Acting 1 (Beginning) or equivalent experience. A second-year class that concentrates exclusively on the problems of characterization. Students present recital performances for critique purposes from contemporary and classical theatre literature. The course may be repeated for a maximum of nine credits.

Costume Workshop TA 261 . . . . . 3 credits
(All Terms) . . . . . 2 class, 3 lab hrs/wk
This workshop 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 oppor-

tunity to help construct costumes for an actual LCC Theatre production.

Dance for Musical Theatre TA 129 . . . . . 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 performances 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.

Fundamentals of Technical Theatre 1:
Stagecraft TA 161 . . . . . 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.

Fundamentals of Technical Theatre 2:
Stage Lighting TA 162 . . . . . 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.

Fundamentals of Technical Theatre 3:
Scenic Artistry TA 163 . . . . . 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 the professional theatre.

Movement for the Acting Student TA 126 . . . . . 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 students' ability to express themselves through movement.

Oral Interpretation of Literature TA 229 . . . . . 3 credits
(Fall, Winter, or Spring) . . . . . 3 class hrs/wk
Oral Interpretation is a one-term course that offers students instruction and practice in the oral presentation of various types of written literature, including prose, poetry and drama. This course includes work in story-telling and readers theatre. Especially recommended for students of theatre and literature and for those intending to be teachers. Also of value to anyone who reads to children, or to anyone else, aloud.

Pantomime TA 128 . . . . . 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.

Projects in Theatre TA 190 . . . . . (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.

Stage Makeup TA 270 . . . . . 3 credits
(Fall, Winter) . . . . . 2 class, 2 lab hrs/wk
The history, purpose, and technique of application of theatrical makeup; the use of makeup in various theatrical media, with emphasis on stage performers.

Studies in Theatre TA 205, 206, 207 . . . . . 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 may be one, two, or three terms long. Examples of recent subjects covered are the Oregon Shakespearean Festival plays (including a trip to Ashland to see them), twentieth-century plays, and acting improvisation. Open to all students. See current Class Schedule for specific course topics.

Survey of Theatre Arts TA 111, 112, 113 . . . . . 3 credits
(Fall, Winter, Spring) . . . . . 3 class hrs/wk
A non-performance course designed from the point of view of the audience member. The course provides general aesthetic background upon which additional experience and information can lead to individual critical appraisal and judgment of the performing arts. *May be used to meet Arts and Letters group and cluster requirements at the University of Oregon.*

Technical Theatre Workshop TA 265 . . . . . 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.

Theatre Rehearsal and Performance
TA 180 . . . . . (variable) 1-3 credits
(All Terms) . . . . . 3-9 lab hrs/wk
Prerequisite: Consent of the 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.

Theatre Rehearsal and Performance
TA 280 . . . . . (variable) 1-3 credits
(All Terms) . . . . . 3-9 lab hrs/wk
Prerequisite: Consent of the 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.

Voice Training for Acting Students TA 127 . . . . . 3 credits
(Fall, Winter, or Spring) . . . . . 3 class hrs/wk
A one-term course designed to develop the entire vocal process as it relates to the needs of the actor. Also valuable to anyone wanting to develop a more interesting voice and thus better vocal communication. The course will be taught through the use of vocal exercises and selected readings.

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.

Chamber Choir (Vocal) Mus 297B . . . . . 2 credits
(Any Term) . . . . . 1 class, 2 lec/lab hrs/wk
Prerequisite: Consent of the instructor. This is a select vocal ensemble of 12 to 20 experienced singers. Students sing music from the 16th through 20th century, including such composers as Bach, Brahms, and Mozart.*

Chamber Orchestra Mus 296B . . . . . 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.*

Chorus Mus 297A . . . . . 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 work on vocal production to develop skills necessary for a performance near the end of each term. Students who do not read music will be encouraged to record the rehearsals for study and sometimes will be given cassette tapes of their parts.*

Contemporary Directions in Music:
Eugene Symphony Mus 206 . . . . . 2 credits
(Fall, Winter, Spring) . . . . . 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.

Electronic Music 1: An Introduction Mus 117 . . . . . 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 of electronic music. Students will learn to use and program analog synthesizers, phase-distortion synthesizers, and digital sequencers. Special multi-track recording techniques are presented, as well as an introduction to MIDI. Students are assigned one hour of lab time per week during which they will complete specific lab assignments.

Electronic Music 2: Advanced Techniques Mus 118 . . . . . 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.

Electronic Music 3: Advanced Technologies Mus 119 . . . . . 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: Advanced Techniques Mus 118. This is the third of a sequence of three courses offered for the student with 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.

Group Guitar Mus 137 . . . . . 2 credits
(Any Term) . . . . . 1 class, 2 lec/lab hrs/wk
Prequisite: The student must have access to an accoustical 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.

Group Guitar Mus 138 . . . . . 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.

Group Piano Mus 131 . . . . . 2 credits
(Any Term) . . . . . 1 class, 2 lec/lab hrs/wk
Prerequisites: Group Piano Mus 131 (no prior music reading experience) is for students who do not read notes in treble or bass clefs and who do not understand notated rhythm. Group Piano Mus 131 (prior music reading experience) is for students who read notes in treble or bass clefs and who understand notated rhythm. The course provides group instruction covering the basic principles of piano playing and may be repeated for credit. Up to six credits may be transferred.

Group Voice Mus 134 . . . . . 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.

Guitar Ensemble (Rock-Jazz Fusion) Mus 294E . 2 credits
(Any Term) . . . . . 1 class, 2 lec/lab hrs/wk
Prerequisite: Consent of the instructor. This course will provide an opportunity for guitarists, pianists, percussionists, and singers to explore and perform rock-jazz fusion literature.*

History of Rock Music 1 Mus 264 . . . . . 3 credits
(Fall, Winter, Spring) . . . . . 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.

History of Rock Music 2 Mus 265 . . . . . 3 credits
(Fall, Winter, 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.

Independent Study—Music Mus 290 . . . . . 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.

Individual Lessons (Non-major) MuP 100 . . . . 1-2 credits
(Any Term) *Extra fee* . . . . . ½ class, 4½ lab hrs/wk
Prerequisite: Consent of instructor. Individual instruction in tech-

nical 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. 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. 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.**

Introduction to Music and Its Literature
Mus 201, 202, 203 . . . . . 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.

Introduction to Jazz History Mus 205 . . . . . 3 credits
(Any Term) . . . . . 3 class hrs/wk
A chronological survey of jazz and its principal proponents, through listening, reading, and discussion, from its origins to the present.

Jazz Ensemble Mus 295E . . . . . 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.*

Music Fundamentals Mus 101 . . . . . 3 credits
(Any Term) . . . . . 3 class hrs/wk
Prerequisite: No previous training is necessary; only an interest in music. This class is for the non-music major. It is designed to provide the student with an opportunity to develop a working knowledge of the fundamentals of music. Students will learn to read, write, analyze, and compose music.***

Music History Mus 261, 262, 263 . . . . . 3 credits
(Fall, Winter, Spring) . . . . . 3 class hrs/wk
Prerequisite: Two terms of Music Theory or equivalent. Students may enter any term. 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, midterm, final exam, and analysis.

Music Theory 1 Mus 111, 112, 113 . . . . . 4 credits
(Fall, Winter, Spring, or
Winter, Spring, Summer) . . . . . 3 class, 2 lec/lab hrs/wk
Prerequisite: Must be able to read traditional music staff notation. Corequisite: Sight Reading and Ear Training Mus 114, 115, or 116 must be taken with each term of Theory 1. Must be taken in sequence. Thorough ground work in the fundamentals of music: notation and calligraphy, melody, harmony, rhythm, and ear training. Students having a limited piano background should take Group Piano in order to have an understanding of the keyboard.

Music Theory 2 Mus 211, 212, 213 . . . . . 4 credits
(Fall, Winter, Spring) . . . . . 3 class, 2 lec/lab hrs/wk
Prerequisite: Music Theory 1 or permission of the instructor. A Continuation of Music Theory 1 Mus 111, 112, 113. Further studies of the disciplines of hearing, analyzing, composing, improvising, and performing original and published music of different styles with emphasis on terminology and concepts of music fundamentals.

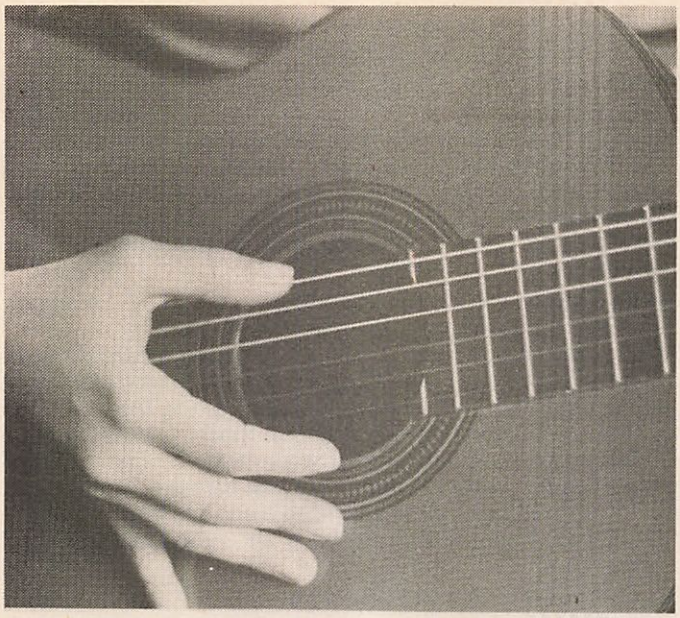
Percussion Ensemble Mus 294D . . . . . 2 credits
(Any Term) . . . . . 1 class, 2 lec/lab hrs/wk
This course will provide an opportunity for percussion students to explore and perform percussion literature.

Sightreading and Ear
Training Mus 114, 115, 116 . . . . . 2 credits/term
(Fall, Winter, Spring or Winter, Spring, Summer Terms)
. . . . . 2 class, 1 lab hr/wk
Corequisite: Music Theory 1 Mus 111, 112, 113. The student may also find it helpful to take Music Fundamentals Mus 101 concurrently with Mus 114. In Mus 114 students study basic concepts in rhythmic principles and pitch combinations in intervals and chords. In Mus 115 and 116 students study more complex rhythmic patterns, minor scales, modes, triad inversions, and harmonic progressions.

String Ensemble Mus 294A . . . . . 2 credits
(Any Term) . . . . . 1 class, 2 lec/lab hrs/wk
Study, rehearsal, and performance of chamber music literature for string quartet or string quintet.*

Studio Singer Mus 108 . . . . . 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.

Symphonic Band Mus 295A . . . . . 2 credits
(Any Term) . . . . . 1 class, 2 lec/lab hrs/wk
Prerequisite: Consent of the instructor. Symphonic Band provides an opportunity for woodwind, brass, and percussion students to study, rehearse, and perform all types of band literature. Growth in instrumental/percussion skills, aural skills, and musicality will be emphasized.*



Vocal Jazz Ensemble Mus 297C . . . . . 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.*

Women's Chorus: Harmony Mup 218 . . . . . 1 credit
(All Terms) . . . . . .5 class, 1.5 lab hrs/wk
Prerequisite: Audition. "Harmony" is a women's choral group specializing in pop choral literature. The group rehearses once a week and performs frequently in the community.

Woodwind Ensemble Mus 294B . . . . . 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.*

* 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.
*** Students are encouraged to take Group Piano simultaneously with Music Fundamentals.

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. Vocational programs available include: Environmental Technology, Energy Management Technician, Residential Energy Analyst, and Forestry Technology.

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

Dynamics Engr 212 . . . . . 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.

Electrical Fundamentals 1 Engr 221 . . . . . 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.

Electrical Fundamentals 2 Engr 222 . . . . . 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.

Engineering Graphics GE 115 . . . . . 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.

Engineering Graphics GE 116 . . . . . 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.

Engineering Orientation GE 101 . . . . . 3 credits
(Fall Term) . . . . . 2 class, 2 lab hrs/wk
Corequisite: Calculus with Analytic Geometry Mth 200. The role of handheld calculators/computers in the analysis of different models: ionic, symbolic, deterministic and stochastic. Structured programming charts used in most analysis.

Statics Engr 211 . . . . . 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.

Strength of Materials Engr 213 . . . . . 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.

*Environmental Technology Courses

Activated Sludge and Trickling Filters 6.304 . . . 4 credits
(Winter Term) . . . . . 3 class, 3 lab hrs/wk
Prerequisites: Environmental Technology 1 6.300 and Water Chemistry and Microbiology 6.502. This course provides an understanding of the process of operation of activated sludge and trickling filter treatment plants.

Environmental Technology 1 6.300 . . . . . 3 credits
(Fall Term) . . . . . 2 class, 3 lab hrs/wk
Introduction to principles of environmental control, water and wastewater, and sanitation normally employed in the field of public health. Methods of disease transmittal are studied. Emphasis is placed on the physical, chemical, and biological means of prevention or minimizing the threat of pathogens, nuisance organisms, and chemical contaminants as these relate to water resources and water pollution control. Includes water pollution control, pesticides, solid waste, and air pollution.

Water and Wastewater Mechanics 6.305 . . . . . 4 credits
(Winter Term) . . . . . 3 class, 3 lab hrs/wk
Prerequisite: Water Treatment and Purification 6.303. This course is designed to teach the student the types, application, operation, maintenance, repair and safety precautions of mechanical equipment used in water and wastewater treatment plants.

Water Chemistry and Microbiology 6.502 . . . . . 4 credits
(See Schedule) . . . . . 3 class, 3 lab hrs/wk
Prerequisite: Environmental Technology 1 6.300, Elementary Chemistry 1 Ch 101, 2 Ch 102, or permission of instructor. Standard chemical and biological tests and measurements for water and wastewater. The course will include theory, laboratory work, and field studies.

Water Distribution/Wastewater Collection 6.307 . . . . . 4 credits
(Spring Term) . . . . . 3 class, 3 lab hrs/wk
Prerequisites: Environmental Technology 1 6.300, and Water Treatment and Purification 6.303. This course is to teach the student the sources of water, the operation of the distribtion systems, and the operation of the wastewater collection systems.

Water Treatment and Purification 6.303 . . . . . 4 credits
(Fall Term) . . . . . 3 class, 2 lab hrs/wk
Prerequisite: Environmental Technology 1 6.300, Elementary Chemistry 1 Ch 101, 2 Ch 102, 3 Ch 103, and Elementary Microbiology Bi 123 or permission of instructor. Principles of treatment and purification of water supplies, designs of the collection, treatment and distribution systems of drinking water. Theory and practice of the treatment and disposal of sewage and industrial waste waters by aeration, sedimentation, digestion, and filtration. Instruction is designed to develop an understanding of, and the skills necessary for, the treatment and protection of water supplies and the disposal of liquid waste. Course includes theory, laboratory work, and field trips.

Water Treatment Plant Operation 6.306 . . . . . 4 credits
(Spring Term) . . . . . 3 class, 3 lab hrs/wk
Prerequisite: Water Treatment and Purification 6.303. This course is to teach the student operation of water treatment plants and the processes and systems for treating water, with emphasis on practical applications.

Courses designed to upgrade skills of those employed in water management fields are offered on demand. Those courses are Water Treatment 9.650, Water Sources 9.651, Secondary Treatment 2 9.659, Advanced Waste Treatment 9.660, and Sludge Handling 9.663.

Energy Management Technician and Residential Energy Analyst Courses

Computer-Aided Energy Analysis
GS 126/6.326 . . . . . 2 credits
(Fall Term) . . . . . 2 class hrs/wk
Prerequisites: Concepts of Computing CS 121 and Residential Energy Analysis GS 122/6.318. Use of Microcomputers for residential heat loss analysis, and commercial heating and cooling load calculations. Emphasis is on the use of a microcomputer disk operating system, and existing software as an analysis and problem-solving tool.

Commercial Energy Use Analysis
GS 138/6.338 . . . . . 2 credits
(See Schedule) . . . . . 4 lec/lab hrs/wk
Prerequisites: Lighting Systems GS 134/6.334, Electrical Devices and Distribution GS 133/6.333, Air Conditioning Fundamentals GS 125/6.324, Residential Energy Analysis GS 122/6.318, and Computer-Aided Energy Analysis GS 126/6.326. Analysis of energy use and management in light commercial buildings; preparing for and performing walk-through audits in apartments, restaurants, and retail/office complexes. Emphasis is on analyzing data obtained from field experience.

Computer-Aided Passive Solar Design
GS 137/6.337 . . . . . 2 credits
(See Schedule) . . . . . 2 class hrs/wk
Prerequisites: Computer Aided Energy Analysis GS 126/6.326 and Residential Energy Analysis GS 122/6.318. Use of microcomputer software for passive solar design of single and multifamily dwellings. Emphasis is on the use of F-chart and Solar Load Ratio methods for estimating potential heat gains from solar energy.

Electrical Devices and Distribution
GS 133/6.333 . . . . . 2 credits
(Fall Term) . . . . . 1 class, 2 lec/lab hrs/wk
Prerequisite: Fundamentals of Physics Ph 103/6.332. The course deals with the (1) operation and maintenance of various electrical devices, (2) electrical distributions, (3) electric load management, (4) methods for maximizing the efficiency and minimizing peak electric load requirements.

Energy Conservation and Appropriate Technology
GS 124/6.321 . . . . . (variable) 3-4 credits
(Spring Term) . . . . . 3 class, 2 lec/lab hrs/wk
A general non-technical survey of topics in appropriate technology. The course provides an understanding of today's energy dilemmas and how technology can assist in providing a sustainable, viable lifestyle generation after generation. Lectures, films, guest speakers, field trips, and an individual or small group project provide a varied learning experience.

Energy Investment Analysis GS 166/6.336 . . . . 2 credits
(Fall Term) . . . . . 2 class hrs/wk
Prerequisites: Computer Aided Energy Analysis GS 126/6.326. Topics include gas and electric utility fuel cost calculations, time value of money, cash flow equivalence, life-cycle costing of energy investments, effects of inflation and/or escalating fuel costs on energy investments, and microcomputer applications.

Energy Management and Planning
GS 135/6.335 . . . . . 2 credits
(Winter Term) . . . . . 2 class hrs/wk
Prerequisites: Lighting Systems GS 134/6.334, Electrical Devices and Distribution GS 133/6.333, Air Conditioning Fundamentals GS 125/6.324, and Energy Investment Analysis GS 166/6.336. Procedures for developing and implementing an effective energy management program in a firm or agency.

Energy Saving Products 3.105 . . . . . 2 credits
(Winter Term) . . . . . 2 class hrs/wk
Corequisite: Residential Energy Analysis GS 122/6.318. An assessment of the many products presently being marketed which have to do with insulation, weatherization, and moisture control.

Lighting Systems GS 134/6.334 . . . . . 2 credits
(Fall Term) . . . . . 1 class, 2 lec/lab hrs/wk
Prerequisite: Fundamentals of Physics Ph 103/6.332. The course deals with the application of the fundamental laws of light to the following: optical instruments, artificial light sources and their characteristics; daylighting; design and maintenance of lighting systems; heating effects of lights; methods for increasing lighting system efficiency.

Residential Energy Analysis GS 122/6.318 . . . . 2 credits
(Winter Term) . . . . . 2 class hrs/wk
Prerequisite: Fundamentals of Physics Ph 101/6.330 and high school algebra or equivalent. Methods of heat transmission, K, C, U and R values of insulating materials, degree days, dwelling heat loss calculations, simple pay back calculations, moisture control.

Solar Domestic Hot Water Systems 6.328 . . . . . (variable) 2-4 credits
(See Schedule) . . . . . 2 class, 4 lec/lab hrs/wk
Prerequisite: Permission of instructor. Topics include energy use requirements for domestic hot water, solar energy availability in Oregon, types of solar domestic hot water systems, collector mounting and installation procedures, check-up and charge-up procedures, sizing collector area, storage capacity and pump; heat transfer option, controls, estimating the solar fraction and fuel savings.

Solar Fundamentals GS 123/6.319 . . . . . 3 credits
(Spring Term) . . . . . 2 class, 2 lec/lab hrs/wk
Prerequisites: Residential Energy Analysis GS 122/6.318, Fundamentals of Physics Ph 101/6.330. and 2 Ph 102/6.331. Potential impact of solar energy; solar terminology; motions of the earth sun system; radiation measurement; isolation; sun chart and site analysis; overview of active, passive, and hybrid systems; photovoltaics; large scale systems; solar rights, building codes; solar tax and use incentives.

Chemistry Courses

Elementary Chemistry
1 (Ch 101), 2 (Ch 102), 3 (Ch 103) . . . . . 4 credits each
NOTE: These courses must be taken in sequence.
(Ch 101 Fall, Winter, Spring, Summer)
(Ch 102 Winter, Spring)
(Ch 103 Spring) . . . . . 3 class, 3 lab hrs/wk

Elementary Chemistry 1 (Ch 101) 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.

Elementary Chemistry 2 (Ch 102) 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).

Elementary Chemistry 3 (Ch 103) 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.

General Chemistry
1 (Ch 104), 2 Ch (105), 3 (Ch 106) . . . . . 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.

General Chemistry 1 Ch 104: 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.

General Chemistry 2 Ch 105: 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.

General Chemistry 3 Ch 106: 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 biology majors and health science students (pre-med., pre-vet., pharmacy, chiropractic, etc.), not for chemistry majors. 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

Contract Documents 6.635 . . . . . 3 credits
(See Schedule) . . . . . 2 class, 3 lab hrs/wk
Prerequisite: Forest Operations 1 6.633. Principles of forest management contracts including contract components, use, and administration. A forest management plan will be developed as a team project incorporating the elements of environmental assessment methodology.

Elementary Statics Engt 110 . . . . . 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.

Elementary Strength of Materials Engt 120 . . . . 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.

Engineering Materials Engt 160 . . . . . 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.

Engineering Materials Engt 161 . . . . . 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.

Plane Surveying 6.102 . . . . . 5 credits
(See Schedule) . . . . . 3 class, 6 lab hrs/wk
Prerequisite: Drafting 1 4.120, Mathematics 3 4.204 or equivalent. Beginning course in surveying techniques; with tape, level, and transit study of surveying fundamentals and care and use of equipment; basic measurement theory, field record-keeping and computations. Emphasis on horizontal and vertical measurements.

Soils Mechanics Engt 223 . . . . . 3 credits
(See Schedule) . . . . . 2 class, 2 lec/lab hrs/wk
Analysis of soil structure, composition and function as related to engineering problems to stability and load bearing methods of classifying and evaluating soil characteristics are studied.

Health Occupations Support Courses

Elementary Human Anatomy & Physiology 1
Bi 121 . . . . . 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 skeletal, muscular, and nervous systems.

Elementary Human Anatomy & Physiology 2
Bi 122 . . . . . 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.

Elementary Microbiology Bi 123 . . . . . 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 recommended.

General Pathology 1 Bi 240 . . . . . 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.

General Pathology 2 Bi 241 . . . . . 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 any college or university in Oregon and, with few exceptions, to any college or university in the United States. 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.

Core Biology (Bi 211, 212, 213) and Principles of Wildlife Conservation (Bi 251) are essentially pre-professional courses, but may be taken by other interested persons. Core Biology requires one year of General Chemistry (Ch 104, 105, 106) as a prerequisite. Wildlife Conservation has no prerequisite.

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.

Core Biology Bi 211, 212, 213 . . . . . 5 credits each
(Bi 211 Fall; Bi 212 Winter; Bi 213 Spring)
. . . . . 3 lecture, 3 lab, 1 discusssion hr/wk
Prerequisite: General Chemistry Ch 104, Ch 105, Ch 106, or concurrent enrollment with consent of instructor. Core biology is a course for students seeking a career in biology or one of the life sciences, such as medicine, veterinary medicine, zoology, botany or biomedical research. The course is designed to provide students with an introduction to key concepts in biology and to provide a foundation for further study in the life sciences. Core biology transfers as credits for Bi 211, 212, 213 at Oregon State University or three quarters of major's requirements at the University of Oregon (check with the Science Department for the specifics on transfers to U of O). Core biology is a requirement for many majors in the life sciences.

Bi 211: Introduction to the diversity of life and the principles of evolution and adaptation. Subjects include plant and animal diversity, natural selection, speciation, biogeography, population genetics, community structure, and ecosystems.

Bi 212: Introduction to cell structure, chemistry of small biological molecules and macromolecules, protein structure and function, nucleic acid chemistry, protein synthesis, and enzyme kinetics.

Bi 213: Membrane structure and transport, carbohydrate and lipid chemistry, organelle functions, nucleus structure and organization, bioenergetics, gene expression, gene control.

General Biology Bi 101, 102, 103 . . . . . 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
Ecology and the Environment	Cell Biology	Animal Biology
Forest Ecology	Fossils and Evolution	Animal Behavior
Molecular Basis of Life	Human Biology	Birds of Oregon
Mushrooms	Human Genetics	Edible and Poisonous Plants
Ponds and Streams	Marine Biology	Field Botany
Survey of Biology	Medical Botany	Survey of Biology
	Survey of Biology	

General Botany Bot 201, 202, 203 . . . . . 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.

General Zoology Z 201, 202, 203 . . . . . 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 acts as a science sequence toward 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 options in many other professional programs. These three courses have no prerequisites and may be taken in any sequence. Z 201: Chemical nature of life, elementary cellular structure and physiology, animal classification, lower invertebrates. Z 202: Invertebrate phyla, genetics, and evolution. Z 203: Vertebrate phyla, vertebrate anatomy and physiology, animal distribution and ecology.

Principles of Wildlife Conservation Bi 251 . . . . 3 credits
(See Schedule) . . . . . 2 class, 3 lab hrs/wk
This course is designed to meet the requirements of the OSU Department of Fisheries and Wildlife for students planning a fisheries and wildlife major. Principles of Wildlife Conservation also provides a fully transferable science elective for any student interested in studying ecological principles and their application to management of wildlife populations. Lecture-slide presentations by wildlife and fisheries professionals add interest and practicality to the course. No prerequisites or biology knowledge is required.

Physical Science Courses

Astronomy GS 121 . . . . . 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.

Earth Science GS 139 . . . . . 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.

Fundamentals of Meteorology GS 109 . . . . . 1 credit
(See Class Schedule) . . . . . 1 class hr/wk
A descriptive treatment of selected weather phenomena. Includes winds, air masses, fronts, cloud formations, and precipitation. Offered in videotape.

General Geology G 101 . . . . . 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.

General Geology G 102 . . . . . 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.

General Geology G 103 . . . . . 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.

General Science for Teachers GS 117 . . . . . 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. This will be the first course in a three-term science sequence for teachers.

General Science for Teachers GS 118 . . . . . 4 credits
(Winter Term) . . . . . 3 class, 3 lab hrs/wk
This is the second term of a three-term sequence designed to introduce the basics of science to individuals interested in pursuing a teaching career. This term of biological science covers characteristics of life and diversity of life.

General Science for Teachers GS 119 . . . . . 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 material from the disciplines of biology, physical science and social science.

Geology G 201 . . . . . 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.

Geology G 202 . . . . . 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.

Geology G 203 . . . . . 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.

Introduction to Geology of Oregon GS 111 . . . . 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.

Introduction to Geology of Oregon GS 112 . . . . 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.

Meteorology GS 107 . . . . . 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.

Physical Science GS 104, 105, 106 . . . . . 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. Non-sequential.

Physics Courses

Electrical Science 4.304 . . . . . 4 credits
(Winter, Summer Terms) . . . . . 3 class, 3 lab hrs/wk
Introductory practical physics covering electrical energy, magnetic fields in industrial applications, electron theory—capacitors, basic electric circuits, use of meters, electric currents—generators, electromagnetism—soleroids, transformer action, alternating current, motor types, power distribution.

Fundamentals of Physics Ph 101/6.330 . . . . . 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.

Fundamentals of Physics Ph 102/6.331 . . . . . 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.

Fundamentals of Physics Ph 103/6.332 . . . . . 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.

General Physics Ph 201, 202, 203 . . . . . 4 credits each
(Ph 201 Fall; Ph 202 Winter;
Ph 203 Spring) . . . . . 6 lec/lab, 1 recitation hr/wk
Prerequisite: College algebra, trigonometry. Recommended: knowledge of the use of exponents. The study of energy and physical measurement including the fundamental principles of mechanics, wave theory, electricity, electronics, relativity, and atomic theory. Courses may be entered any quarter.
NOTE: If you can solve the following problem, you do not need additional mathematical skills for this course: Given a right triangle with sides of 3.7 cm and 9.8 cm, what is the magnitude of the hypotenuse? What are the other two angles of the triangle?

General Physics with Calculus Ph 211, 212, 213 . 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.

Hydraulics 6.112 . . . . . 3 credits
(Spring Term) . . . . . 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.

Instrumentation and Controls 6.302 . . . . . 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.

Physics for Technicians 1 4.300 . . . . . 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.

Physics for Technicians 2 4.302 . . . . . 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.

Physics for Technicians 3 4.303 . . . . . 4 credits
(Spring Term) . . . . . 3 class, 3 lab hrs/wk
Prerequisite: Physics for Technicians 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.

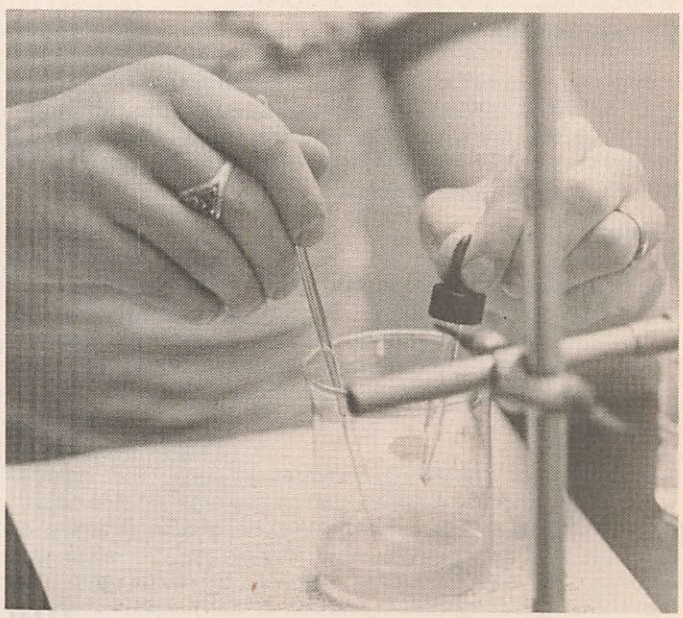
Other Science Courses

Current Topics in Science
GS 199/9.600 . . . . . (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, Physical Science, and Physics.

Natural History of Baja California
GS 114 . . . . . 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.



Oceanus: The Marine Environment
GS 147 . . . . . (variable) 1-4 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.

Orientation to Science GS 100 . . . . . 4 credits
(Fall, Winter, & Spring Terms) . . . . . 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.

Project Universe GS 136 . . . . . (variable) 1-4 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.

Supervised Field Experience FE 207/1.300 . . 1-12 credits
(All Terms) . . . . . 3-45 hrs/wk
Supervised Field Experience is available in life and physical sciences, energy, forestry, engineering, and environmental technology. See the beginning of the course description section of the catalog for the SFE course description.

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
Rita Hennessy, CWE Anthropology, Geography, History, Psychology, Sociology, Political Science
Peggy Marston, CWE Education
Tom Hickey, CWE Criminal Justice

Criminal Justice Courses

Commercial and Industrial Security CJ 152 . . . 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.

Community Based Corrections CJ 233 . . . . . 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.

Concepts of Enforcement Services CJ 111 . . . . 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.

Correctional Casework CJ 232 . . . . . 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.

Criminal Justice Management CJ 216 . . . . . 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.

Crisis Intervention CJ 203 . . . . . 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.

Criminal Investigation 1 CJ 210 . . . . . 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.

Criminal Law: Procedural Issues CJ 222 . . . . . 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.

Interviewing and Interrogation CJ 213 . . . . . 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.

Introduction to Corrections CJ 130 . . . . . 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.

Introduction to Criminal Law CJ 220 . . . . . 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.

Introduction to Criminal Justice CJ 100 . . . . . 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.

Introduction to Criminology CJ 101 . . . . . 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.

Introduction to Security Systems
CJ 150 . . . . . 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 non-technical manner.

Juvenile Delinquency CJ 201 . . . . . 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.

Narcotics and Dangerous Drugs
CJ 243 . . . . . 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.

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

The Art of Being Human HUM 199 . . (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.

Changing Cultures SSc 101 . . . . . 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.

College Forum SSc 112 . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
Corequisite: Concurrent registration in College Forum EI 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.

Consumer Education SSc 250/2.150 . . . . . 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.

Consumer Problems SSc 251 . . . . . 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.

Creativity: The Human Experience HUM 102 . . . 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.

Energy in Society SSc 120/6.320 . . . . . 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.

Honors Seminar in the Social Sciences SSc 211 . . . . . (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.

Humanities Through the Arts
HUM 100 . . . . . (variable) 1-3 credits
(See Schedule)*
A telecourse that approaches the humanities through a study of seven major arts: film, drama, music, literature, painting, sculpture, and architecture. Students should gain an understanding of these arts from the perspectives of historical development; the elements used in creating works of art; meaning and form expressed; and criticism or critical evaluation.

Sociology of Work Soc 220/1.172 . . . . . 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.

Trends in Social Science SSc 199 . . . . . 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.*

Anthropology Courses

General Anthropology Anth 101, 102, 103 . . 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 (Fall Term) *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 (Winter Term) *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 (Spring Term) *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.

Readings in Anthropology
Anth 224, 225, 226 . . . . . (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.

Selected Topics in Ethnology
Anth 210 . . . . . 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.

Economics Courses

Principles of Economics Ec 201, 202, 203 . . . . 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.

Geography Courses

Landscape, Environment, and Culture Geog 103 . 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.

Geography of the American West Geog 208 . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
Study of the variations in cultural attributes within the physical framework. Study of the settlement process and resulting landscape. Regional synthesis of different areas in the American west are also studied, including the Great Basin, Western Mountains, the Southwest, Southern California, Alaskan and Canadian Northwest, Northern California, and the non-Oregon part of Northwestern U.S.A.

Geography of Europe Geog 201 . . . . . 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.

Geography of Oregon Geog 206 . . . . . 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.

Independent Study: Geography Geog 248 . . . 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.

Map Reading and Interpretation
Geog 180 . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
Map Reading and Interpretation is designed to introduce the student to various forms of maps of the earth's surface. Emphasis will be placed on practical application of maps to understand landforms, map and compass work, forest patterns and urban patterns visible on maps published from around the world.

Mexico and Central America Geog 214 . . . . . 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.

The Natural Environment Geog 101 . . . . . 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.

Urban Environment Geog 105 . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
Process of settling the land, population patterns, urban landscapes, perception of place, methods of geographic inquiry.

History Courses

China, Past and Present Hst 291 . . . . . 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.

History of the United States
Hst 201, 202, 203 . . . . . 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.

History of the American West Hst 207 . . . . . 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.

History of Western Civilization
Hst 101, 102, 103 . . . . . 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.

Independent Study: History Hst 248 . . . . . 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.

Japan: The Changing Tradition Hst 182 . (variable) 1-3 credits
(See Schedule)*
A televison course that focuses on the history and changing cultural traditions of Japan's modern era, the brief period during which Japan has developed its distinctive form of urbanized, industrialized, and democratic society.

Japan: The Living Tradition
Hst 181 . . . . . (variable) 1-3 credits
(See Schedule)*
A television course that focuses on the history and continuing cultural traditions of Japan's pre-modern era, the long period preceding the opening of Japan to Western contact in the 1850's.

Readings in American History
Hst 204 . . . . . (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.

Readings in American History
Hst 205 . . . . . (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.

Readings in American History
Hst 206 . . . . . (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.

Readings in European History
Hst 113 . . . . . (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 113 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.

Socialism—Prophesy, Promise & Practice
Hst 115 . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
To critically explore and discuss the origins, development and current directions of various socialist movements and socialist

thought. Both historical aspects of socialism and contemporary socialist practices are included in the course. Among the topics covered are the socialist practices in the Peoples Republic of China, the U.S.S.R., and the Third World; and the prospects for a socialist future in America.

The Human Adventure
Hst 107, 108, 109 . . . . . (variable) 1-3 credits
(All Terms) . . . . . 1-3 class hrs/wk
The Human Adventure 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 107 The origin and diffusion of civilization in the ancient world. May be taken out of sequence.

History 108 The world of the classical and early modern age. May be taken out of sequence.

History 109 A history of the modern world. May be taken out of sequence.

Vietnam: A TV History Hst 195 . . . . . 3 credits
(See Schedule)*
This is a history course that provides a television history of America and France in Vietnam with an emphasis on the period of heavy participation by the United States.

****Television course offerings are subject to availability of materials.***

Philosophy and Religion Courses

Contemporary Moral Issues Phl 205 . . . . . 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.

Elementary Logic Phl 221 . . . . . 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.

Introduction to Philosophy
Phl 201, 202, 203 . . . . . 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.

Minds and Machines Phl 256 . . . . . 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).

Religions of the Eastern World REL 101 . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
This course is designed to develop a greater knowledge and awareness of four major Eastern religions (Hinduism, Buddhism, Confucianism, Shintoism) and the role of religion in culture and society, especially those other than one's own.

Religions of the Western World REL 102 . . . . . 3 credits
(See Schedule) 3 class hrs/wk
This course is designed to develop a greater knowledge and awareness of four major Western religions (Judaism, Islam, Christianity, Native American) and the role of religion in culture and society, especially those other than one's own.

Political Science Courses

American Government PS 201, 202, 203 . . 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.

Global Issues PS 199 . . . . . 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.

International Relations PS 205 . . . . . 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.

Introduction to Political Behavior PS 222 . . . . . 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.

Introduction to Political Theory PS 208 . . . . . 3 credits
(Fall Term) . . . . . 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.

Laboratory in Applied Behavioral and Social Science
(LABSS) PS 294 . . . . . 1-6 credits
(See Schedule) . . . . . 2 lec/lab hrs per credit
Prerequisite: Permission of instructor. Students will learn to use computers to manipulate available data to analyze, prove or disprove a political science concept or thesis which is of interest to them. After introductory class or tutorial sessions, the work will be done on an independent study basis with assistance readily available from an instructor and/or aides. This will be an open-entry/open-exit course.

Political Ideology PS 225 . . . . . 3 credits
(Winter Term) . . . . . 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

Applied Psychology Psy 205 . . . . . 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.

Brain, Mind, and Behavior Psy 211 . . . . . 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.

General Psychology Psy 201, 202, 203 . . . . . 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 (All Terms) 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 (All Terms) The study of behavior as it is influenced by learning, remembering, forgetting, higher brain functions, motivation and emotions.

Psy 203 (All Terms) Individual differences and methods of measurement, personality dynamics, reactions to stress, therapy, social behavior, and the history of psychology.

Human Development 1 Psy 235 . . . . . 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.

Human Development 2 Psy 236 . . . . . 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.

Human Sexuality Psy 231 . . . . . 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.)

Independent Study: Psychology
Psy 248 . . . . . (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.

Introduction to Abnormal Psychology
Psy 239 . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
Prerequisite: Any two of the General Psychology sequence (Psy 201, 202, 203) 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.

Introduction to Experimental Psychology
Psy 217 . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
Prerequisite: Psy 201. 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.

Introduction to Learning Psy 212 . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
Prerequisite: Psy 201. 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.

Introduction to Personality Psy 214 . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
Prerequisite: Psy 201. A survey of the major topics in the field of personality, including personality theory, personality assessment, and motivation in personality.

Introduction to Physiological Psychology
Psy 213 . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
Prerequisite: Psy 201. An introduction to the physiological processes underlying behavior. The human organism is explored as a specific nervous system interacting with its environments. Lectures, labs, and seminar discussions.

Social Psychology Psy 216 . . . . . 3 credits
(See Schedule) . . . . . 3 class hrs/wk
Prerequisite: General Psychology (Psy 201, 202) or General Sociology (Soc 204, 205). 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.

Understanding Human Behavior
Psy 199 . . . . . 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.*

Sociology Courses

Deviant Behavior Soc 211 . . . . . 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.

General Sociology
Soc 204, 205, 206 . . . . . 3 credits each
(Fall, Winter, & Spring Terms) . . . . . 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 204 and 205 are also taught as telecourses.

Introduction to Social Science Research Methods Soc 293 . . . . . 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.

Social Control Soc 212 . . . . . 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.

Social Problems Soc 225 . . . . . 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.

Sociology of Marriage and the Family Soc 210 . . 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.

Women's Studies Courses

Introduction to the American Working Woman
Soc 107 . . . . . 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.

Introduction to Women's Studies WS 101 . . . . . 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.

Independent Study: Women's Studies
WS 248 . . . . . 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.

Selected Topics in Women's Studies
Soc 108 . . . . . 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.

Selected Topics in Women's Studies
Women's Bodies, Women's Selves
Soc 108 . . . . . 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.

Study Skills Learning Center

The Study Skills Learning Center was established to meet the reading, basic math, and learning skills needs of the community college student. It provides an opportunity for students to learn under the direction of professional staff members who are trained in many different methods of instruction and who accommodate individual needs.

Courses

Accelerated Reading Eng 115/0.529.2 . . . . . 3 credits
(All Terms) . . . . . 36 hrs/term
Prerequisite: Reading rate of 250 wpm with 70 percent comprehension as determined by standardized test or consent of instructor. Designed to develop rapid, efficient, and flexible readers. The course promotes visual acuity, vocabulary development, and the mastery of main idea, exploratory, and recreational reading.

Advanced English Grammar and Sentence Writing 0.525.7 . . . . . 6 credits
(All Terms) . . . . . 6 class hrs/wk
Prerequisite: Basic English Grammar and Sentence Writing 0.525.3. 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.

Basic English Grammar and Sentence Writing 0.525.3 . . . . . 6 credits
(All Terms) . . . . . 6 class hrs/wk
Prerequisite: 7th grade reading level or instructor consent, 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.

Basic Paragraph Writing 0.525.4 . . . . . 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.

Basic Reading and Spelling
0.525.5A . . . . . (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.

College Forum EL 112 . . . . . 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.

College Vocabulary Eng 116 . . . . . 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.

Effective Learning EL 111/0.768 . . . . . 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. 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.

Learning Skills Laboratory 0.593 . . . . . 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.

Morphographic Spelling 0.525.2 . . . . . 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.

Phonetic Spelling 0.525.1 . . . . . 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.

Preparatory Vocabulary 0.527 . . . . . 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.

Preparatory Writing
for Foreign Students Wr 110 . . . . . 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.

Reading Comprehension 0.529 . . . . . 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.

Read, Write, and Spell 1 0.525.5 . . . (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.

Read, Write, and Spell 2 0.525.6 . . . (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.

Problem Solving 0.527.1 . . . . . 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.

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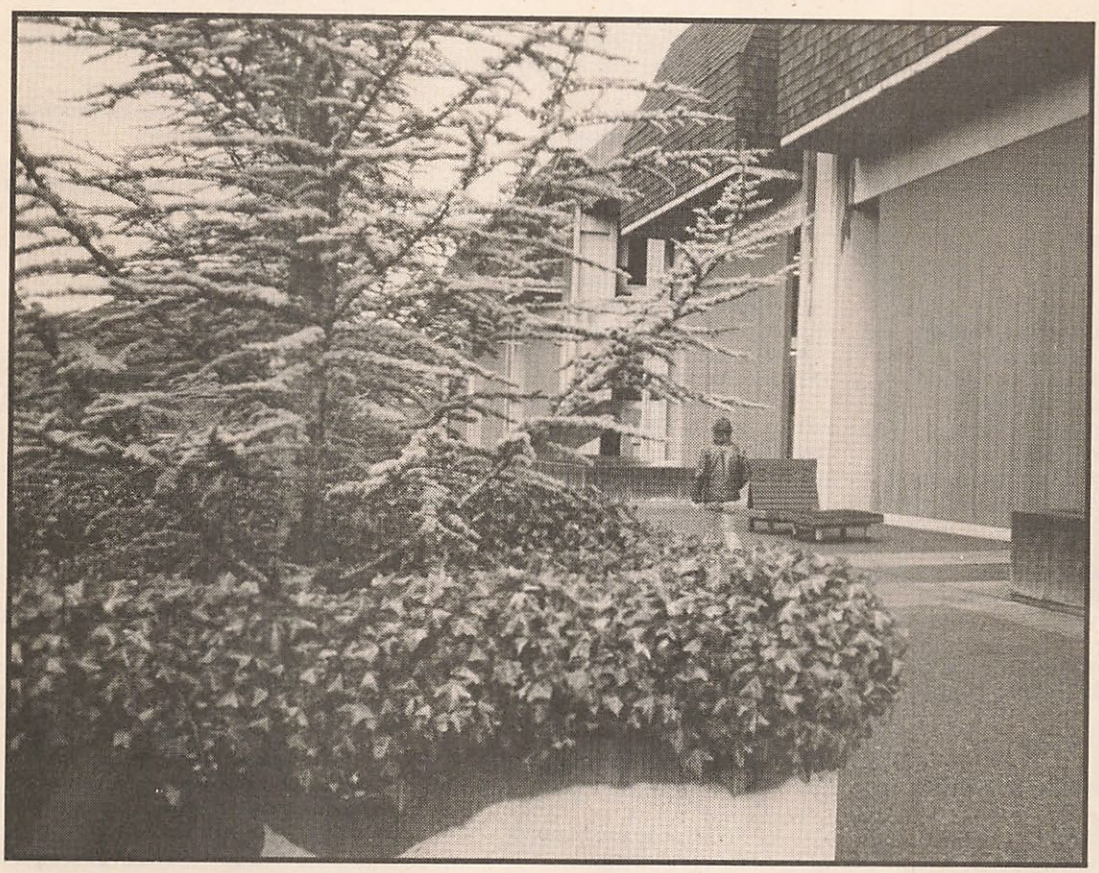

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Lane Community College
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