1998/99 GENERAL CATALOG

Linn-Benton Community College

A WORLD OF OPPORTUNITIES

LINN-BENTON COMMUNITY COLLEGE 1998-99 ACADEMIC CALENDAR*

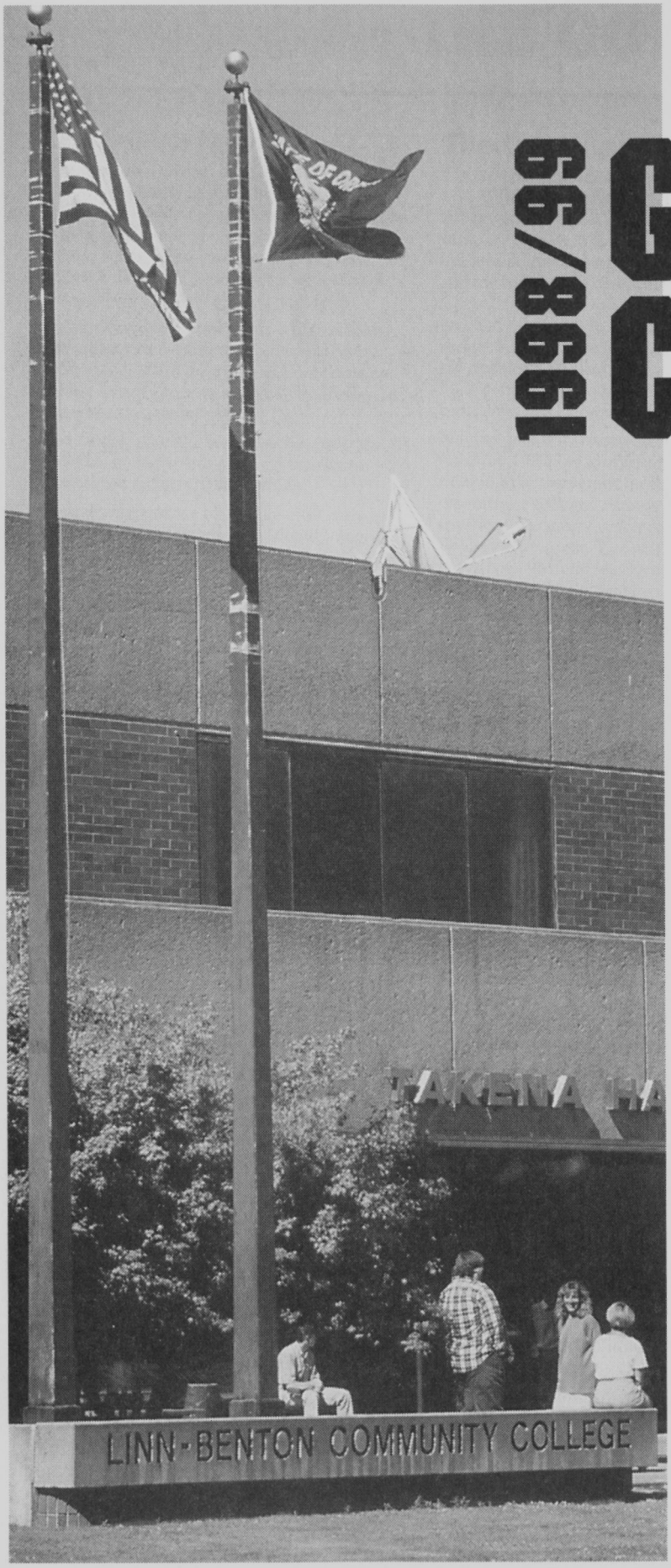
	Summer 1998	Fall 1998	Winter 1999	Spring 1999	Summer 1999
Registration begins	See quarterly Schedule of Classes				
Classes begin	June 22	September 21	January 4	March 29	June 21
Last day to drop without "W"	July 6	October 2	January 15	April 9	July 6
Last day to withdraw and qualify for a refund (full-term classes)	July 6	October 2	January 15	April 9	July 6
Last day to request P/NP (full-term classes)	July 31	November 6	February 19	May 14	July 30
Last day to officially withdraw (full-term classes)	July 31	November 6	February 19	May 14	July 30
Last day to add open-entry/ late-starting classes	August 7	November 20	March 5	May 28	August 6
Final exams	Last week of class	December 7-9	March 15-17	June 7-9	Last week of class
Commencement Ceremony				June 10	
Last day of term	August 13	December 11	March 19	June 11	August 13
Holidays/in-service: No classes held	See quarterly Schedule of Classes				

* Deadlines for full-term courses are indicated here. See the quarterly Schedule of Classes for other deadlines.

CATALOG TABLE OF CONTENTS

The College/General Information 1-2
Entering College 3
Financial Aid and Veterans 8
Services for Students 17
Programs of Study 21
Graduation Requirements 23
Professional Technical Programs 27
Transfer Programs 49
Human Resources Learning Community 61
Community Outreach 62
Course Descriptions 66
Faculty and Administrative Staff 114
Alcohol- and Drug-Free Program 119
Major Codes 120
Common College Terms 121
Index 124

Cover photograph by Dennis Wolverton.



1998/99 GENERAL CATALOG

A WORLD OF OPPORTUNITIES

Linn-Benton Community College

6500 Pacific Blvd. SW ★ Albany, OR 97321-3755

THE COLLEGE

LBCC Overview

Linn-Benton Community College is a two-year public college serving the educational needs of residents in its two-county district. Supported by tuition, local property taxes and state revenue, the college is directed by an elected, seven-member board of education. Admission is open to any district resident beyond high school age.

Recognizing the diverse needs of its students, the college offers general education courses, professional technical training, lower division college transfer courses and skills upgrading for those already employed.

The Cooperative Work Experience program provides students with practical experience in jobs related to their fields of study.

Special programs are offered in adult basic education for the vocationally disadvantaged and the disabled.

The college's Extended Learning centers offer a wide variety of credit and non-credit classes on the Albany campus, in the Corvallis, Lebanon and Sweet Home centers and at other locations throughout the district. Non-credit classes that do not qualify for reimbursement from the state are required by the college to be self-supporting. Tuition rates for these classes are higher to cover all instructor and facility costs.

In addition to the Extended Learning classes, the Training and Business Development Center serves the needs of the district's business and industrial community. The Family Resources Department provides special services, including classes, workshops and consultations, to help strengthen families.

A full range of student services, including career counseling, academic and personal guidance, financial aid and job placement, are provided in addition to supportive learning services.

History

The endeavor to establish Linn-Benton Community College began in 1963 through the cooperative efforts of the Linn County Chamber of Commerce and community leaders in Benton County. A study prepared by the University of Oregon's Bureau of Educational Research in 1964 documented the need for a community college in the two-county area.

In 1966, through a local election, the Linn-Benton Community College District was formed. In the fall of 1967, 2,800 students enrolled in the college's first classes, which were held in rented facilities throughout the district.

Following voter approval of a $6.1 million bond issue in 1970, the college moved from its headquarters at 203 W. First Avenue in Albany to the present college site. Classes were held in trailers and modular buildings during construction of permanent facilities.

As the campus has grown, so has the student body. More than 25,000 people take one or more classes each year—a full-time equivalent of about 6,000 full-time students—making LBCC the fifth largest of Oregon's 17 community colleges.

The Campus

The 104-acre campus is centrally located in the mid-Willamette Valley, two miles south of Albany and 11 miles east of Corvallis. The main campus complex is formed by 13 contemporary brick buildings, connected by covered walkways and encircling a landscaped open courtyard. These buildings have been constructed gradually since 1970, in accordance with a master building plan that was completed with the opening of Takena Hall in 1979. Takena Hall is the "front door" to LBCC and centralizes most student services.

No new buildings were added at the college until the 1987 Legislature approved $8.5 million in construction funds for Oregon community colleges. Among the projects approved was a new center for LBCC's Family Resources program. The new building opened the fall of 1988 and was formally dedicated in February 1989.

The Workforce Education Building opened in 1992 and is the site for three training and workforce programs, which are operated through collaborative efforts of the college and local and state agencies.

Many of the college's more than 120 classrooms, shops and instructional laboratories are geared to individualized learning. Shop and laboratory equipment is designed to train students for employment in today's businesses and industries.

On-campus dining facilities include a cafeteria and the Santiam Room (a student-operated restaurant), both in the College Center, and the Camas Room, which is a snack bar in Takena Hall.

A learning resource center, bookstore, 500-seat theatre, physical education and sports facilities, and a small greenhouse and arboretum site are included in the campus complex.

All main campus facilities are designed with the needs of people with disabilities in mind, including special parking areas and access to buildings and classrooms.

Philosophy

Linn-Benton is a two-year community college, publicly funded and locally governed. It was established to provide fully accessible educational opportunities to members of the community based on the following beliefs:

1. Individuals have different potentials for growth and self-fulfillment.
2. Learning provides the means for men and women to develop their abilities, to expand their knowledge and skills, and to approach their potential as contributing members of a free society.
3. Learning opportunities should be available to the greatest number of people with minimum restrictions, based on individual and community needs.
4. Enrollment should be based on an open door policy, so as to accommodate high school graduates and other adults who are capable of profiting from the instruction offered. Through proper assessment and advising, students will be able to select appropriate courses of study.
5. Appropriate high standards of performance should be maintained within each course of study.
6. The educational scope of college programs should be as broad and flexible as possible, with priorities established on the basis of available resources. Within these limits, the programs should be responsive to local, state, national and global needs, as well as reflect sound educational standards.
7. Tuition and fees should be maintained at a reasonable level.
8. Local direction and control of the college should be maintained through the elected board of education, based on college policies that are consistent with local, state and federal laws and policies.

Mission

The mission of Linn-Benton Community College is to provide accessible, quality, life-long learning opportunities to serve the present and future needs of the community. The college works in cooperation with public school systems and other institutions of higher education. The college is community based and is committed to student success through responsive and flexible educational programs designed to meet individual student needs.

The mission will be accomplished by developing, implementing and updating the following comprehensive education programs and services.

1. The college shall emphasize its commitment to a high-quality teaching and learning environment that fosters creativity, critical thinking skills, leadership skills and student success.
2. The college shall provide students with the opportunity to develop competencies to function as life-long learners given the challenge of a changing world society.
3. The college shall respond to the needs of business and industry by providing professional technical programs for training, retraining and upgrading the skills of those seeking entry-level employment or career advancement.
4. The college shall provide lower-division transfer courses for students transferring to four-year colleges and universities, completing associate degree requirements or for broadening their educational base.
5. The college shall offer developmental and remedial programs to prepare students to enter professional technical or transfer programs of their choice.

6. The college shall provide the planning, services and facilities needed to provide a positive learning environment and to enhance student life.
7. The college shall provide opportunities for residents of the district to appreciate and participate in cultural, recreational, civic and international activities that enhance the quality of life.
8. The college and its staff shall support and participate in community service activities.

Accreditation

Linn-Benton Community College has been accredited by the Accrediting Commission of the Northwest Association of Schools and Colleges. Courses are approved by the Oregon State Board of Education and lower division courses have been approved for transfer to Oregon University System colleges and universities. A variety of Linn-Benton programs qualify for veterans' benefits with approval of the Veterans Administration.

Students who want to review information about LBCC's accreditation status may contact the President's Office, CC-101, 917-4200. Students also may write the Northwest Association of Schools and Colleges, 3700-B University Way NE, Seattle, WA 98105, for information about the college's accreditation status.

Non-Discrimination Policy

Linn-Benton Community College maintains a policy of non-discrimination and equal opportunity in employment and admissions, without regard to race, color, sex, marital and/or parental status, religion, national origin, age, mental or physical disability, Vietnam era or disabled veteran status, expunged juvenile record, family relationship (except where one employee would be in a supervisory position over another employee), opposition to safety and health hazards, application for workers compensation benefits, or any other status protected under applicable federal, state or local law, unless it is a bona fide occupational requirement reasonably necessary to the operation of the institution, as allowed by law. Questions or concerns related to affirmative action, non-discrimination, equal opportunity or college discrimination complaints and hearing procedures should be directed to the Human Resources Office, Linn-Benton Community College, 6500 SW Pacific Blvd., Albany, OR 97321-3779, or telephone (541)917-4806.

Student Rights, Responsibilities and Conduct

The college's board of education has established policy relating to student rights, freedoms, responsibilities and due process. This policy includes the opportunity for students to file complaints and outlines the due process procedure. In addition, rules for student conduct are included in the policy. Individuals who want a copy should contact the Dean of Student Services, Takena Hall 107, (541)917-4806.

Student Right to Know

In compliance with the Student Right-To-Know and Campus Security Act (Public Law 101-542), retention and graduation rates for full-time new students that began attendance at LBCC Fall Term 1996 will be available at the First Stop Center in Takena Hall or the Institutional Research Office in the College Center by July 1999.

Pledge to Quality Education

Any graduate of an Associate of Applied Science* degree program who is judged by his or her employer to lack communication, computation, interpersonal or technical skills normally expected of a job-entry employee will be provided further skill training up to 15 quarter credit hours by LBCC without charge.

**Special conditions do apply. Contact the Academic Affairs Office for more information. (541) 917-4201.*

GENERAL INFORMATION

Academic Calendar

The college operates on a term (also called a quarter) system, with the fall term beginning late September and ending before Christmas. The winter term begins early January and runs until mid-March. The spring term begins late March and ends mid-June. A summer term is held for an eight-week period from mid-June until mid-August.

Catalog Information

The information contained in the current LBCC catalog and quarterly Schedule of Classes reflects an accurate picture of Linn-Benton Community College at the time of publication. However, conditions can and do change. Therefore, the college reserves the right to make any necessary changes in the matters discussed herein, including procedures, policies, calendar, curriculum, course content, emphasis and cost. Students enrolling in LBCC classes shall be subject to rules, limits and conditions set forth in the current catalog; schedule of classes; the student rights, complaints, freedoms and responsibilities policy; and other official publications of the college.

Credit Hours

Generally, a class that meets one hour per week for one term will yield one credit; a class meeting three hours per week, three credits. A lab class usually yields one credit for each two hours of lab time. Full-time enrollment equals 12 credit hours.

Housing

The college does not provide on-campus housing for students but the Student Life and Leadership Office maintains a self-service bulletin board with current housing information from both the Corvallis Gazette-Times and Albany Democrat-Herald newspapers. For assistance locating this board, contact the Student Life and Leadership Office, CC-213.

Parking

Parking is provided for students, staff and visitors on a first-come, first-served basis. Certain areas of the campus are designated for specific parking uses, such as motorcycle parking, bicycle parking and parking for persons with disabilities.

Although parking permits are not required to park on campus, they are recommended. The permits help the Security and Safety Services Office locate car owners in case of car problems or an emergency. Permits are free and available in the Security and Safety Services Office, CC-123.

Parking and traffic rules also are available in the Security and Safety Services Office in CC-123. Special permits for disabled people must be obtained from an Oregon Department of Motor Vehicle Office. Cars improperly parked are subject to fine. Unauthorized overnight parking is prohibited. Vehicles parked for an extended period of time may be considered a security risk and are subject to towing at the owner's expense.

Student Health Insurance

LBCC makes available a comprehensive hospitalization and accident insurance policy for students who desire such coverage. The insurance program is available at group rates and includes provision for coverage of the student's dependents. For more information, contact the Admissions Office in Takena Hall or call (541)917-4812.

ENTERING COLLEGE

Choosing a Career or Program

An important beginning step at Linn-Benton Community College is selection of a program or major. Typically, students attend LBCC to obtain employment training, to improve existing employment skills, to begin a four-year college program or for life enrichment through learning. The Career and Counseling Center staff is available to assist prospective LBCC students in making decisions about community college studies. Those wanting to enroll at LBCC often make consultation with a counselor a first step. The Career and Counseling Center is located on the first floor of Takena Hall.

Admissions/First Stop Center

Director of Admissions and Records:
Glenda Tepper
(541)917-4811
Takena Hall 115

The First Stop Center, which includes the Admissions Office, represents the integration, coordination and cooperation of the Takena Hall student services offices. The First Stop staff welcomes students and community members by providing direct answers to questions or by referring students directly to the appropriate service offices. A major goal of the center is to reduce student frustration in dealing with institutional processes and to increase awareness of the many campus-wide services from which students might benefit.

Enrollment Standards

Students 18 years of age or older are eligible to apply for admission and/or enroll at Linn-Benton Community College. Also, students under 18 years of age who have graduated from an accredited or standard high school or who hold a GED are eligible for enrollment and admission. There are special enrollment agreements with various school districts and an enrollment request process for students not meeting the above guidelines. In addition, students must successfully pass the safety and health standards of any instructional program that utilizes moving equipment, machinery and/or hazardous materials/chemicals in the course of its instructional processes.

Admission

To be admitted to the college, a student must be 18 years of age or have graduated from an accredited high school, or hold a GED, complete an application for admission and pay the application fee. Students under the age of 18 must provide proof of graduation from an accredited or standard high school or proof of a GED. Prior to registering full time, admitted students are required to take the placement examination or petition to waive the exam based on prior completion of appropriate college courses. In addition, admitted students must attend an orientation/advising session prior to registration. Admitted students who complete the testing and advising process may register full time or part time. Admitted students receive a priority registration time each term.

Some instructional programs have special admission standards and may be subject to strict application deadlines and procedures. For all programs, the college reserves the right to give higher priority to the enrollment of district residents. General admission shall be on a first-come, first-served basis.

Articulation Agreements

Linn-Benton Community College provides assistance to people who want to complete their high school education. The college cooperates with local high school districts in supporting school improvement efforts by providing educational opportunities for the youth of Linn and Benton counties. Such persons may enroll in college courses and programs according to the terms and conditions of articulation agreements that exist between the college, various school districts and other agencies. An Alternative Learning Opportunity Referral Form may be required every academic term of enrollment.

Open Enrollment

Students who are enrolling less than full time (0-11 credits) and who choose not to be formally admitted may register for desired classes during open registration times. Part-time students are required to take the appropriate placement tests for some classes. Prior to receiving a certificate or degree, students must be admitted to the college.

Enrollment of Younger Students

Students who are under the age of 18 years who are not enrolled as part of an articulated agreement or have not graduated from high school or hold a GED certificate, are required to request permission to enroll through the Request for Enrollment form available in the Admissions Office for all credit classes except courses designed for students under 18. It is the student's responsibility to submit completed forms and to receive permission to register. Failure to do so may result in disenrollment from classes. Requests must be filed and approved for every academic term enrolled. In order to assure a timely response, Requests for Enrollment must be filed at least seven working days in advance of the beginning of classes for the term of desired enrollment. Requests for Enrollment are available from the Admissions and Records Office and from each Extended Learning Center. Although other questions may be asked, the Request for Enrollment will, at a minimum, require the following information:

1. Legal name of prospective student.
2. Birth date of prospective student.
3. Classes desired.
4. Reasons why enrollment is requested.
5. Evidence of the prospective student's ability to successfully complete the course work. Usually this will require the satisfactory results of an appropriate assessment instrument as determined by the Director of Admissions.
6. Current school status, if any (name of school, grade).
7. Permission to exchange information with the appropriate school or local ESD related to the student's requested course work.

A standing committee appointed by the President will promptly review all requests in a timely manner to determine if enrollment is appropriate. Oregon law imposes on school districts the primary responsibility for the education of students 17 years of age and younger. Therefore, the committee will carefully review each Request for Enrollment and only grant those that clearly provide: (a) evidence of sufficient maturity to successfully participate in the planned course load and (b) evidence that another, more age appropriate, instructional resource is not available. Students will not be permitted to attend an LBCC class if in the judgement of the college such participation would likely create a health or safety risk for any person or be in violation of Oregon statutes or regulations. The decisions of the committee on Requests for Enrollment shall be final.

Although the college does not generally require that students under 18 provide Requests for Enrollment for non-credit classes, it does request that the student receive instructor permission. The college reserves the right to impose the above standards as deemed appropriate by the course subject matter, safety factors or other significant concerns. Students who do not receive instructor permission may complete the Request for Enrollment process to be reconsidered for eligibility for a specific course. It is the student's responsibility to receive permission to enroll (instructor permission or permission from a Request for Enrollment). Failure to receive permission may result in disenrollment. Further, students under the age of 18 who want to enter GED classes must provide evidence of release from compulsory attendance or home schooling.

Program Completion

Students admitted to the college may register for classes on a space-available basis, providing that prerequisites have been met. The time needed to complete a program may vary according to the student's preparation and the availability of classes.

International Student Admission

Linn-Benton Community College intends to serve educational needs of residents of the Linn-Benton Community College district. College programs and services are planned primarily to serve students who live permanently in the local area. Therefore, international student enrollment at LBCC is limited and selection is based upon fulfillment of specific admission requirements and availability of space. No students possessing tourist or visitor visas will be considered eligible to receive a student visa. The deadline for international student applications is

at least one month prior to the beginning of the term in which the student plans to attend. International students needing to increase their writing/speaking skills, as determined by a Placement Test, may be required to take academic English to speakers of other languages classes. Questions about specific requirements may be addressed to the Director of Admissions and Records, Linn-Benton Community College, 6500 SW Pacific Blvd., Albany, OR 97321-3774.

Special Admission Programs

Some programs at LBCC require admission standards beyond what is generally required to maintain our "open door" admission policy. These additional standards are set to effectively and responsibly administer the college's resources and to ensure that each student has a reasonable chance of succeeding in a program. Annually, the Admissions Office creates a special admission bulletin for each special admission program, outlining the application requirements.

Special admission programs often require skills assessment or prerequisite courses. Placement scores are only valid for five years when being used to determine skill assessment for special admission programs.

Students may appeal minimum admission standards if they are denied admission to one of the special admission programs. Petitions are available in the Admissions Office. All petitions will be reviewed by three staff members from the Student Services Division with recommendations made to the Director.

Special admission selection priority will be given to qualified in-district applicants. Please note: The Linn-Benton Community College district does not include all of Linn and Benton counties. Please contact our Admissions Office if you have questions about specials admissions.

The following programs are currently designated as requiring standards beyond the general admission requirements:

Dental Assistant:
The Dental Assistant program is offered once each year, beginning with the fall term and ending the following summer term. Dental Assistant applicants must: (1) have application and transcripts on file by a specified date (contact the Admissions Office for date); (2) supply to the Admissions Office proof of high school graduation or GED; (3) take the LBCC placement exam and obtain a reading score at the 31st percentile or better or successfully complete RD 1.176 Reading Improvement II and obtain a math score at the 67th percentile or better or successfully complete MTH 20; (4) attend a career exploration session; (5) if accepted, the following must be completed and supplied before the first day of class: complete physical exam, a negative tuberculin test, proof of immunization against measles, start immunization series against hepatitis B (a series of three injections).

The application dates and deadlines are subject to change. **Please contact the Admissions Office for the current bulletin.**

Please Note: Occupational health hazards include the use of latex gloves and mask to be worn. Applicants with skin or breathing disorders should meet with the Dental Assistant advisor prior to applying for admission. In addition, dental assisting can intensify carpal tunnel syndrome. Therefore, applicants with this condition also should meet with the Dental Assistant advisor prior to applying for admission.

Engineering Systems Technology:
Students wanting to enroll in the Engineering Systems Technology program must take the Placement Test and demonstrate ability to enroll in MTH 112 Trigonometry and WR 115 Introduction to Writing or complete the prerequisite courses with a grade of "C" or better.

Interest in the Engineering Systems Technology program must be demonstrated by filling out an application form on which students declare, by the appropriate code, Engineering Systems Technology as their major. Applications may be submitted beginning in January with a deadline in June. Selection and approval will begin in June and continue until the program is full. The application dates and deadlines are subject to change. **Please contact the Admissions Office for the current bulletin.** Notification of admission to the program will be made in late summer.

Nursing:
Applicants for the two-year program beginning fall term must: (1) have application (and transcripts if needed) on file by a specified date (contact the Admissions Office for date); (2) supply proof of high school graduation or GED; (3) complete the National League for Nursing Preadmission Examination (dates for administration of this exam are available through the Student Assessment Center—test scores are valid for seven years); [Students needing NLN accommodation because of a disability must contact the Office of Disability Services, (541)917-4683, by **Nov. 15, 1998.**] (4) have completed one year of high school chemistry with a grade of "C" or better or completed CH 112 Chemistry for Health Occupations with a grade of "C" or better within the last five years; (5) complete the Placement Test; (6) if accepted, complete MTH 65 Elementary Algebra by the first day of classes; (7) if accepted, supply proof of the following by the first day of classes: a complete physical exam, a negative tuberculin skin test or chest X-ray, current CPR Card Level C and appropriate immunizations, including Hepatitis B. The admission procedure is reviewed annually for the ADN program and therefore subject to change. **Please contact the Admissions Office for the current bulletin.**

Water/Wastewater Technology:
Students applying for the one- or two-year Water/Wastewater program must demonstrate the ability to enroll in MTH 60 Introduction to Algebra and WR 115 Introduction to Writing. This ability may be shown by an appropriate Placement Test score or by completing the prerequisite courses with a "C" or better grade shown on a college transcript.

Interest in the Water/Wastewater program must be demonstrated by filling out an application form in the Admissions Office declaring Water/Wastewater as a major. Applications may be submitted beginning in January, with a deadline in May. Selection and approval will begin in May and continue until the program is full. The application dates and deadlines are subject to change. **Please contact the Admissions Office for the current bulletin.**

Classification of Residency

Oregon Revised Statue 341.625 provides that a community college district shall establish tuition rates and fee schedules, subject to approval of its board of education. Different tuition rates and fee schedules may be established for students who reside in the operating district; students who do not reside in the operating district, but in the state of Oregon; and students who do not reside within the state. An additional rate may be established for international students.

A resident, for tuition and fee-paying purposes at Linn-Benton Community College, is a student who has lived in Oregon as a permanent resident for no less than 90 continuous days immediately preceding the first day of the term for the quarter in which residency is in question and who has demonstrated the intent of making Oregon the state of permanent residency. A list of acceptable documents that demonstrate a student's intent to reside in Oregon on a permanent basis is available from the Admissions Office. A student has until the end of the second week of the term to file residency documents for that term. Permanent residence is defined as the home to which one intends to return after any absence and in which one's dependents reside for an unlimited period of time.

To qualify as a resident of the state, a student must be 18 years of age or older. If under 18 years of age, the student must have a permanent residence independent of that of his or her parent(s) or legal guardian; otherwise the residency of the student shall be the same as his or her parent(s) or guardian. An affidavit of non-support will be required for students under 18 years of age to show proof of emancipation.

The following instances will be used to define extraordinary circumstances in determining residency status for the state of Oregon:

1. A veteran who has established a permanent residence inside the state within 90 days of separation or discharge from the service.
2. A person on active military duty or a government employee whose place of work is assigned within the state; i.e., Defense Department and foreign embassy.
3. A dependent (under the age of 18) student whose non-resident parent or legal guardian moves to the state and establishes a permanent residence during the school term will be entitled to register as a resident student at the beginning of the next term.

4. A released Oregon state prisoner living in Oregon will be considered a resident regardless of the person's residency prior to his or her sentencing.
5. An incarcerated student paroled to an agency in Oregon or paroled in order to attend Linn-Benton Community College specifically.
6. A senior citizen, age 62 years or older, who has established a permanent residence in Oregon.

All international students enrolled on student visas and who have not obtained immigrant visas will not be allowed to change residency status during the duration of their enrollment at LBCC.

The guidelines outlined are general in nature and may require additional clarification. Questions concerning residency status should be directed to the Director of Admissions and Records.

Registration

(541)917-4812
Takena Hall 115

Registration for Credit Classes

1. If you are a fully admitted student, you will be assigned an early registration time each term based on the number of credits you have earned at LBCC. The quarterly Schedule of Classes will contain registration times and information about the registration process including using the touch tone registration system.
2. Pre-registration advisor conferences are recommended for the following students:
   a) all new students;
   b) students sponsored by certain agencies;
   c) students on probation or having academic difficulties;
   d) students changing their major or those who have questions regarding the courses that should be taken to meet program requirements.
3. Non-admitted students can register for 0-11 credits during open registration times. (See the quarterly Schedule of Classes for registration information.)
4. Students will be asked to use their social security number as their student identification number. Please check with the registration office if you would prefer to have an identification number generated instead of using your Social Security number.

Registration for Extended Learning Classes

Registration materials for Extended Learning classes, both credit and non-credit, are available in class during the first class meeting. Students may preregister using the touch tone registration system or at the campus Registration Office or the off-campus Extended Learning centers. Please refer to the quarterly Schedule of Classes for registration information.

Waiting Lists

At the time of registration, students may request to be put on a computer Wait List for classes that are full, if there is space available on the Wait List. *Students will be charged tuition for a Wait List registration.* Through the first week of class, students are rolled from the Wait List to registered status as space becomes available. No signatures or special forms are required. Students also can be added to the Wait List through the first week of class if the class is full and space is still available on the Wait List.

Students must contact the instructor at the time of the first class meeting to find out whether or not they have been given "registered" status or whether they should continue attending while waiting to see if space becomes available in the class.

While students remain on the Wait List through the second week of class, they are not automatically rolled into classes. During the second week, instructor signature is required before a student can be registered. An instructor can move a Wait List student to registered status or add other students to the class by signing a registration form or an add/drop form.

Students who are still on the Wait List as of the last day of the second week will be taken off the Wait List and their tuition will be refunded, if a refund is due. Refunds are made after the Add/Drop period is over.

Schedule Changes

A student may add a full-term course during the first week or, with the instructor's written permission, during the second week. Registration deadlines for shorter classes are printed in the quarterly Schedule of Classes.

A student may officially withdraw from a full-term class up to the end of the seventh week. Withdrawal deadlines for shorter classes are printed in the quarterly Schedule of Classes.

Students changing to another section of a course due to cancellation of a class or for other reasons must officially add the new section.

Auditing Classes

Students may request audit status at the time of registration or later during the add period for that class. Charges for auditing are the same as for regular credit enrollment.

The final grade assigned a student with audit status shall be based solely on classroom attendance and may be entered as an "AU" or a "Y" (see course syllabus) at the discretion of the instructor. The instructor has the right to require 100 percent attendance when audit status is requested.

Tuition and Fees

Tuition Schedule

At the time this catalog was published, the tuition and fee charges for credit and non-credit classes had not been determined for the 1998-99 school year. *The tuition and fees shown below were in effect for the 1997-98 school year.*

Credit Classes	*District*	*Out-of-State*	*Foreign*
Per credit	$ 36	$123	$138
(15-20 credits)	$540	$1,845	$2,070

Note: Tuition and fees are subject to change by the LBCC Board of Education.

Non-Credit and Extended Learning Classes

Non-Credit Tuition

Contact Hours	*Reimbursable*	*Non-reimbursable*
1 - 6	$12.40	$ 13.40
7 - 12	$19.40	$ 20.40
13 - 18	$28.80	$ 32.80
19 - 24	$36.80	$ 42.80
25 - 40	$47.80	$ 54.80
41 - 48	$73.40	$ 84.80
49 - 60	$97.80	$102.80

Note: Tuition and fees are subject to change by the LBCC Board of Education.

Special Fees

Application for Admission $20
Course Add ..... No charge
Course Drop ..... No charge
Telephone Registration $1
Credit by Examination .. 30% of tuition per credit
Photo ID card $5
Placement Test ..... $2 per test
Official copy of LBCC transcript $5
(Additional copies ordered at the same time ..... $3)
Unofficial copy of LBCC transcript $1
Physical education activity fees (some courses) .. variable

Student Activity and Program Fee

Each student is assessed a $1.70 per credit charge, to a maximum of $26, as a student activity and program fee. The fee is included in the $36 per credit tuition and fee charge listed above. Income derived from the fee is used to support a variety of extracurricular activities and programs, including athletics, artist and lecturer guest appearances, clubs and organizations, and a variety of recreational and social activities. More information about the activities supported by the fee is available in the Student Programs Office, College Center Building, room 213.

Note: These fees are subject to change.

Student ID Card

A student ID card is required in some areas on campus, including the Library, Learning Center, Business Affairs Office, Assessment Center and Computer Labs. The card is used for verification and identification of students receiving financial aid and charging books and supplies in the Bookstore. The card also provides verification to merchants in the local community that you are a student, which may qualify you to receive merchandise or service discounts.

There is a one-time charge of $5 for the card, and it will be re-validated free each term you

register. There will be a charge for reissuing lost cards.

Any LBCC student is eligible for a picture ID card; however, they will be issued only on the main campus.

Refunds

To receive a tuition refund, students must submit a schedule change form to the Registration Office within the first two weeks of a full-term class. Students may petition for refunds after the deadline if "serious and compelling" circumstances exist. Refund deadlines for shorter classes are printed in the quarterly Schedule of Classes. Refunds will be mailed after the second week of classes.

For classes cancelled by the college, students will receive full refund or enrollment in another class, provided the student notifies the Registration Office.

Academic Regulations

Prerequisites

Many of the courses offered by the college require that students complete other courses prior to enrollment. Prerequisites are determined with student success in mind. Make sure that you consult the Course Description section of the current year catalog for prerequisites before you register. If you are uncertain about whether you have met a specific prerequisite for a class, consult with your advisor or the instructor of that class. A student may be withdrawn from a course if the prerequisite has not been met.

Transferring LBCC Credits

Lower division credits may be transferred to most colleges throughout the United States. Lower division students may transfer up to 108 credit hours to schools in the Oregon State System of Higher Education.

Students planning to transfer credits to another institution are encouraged to work with an LBCC advisor in planning an appropriate transfer program. It is also recommended that students contact the four-year college or university to plan a transfer program of classes.

Accepting Transfer Credits

Linn-Benton Community College accepts college-level credits earned in academic certificate and degree programs from colleges and universities accredited by regional accrediting associations and with an "AG" symbol for credit acceptance as indicated in Transfer Credit Practices of Designated Educational Institutions published by the American Association of Collegiate Registrars and Admission Officers. Transfer credits are posted to academic history for matriculated students only. Students must have credits from foreign colleges and universities evaluated by an external evaluation service recognized by the college. The college or university must be listed in the International Handbook of Universities and be generally accepted by Oregon colleges and universities.

Student Credit Load and Full-Time Status

Students are considered full time if registered for 12 or more credit hours. Students may mix schedules by registering for some general studies courses and some professional technical courses. If students must work part time while attending the community college, they should bear in mind that most classes require one or two hours of preparation for each class hour and should adjust work schedules accordingly or register for fewer class hours. In most areas, there are suggested curriculums to cover one or two years of study; working students may schedule a two-year-equivalent curriculum over an extended period of time.

Students in lower division studies should plan to schedule an average 15 credits per term to accumulate 90 credits in a six-quarter (two-year) period. No more than 21 credits may be taken in any single term without a counselor's signature.

Credit by Examination

Students who believe they have mastered the material presented in courses listed on LBCC's Course Challenge List may apply for Credit by Examination. To apply, students must be currently enrolled in a credit class or have completed 12 credits at LBCC.

Application for Credit by Examination must be completed in the Student Assessment Center, second floor of Takena Hall, by the end of the second week of a term and the examination must be completed by the end of the seventh week of the same term.

A non-refundable processing fee consisting of 30 percent of the tuition per challenged course per credit hour must be paid before the examination is given. An additional testing fee also may be required.

For more information about LBCC's Credit by Examination program, stop by the Student Assessment Center or the Admissions Office in Takena Hall or call (541)917-4781.

College Level Examination Program

LBCC is an approved open center for administration of the College Level Examination Program (CLEP). In addition, LBCC accepts most CLEP scores for college credit, which may be posted to transcripts under "advanced standing." CLEP examinations are administered through the Student Assessment Center. For a list of tests accepted at LBCC, contact the Assessment Center in Takena Hall or call (541)917-4781.

Advanced Placement Tests

Students who complete college-level work in high school under the Advanced Placement Program sponsored by the College Entrance Examination Board and who receive satisfactory grades (3, 4 or 5) on examinations administered by the Board may, upon admission to LBCC, be granted comparable credit toward a degree for some of the examinations. All examinations are subject to review and approval by the appropriate college division.

Students must request that official Advanced Placement scores be forwarded to the Admissions Office. For a list of Advanced Placement at LBCC, contact the Student Assessment Center in Takena Hall or call (541)917-4781.

Repeating a Class

In general, a class that a student has already completed for credit at LBCC cannot be repeated for credit. There are some exceptions, however. These exceptions are noted under the individual course descriptions in this catalog.

LBCC students will not receive credit for courses clearly identified as being prerequisites to LBCC classes already completed by the student with a grade of "C" or better. Staff may disenroll students who register for credit in these courses. Any exceptions must be authorized in writing to the Director of Admissions by the appropriate faculty member and dean or designee.

If a student earns a higher grade upon repeating a class, a request may be made at the Registration Office to recalculate the grade point average using the higher grade. The lower grade will be preceded by an "R" on the transcript and removed from credit and point totals.

Course Number Change

In the event a course number has been changed from a professional technical number to a transfer level number, the transfer level number will appear on the permanent record only for those who took the class after the change was approved.

Grading System

A	Excellent work; 4 quality points per credit.
B	Above average work; 3 quality points per credit.
C	Average work; 2 quality points per credit.
D	Below average work; 1 quality point per credit.
F	Failing work, no credit earned; 0 quality points per credit.
IN	Incomplete work (not computed in GPA).
P	Pass, credit earned (not computed in GPA).
W	Withdrawal; no credit earned (not computed in GPA).
Y	Amount of submitted course work and of class participation was too insignificant to warrant assigning a grade, as defined in the course syllabus (not computed in GPA).
NP	No pass; no credit earned (not computed in GPA).
WP	Work in Progress; no credit earned (not computed in GPA).
AU	Audit; no credit earned (not computed in GPA).
R	Repeat Indicator; Followed by original grade (not computed in GPA).

Standards of Progress for Graduation

To qualify for graduation, students are required to meet all graduation requirements and to complete 70 percent of all courses attempted. "F," "NP" and "Y" are non-completion grades.

Pass/No-Pass Option

Courses listed in the schedule with an "OPT" designation indicate that students have the option of taking the course for a letter grade or on a pass/no-pass (P/NP) basis. It is the student's responsibility to check the class schedule to determine whether or not a class has the pass/no-pass option. Requests submitted in A-F classes have no effect on the grade issued by the instructor. The maximum number of "P" credits allowed toward an LBCC degree is 16, not including those with an obligatory "P" grade. Requests for "P" grades may be processed through the Admissions Office or through the instructor.

It is not advisable for a student to choose the "P" grade for major course work in his or her field of study. Students planning to transfer to a four-year institution should check that institution's requirements regarding "P" grades.

Academic Probation

Students registered for 12 or more credits after the second week of the term are subject to academic probation regulations.

Full-time students are placed on academic probation if the accumulative grade point average drops below 2.00.

Students are expected to complete those courses for which they have registered. A full-time student also may be placed on academic probation upon non-completion of 50 percent of the credits registered for after the second week of the term.

A student must maintain a grade point average of at least 2.00 in all specific major requirements in order to continue in a program. A student dropped under this requirement may petition the department for reinstatement. Some programs may have a more restrictive requirement, which will be indicated in the college catalog under that program.

A student who has been on academic probation for three consecutive terms is subject to suspension. Students on suspension will be limited to enrolling in seven or fewer credits. Students may petition to be reinstated as a full-time student. This process is initiated by completing a Suspension Appeal Petition available in the Admissions Office.

Honor Roll

Students who obtain a grade point average of 3.50 or better with no incompletes and have completed a 12-credit load or more of graded work (not including P/NP) are placed on the Honor Roll list for that quarter.

Records Information

Linn-Benton Community College follows the Federal Health Education and Welfare Guidelines for the Family Educational Rights and Privacy Act of 1974 as amended (Pell-Buckley amendment) and the Oregon Administrative Rules regarding Privacy Rights and Information Reporting in Community Colleges in regard to educational records.

Federal legislation gives students the right to inspect and review their educational records as defined in LBCC Board Policy # 7071. If a student believes the educational records relating to the student contain information that is inaccurate, misleading or in violation of the student's rights of privacy or other rights, he or she may ask the college to amend the record. If the college decides not to amend the record as requested, it shall inform the student of its decision and of his or her right to a hearing. Further, a student may file a complaint with the U.S. Department of Education by contacting the Family Policy and Regulations Office, U.S. Department of Education, Washington, DC 20202.

In accordance with the Family Educational Rights and Privacy Act, LBCC considers the following to be directory and, therefore, public information: student's name, address and telephone listing; major field of study; participation in officially recognized activities and sports; weight and height of athletic team members; dates of attendance; school or division of enrollment; and degrees and awards received. **Students who do not want to have any of the above information released by the college must complete and file a Directory Deletion Form with the Director of Admissions.** Students must notify the college by the time of registration to ensure that directory information will not be released. Information will not be released except to the extent the Oregon Administrative Rules allow disclosure without consent, for example, in cases of a federal audit.

OAR 581-41-290 authorizes Linn-Benton Community College to ask you to provide your Social Security number. The number will be used by the college for reporting, research and recordkeeping. Your number also will be provided by the college to the Oregon Community College Unified Reporting System (OCCURS), which is a group made up of all community colleges in Oregon, the state office of Community College Services and the Oregon Community College Association. OCCURS gathers information about students and programs to meet state and federal reporting requirements. It also helps colleges to plan, research and develop programs. The information helps the colleges support the progress of students and their success in the workplace and in other education programs. OCCURS and the college also may match your Social Security number with records from the following systems:

- State and private colleges, universities and vocational schools to find out how many community college students go on with their education and to find out whether community college courses are a good basis for further education.
- The Shared Information System, which gathers information to assist state and local agencies in planning education and training services to help Oregon citizens get the best jobs available.
- The Office of Professional Technical Education Management Information System to provide reports to the state and to the federal government. The information is used to learn about education, training and job market trends for planning, research and program improvement.

Some funding for community colleges is based on this information.

Your number will be used only for the purposes listed here. State and federal law protect the privacy of your records.

Students may obtain a copy of the LBCC Records Policy through the Admissions Office.

Transcripts and Records

LBCC official student transcripts may be ordered in the Admissions Office or by mail at a cost of $5 each. Additional official copies are $3 each when ordered at the same time. (These fees are subject to change.) Unofficial copies are available for $1 each. Processing of transcript orders takes up to 72 hours. Students have access to transcripts and records as outlined in "Policy on Students Rights, Freedoms, Responsibilities and Due Process."

It is the policy of the LBCC Board of Education that official records belonging to a student who has failed to repay an emergency loan, installment tuition payment or other debt or obligation shall not be released, either to the student or another institution, as long as such obligations are outstanding.

Withdrawal from School

Individuals who find they can no longer attend classes should officially withdraw from school. Students who withdraw within the refund period may expect a tuition refund (see "Refunds" and "Withdrawal Deadlines" in the quarterly schedule of classes).

A grade of "W' will not be recorded if the withdrawal from class is processed before the deadline (generally the first two weeks of the quarter).

Incomplete Rule

Work must be completed by the end of the following term. Summer term is an exception; students completing work for a spring term class have until the end of fall term. A default grade will automatically assigned as the student's grade at the end of the next term if the instructor has not submitted a change of grade. "IN" grades are not normally awarded in variable credit classes.

Grade Point Average (GPA) is calculated by dividing total quality points by total GPA hours. (Grades not included in GPA: IN, W, Y, P, NP, WP, AU and repeated grades preceded by R.) Grade reports and transcripts show both current GPA (one-term) and cumulative GPA (all classes taken at LBCC).

FINANCIAL AID AND VETERANS

Financial Aid and Veterans

Director of Financial Aid:
Lance Popoff
(541)917-4850
Takena Hall 119

Financial aid at Linn-Benton Community College is intended to provide opportunity for students to attend college who cannot pay the full cost of a college education. Funds are intended to supplement family and student resources through loans, grants and/or part-time employment.

The Financial Aid Office provides information to students and prospective students regarding availability of financial aid, eligibility requirements for receiving aid and application procedures for financial assistance.

Certification and administration of veterans' educational benefits also are provided through the Financial Aid Office.

Eligibility Requirements

You may be eligible to receive financial aid if you:

- are enrolled at least half time, which is six credit hours, for the Federal Stafford, PLUS and Perkins Loan programs.
- fully admitted, degree-seeking students enrolling for less than half-time status may be eligible to receive Pell Grants.
- have been admitted to the college as a regular student (one who is enrolled to obtain a degree or certificate) in an eligible program that is at least one year in length.
- have registered with the Selective Service, if required to do so.
- have a high school diploma or GED.
- are not attending an elementary or secondary school.
- are a United States citizen or an eligible non-citizen.
- are not in default of any federal loan program nor owe a refund on any federal grant program.

Program Eligibility

- Eligible programs need to be at least one year in length and lead to a degree or certificate.
- Two-year programs that are acceptable for full credit toward a baccalaureate degree also are eligible, even if they do not offer degrees.
- Eligible one-year programs must provide training to prepare students for "recognized occupations" as defined in the Dictionary of Occupational Titles.

Application Procedures

LBCC uses the Free Application for Federal Student Aid (FAFSA) to determine the amount a family and student can contribute to the cost of a college education. The use of the federally approved aid application assures every applicant fair and consistent treatment. The FAFSA is used to apply for federal and state grants, work programs and loans. No processing fee is charged for filing the FAFSA. It takes three to four weeks to process the FAFSA. LBCC then receives the data electronically so that the Financial Aid Office staff can begin determining the applicant's financial aid eligibility. This process takes two to six weeks depending on the individual's application and the time of year. Allow 10 to 12 weeks for the entire process from application to award.

Application forms are available from the LBCC Financial Aid Office, high school counselors or agency personnel. The applicant completes and mails the application form to the FAFSA Central Processor, which forwards information to the Pell Grant Office and LBCC. The FAFSA is now on the Internet. The address is www.fafsa.ed.gov. Pell Grant Student Aid Reports (SAR) are sent to the student only. When information is received from the Central Processor, the LBCC Financial Aid staff may request additional information from the applicant, such as proof of independence, information regarding aid received at other institutions or tax forms.

In addition, students transferring to LBCC from other schools within the same academic year must obtain financial aid transcripts (FATs) from the previously attended post-secondary schools.

Application for aid may be made throughout the year; however, because financial aid funds are limited, students applying after April 1 may find some programs no longer have funds. Applicants are notified by mail concerning eligibility for aid.

Prospective aid applicants must be fully admitted to LBCC as regular students (even if attending less than full time) before their aid applications will be processed and they are notified of aid offers. Please contact the LBCC Admissions Office for applications and information regarding the admissions process.

Student Costs

Individual costs vary according to course of study, transportation requirements, housing and other factors. Examples of average student costs for nine months (three school terms) are:

Single (living with parents)

* Tuition & Fees	$1,620
* Books & Supplies	$900
Living Expenses	$2,946

Single (away from parents' home)

* Tuition & Fees	$1,620
* Books & Supplies	$900
Living Expenses	$6,426

** Tuition estimates are provided here so total costs can be compared. Tuition and fees for the 1998-99 school year had not been established at the time this catalog was published. Current tuition rates may be found in the quarterly schedule of classes. Additional tuition charges are assessed for non-resident and foreign students. Books and supply costs vary greatly. Check with the Admissions Office for current estimates in individual programs.*

Tuition Refunds for Financial Aid Recipients

The college has two tuition refund schedules for financial aid recipients who completely withdraw from school. The policy used to calculate the tuition refund is based on recorded dates of last attendance during the term and whether the student is new to LBCC or is a returning student.

The college utilizes the tuition refund policy that yields the highest refund amount based on the student's recorded last date of attendance. Please note that students must submit written notification of complete withdrawal via the drop/add form to the Registration and Financial Aid offices to qualify for tuition refunds. Tuition refunds are returned to federal financial aid programs and not to students. Tuition refunds are first attributed to loan programs to reduce the student's indebtedness and next to grant programs from which the student received aid.

The following table shows the percentage of tuition refund students will receive, depending upon whether they are a new student or a returning student and depending upon when they completely withdraw:

	Tuition Refund	
Complete Withdrawal by End of:	*New Students**	*Returning Students*
2nd week of classes	100%	100%
3rd week of classes	70%	50%
4th week of classes	60%	25%
5th week of classes	50%	25%
6th week of classes	50%	25%
7th week of classes	40%	0%

8th week – At the beginning of the eighth week, the tuition refund for new and returning students is 0 percent.

**New students only during their first term of attendance at LBCC.*

Standard academic year terms are 11–12 weeks in length. Appropriate adjustments to the refund schedules are made for terms of shorter duration.

Student-Owed Repayments

Students receiving cash payments from financial aid programs (not including the Federal Student Work Program or the Federal Stafford Loan Program) who completely withdraw from classes may be required to repay a portion of the aid received according to the following schedule:

Recorded Date of Last Attendance	*Repayment*
No satisfactorily completed grades	100%
End of 2nd week of classes	100%
3rd & 4th wk of classes	1st 1/3 of living expenses exempted
6th & 7th week of classes	2/3 of living expenses exempted

No repayment of financial aid is required for recorded attendance beyond the seventh week of the term.

A student who is no longer attending classes has the responsibility of contacting the Financial Aid Office. No additional financial aid will be paid a student who owes a repayment for early withdrawal.

Academic Standards and Eligibility

Students receiving financial aid must fulfill the standards of satisfactory academic progress outlined in the financial aid brochure and the award letter.

Additionally, any student not in good standing with the institution, i.e. academic or disciplinary suspension, will not be eligible for further aid or certification until such time as the student has been returned to good standing.

Veterans Affairs

The Veterans Affairs coordinator is an LBCC staff member who provides assistance to veteran students and eligible dependents regarding college-related matters. A list of LBCC courses approved for benefits is available, as well as information regarding certification and general payment policies. The coordinator will assist veterans and eligible dependents in applying for benefits. Academic advising, counseling for veterans and referral assistance also is available. The Veterans Affairs coordinator is located in the Financial Aid Office.

Standards of satisfactory progress for students receiving veterans' benefits:

Students receiving Veterans Administration (VA) benefits are responsible for demonstrating satisfactory progress toward a degree or certificate in a VA-approved program of study. The VA will only pay for classes that advance students toward their established program goal.

School admission and evaluation of prior credit:

Veterans must become fully admitted students which requires:

1. Formal application for admission to the college.
2. Completion of a Placement Test (unless waived by adequate transfer credit).
3. Having official transcripts of all college credit earned at other schools sent to the LBCC Admissions Office.
4. Requesting an official credit evaluation of all prior or transfer credit.
5. Attendance at a scheduled LBCC new student orientation.

Grades:
Satisfactory grades are "A," "B," "C," "D" and "P." All non-completion grades ("Y," "W," "NP" and "IN") that reduce the student's total credits to less than the original certification amount are reported to the VA. Any benefits that have already been paid for courses in which non-punitive grades are received must be repaid to the VA.

Note: The VA may deduct the overpayments from future benefits when due. Any course in which an "F" grade was received may be retaken with benefits only if that specific course is required for graduation. The VA allows one year for "IN" grades to be completed. Failure to complete an "IN" within one year may result in an automatic reduction of benefits. However, college policy requires incompletes to be made up within one term. (See Incomplete rule under Grading System in the Academic Regulations section.)

Variable Credit Classes:
You may be certified for all the credits of a variable credit class; however, failure to complete all the credits for which you are certified results in an overpayment of benefits.

Grade Point Average:
A cumulative GPA of 2.00 is the minimum acceptable GPA necessary to qualify for any degree, diploma or training certificate from Linn-Benton Community College.

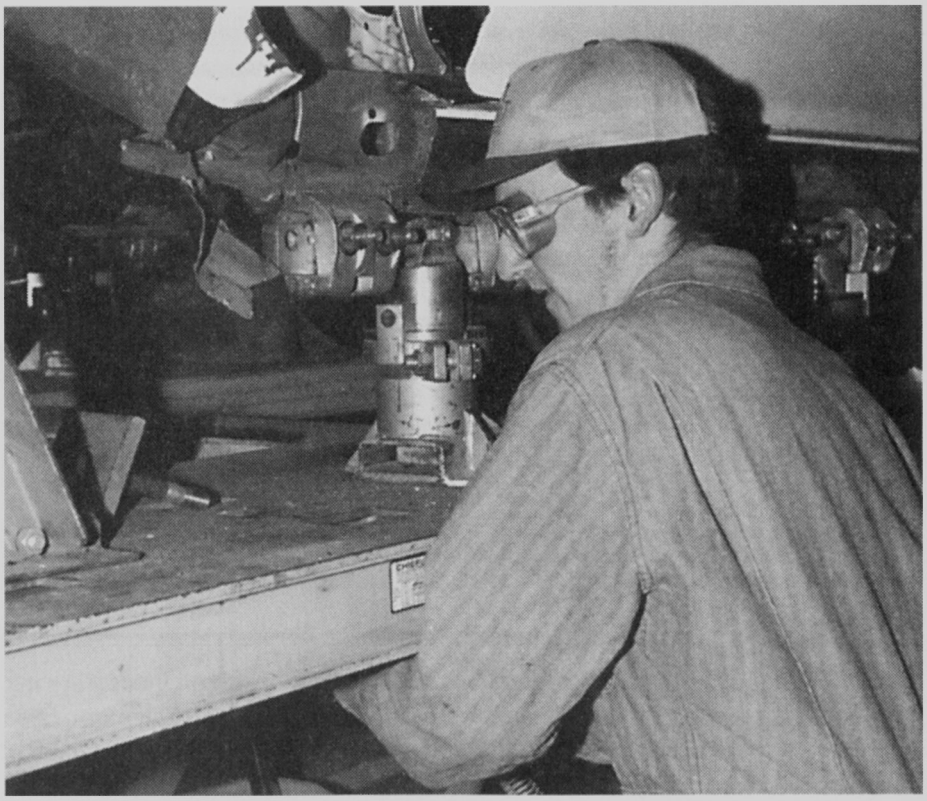
Unsatisfactory Progress:
Students will be notified of unsatisfactory progress at the end of any term that they fail to meet minimum standards of progress. A probation letter will be sent to students whose cumulative GPA falls below 2.00. A termination of benefits letter will be sent to students who fail to bring their cumulative GPA above 2.00 for a second consecutive term. In addition, 70 percent of all classes attempted must be completed in order to qualify for graduation. Therefore, any student whose total course work consists of more than 30 percent "Y," "F" and "NP" grades also will receive a probation or termination letter in the same manner that is prescribed for a deficient GPA. Failure to complete any of the courses attempted in one term may result in immediate termination of benefits. (e.g. Attempted 12 credits, completed none).

Reinstatement of VA Benefits:

To re-establish VA benefits following unsatisfactory progress, the student may:

1. Continue without benefits until the unsatisfactory progress has been corrected. Benefits will then be reinstated to include the unpaid period of attendance.
2. Or, submit the following to the LBCC Veterans Office:
   a. A letter of counseling from an LBCC guidance counselor addressing the reasons for unsatisfactory progress and an assessment of the student's potential to correct academic problems.
   b. A statement explaining reasons for the unsatisfactory progress and how any reoccurrence will be avoided.

Changes in Course Scheduling:
Students are responsible for notifying the LBCC Veterans Office of any change in courses attempted or credit load (adds, drops, cancelled or withdrawal from classes). Failure to do so immediately may result in unnecessary overpayments that must be repaid or deducted from future benefits.



Financial Aid Programs and Sources

	ELIGIBILITY REQUIREMENTS	AMOUNTS AVAILABLE	SPECIAL INFORMATION
GRANTS			
FEDERAL PELL GRANTS	• You must not have a bachelor's degree. • You are enrolled for 6 or more credits per term. • Fully admitted, degree-seeking students enrolling for less than half-time status (fewer than 6 credits) may be eligible.	• Amounts are based on financial need. • Awards usually range from $400 to $3,000.	• The Department of Education will send you a Student Aid Report (SAR) indicating your eligibility.
FEDERAL SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANTS (SEOG)	• You must not have a bachelor's degree. • You must prove an exceptional financial need.	• Grants vary from $300 to $1,200 per academic year, depending on the need of the applicant.	• SEOG is linked with Pell-Grant eligibility.
STATE NEED GRANTS	• You must be a resident of the state of Oregon. • You also must apply for a Pell Grant. • You must be enrolled as a full-time student and not have earned a baccalaureate degree.	• Amounts are based on available funds.	• Oregon State Need Grants are transferrable to other Oregon institutions and renewable for a maximum of 12 quarters. • Amounts are awarded by Oregon State Scholarship Commission.
WORK STUDY			
FEDERAL WORK STUDY PROGRAM	• Undergraduate students and students who have bachelor's degrees are eligible to participate.	• Students are paid $5.50 an hour or higher for work performed. Higher wages are paid to returning student workers and for jobs requiring certain skills.	• Employment during the school term may not exceed 20 hours per week. • When possible, the student is placed in a job compatible with his or her career goal.
STUDENT LOANS			
FEDERAL PERKINS LOANS	• Eligibility is based upon need, other resources and availability of funds. • Students who have bachelor degrees are eligible to participate in this program.	• Typically, the college awards a maximum of $750 per term of attendance. • The aggregate maximum for an undergraduate student is $15,000 (this includes Perkins Loans fron previously attended schools).	• Application is made through the FAFSA. • The Perkins Loan is a federally supported loan program provided by the college to needy students. • Loan repayment and interest charges of 5 percent begin nine months after the borrower ceases half-time enrollment. • Additional information is available at the Financial Aid Office.

Several different student loans are available. However, if borrowed, they all require repayment. Think before you borrow and borrow only what is needed for educational expenses: convenience now may result in financial hardship later. Failure to repay student loans will result in a damaged credit rating and make credit difficult to obtain in the future.

PLEASE NOTE: All prospective federal loan applicants will be subject to a credit history check. Those applicants found to have poor credit histories may be denied access to all federal student loans administered by the college. Students will be notified if loan eligibility is denied. Students do have the right to appeal. Please contact the Student Financial Aid Office for more information regarding the appeal process.

Warning! If you receive federal and/or state aid based on inaccurate information, you will have to pay it back; you also may have to pay fines and fees. If you purposely give false or misleading information on any documents used to determine your aid eligibility, you may be subject to a fine of $10,000, receive a prison term or both.

	ELIGIBILIGY REQUIREMENTS	AMOUNTS AVAILABLE	SPECIAL INFORMATION
STUDENT LOANS			
FEDERAL STAFFORD STUDENT LOANS	• Eligibility is determined by the FAFSA.	• Loans of up to $2,625 per year are available to first-year students through local banks. • Students in the second year of their programs (45+ credits) may borrow up to $3,500 per academic year. • The aggregate maximum amount for Federal Subsidized Stafford Loans for undergraduates is $23,000.	• Students must first apply for Pell Grants by completing the FAFSA. • A separate application is required for this program. • Prospective loan borrowers are strongly encouraged to to apply for grants administered by the state aid agencies in their state of legal residence. • Non-Oregon residents may pick up the addresses of their state grant programs from LBCC's Financial Aid Office. • At the time of application, a 3 percent origination fee and a 1 percent insurance premium fee are charged. • The interest rate on a Federal Stafford Loan is variable, annually, and is tied to the 91-day Treasury bill. Effective for new loans, the interest rate is 7.66 percent. • Loan repayment and interest charges begin six months after the borrower ceases half-time enrollment.
UNSUBSIDIZED FEDERAL STAFFORD STUDENT LOANS	• Students not eligible for subsidized Federal Stafford Loans are eligible for unsubsidized loans, regardless of need.	• Up to $4,000 yearly. • Students may borrow up to the same limits as their Federal Stafford Loan limits less any subsidized loan received.	• Loan conditions are similar to the subsidized Federal Stafford Loan except that the borrower is responsible for the interest on the loan while attending school.
FEDERAL PLUS LOANS	• These loans are available to parents of dependent undergraduate students regardless of need. • Limited to parent borrowers who have "no adverse credit history."	• Parents may borrow up to the difference between the student's estimated cost of attendance and any financial assistance annually for each dependent student. • There is no longer an aggregate maximum under this program. • The amount of Federal PLUS is limited by the amount of other aid the student will receive because the loan amount cannot exceed the difference between the cost of attendance and estimated financial assistance.	• Students must complete and process the FAFSA aid application before eligibility for the PLUS Loan can be determined. • Federal PLUS loans may be used to substitute for the family contribution. • Federal PLUS loan checks are co-payable to the parent and the school and must be disbursed in at least two installments. • Interest is variable and is determined annually by a formula linked to 52-week Treasury bill rates. However, the interest rate may not exceed 9 percent. • There is no federal interest subsidy on PLUS Loans. However the lender may charge the borrower an up-front fee of up to 3 percent to offset the federal government's cost of the program. • Repayment of principle and interest begins 60 days after disbursement; if the parent borrower qualifies for a deferment, repayment of principle only is deferred. Interest must be paid unless it is capitalized by the lender. • Applications are available at the Financial Aid Office.
ELDON SCHAFER STUDENT LOAN FUND	• Provides loans to students with short-term needs.	• Students may borrow up to $150 beginning the third day of the term through the ninth week of the term.	• No loans will be made during final exam week or between terms. Only one loan per student per term is permitted. • A $5 loan fee is charged. • Loans must be repaid by the end of the seventh week of the term. • Applications are available at the Financial Aid Office.

FINANCIAL AID POLICY

FINANCIAL AID PAYMENTS

- Financial Aid Payments are made each term at the Business Affairs Office on the first floor of the College Center (CC-130). The following conditions must be met before financial assistance can be disbursed:

1. You must be regularly admitted (both full- and part-time students).
2. You must be enrolled in an educational program, of at least one year in length, that leads to a degree or certificate.
3. You must sign and return to the Financial Aid Office an "Offer of Financial Aid" letter.
4. You must obtain an instructor's signature verifying class attendance (forms are available at the Financial Aid Office).
5. You must enroll for six (6) or more credit hours.
6. You must be maintaining satisfactory academic progress.

Financial aid is disbursed to students after the refund period (second week) of each term. Typically, this means aid monies are available during the third week of each term. **Picture ID is required to claim aid checks.**

Note: If aid was based on full-time attendance and you elect to register for fewer credit hours, your financial aid must be adjusted to reflect the reduction in course load based on institutional financial aid awarding policies. Generally, this will result in a reduction of and a delay in the aid you are eligible to receive.

FEDERAL STAFFORD LOAN RECIPIENTS

Federal regulations require that subsequent loan disbursements be returned to the lender if at any time you enroll for and complete less than six (6) credit hours during the period of the loan as indicated on your Stafford Loan application. Your loan application will be voided, and you must start the loan application process over again. *First-time Stafford Loan borrowers at LBCC must wait until 30 days after the start of classes to receive their initial loan checks.*

LBCC AWARDS

LBCC SCHOLARS AWARDS (BOARD SCHOLARSHIP)

- Awarded to high school seniors in Linn and Benton counties.
- You must have an overall GPA of 3.00.
- Special consideration given to individuals who have shown an outstanding ability in a subject area that they will pursue in college.
- A minimum of 13 full-tuition scholarships to LBCC are awarded annually.
- In addition to full academic-year scholarships, some one-term awards may also be granted.
- Additional information is available from local high school counselors or the LBCC Financial Aid Office.

LIBBY VOCATIONAL SCHOLARSHIPS (LBCC FOUNDATION)

- Applicants must have resided in Willamette Valley for at least one year and be pursuing an education in a professional technical field.
- You must demonstrate a need for financial assistance.
- You must enroll at least half-time (6 credit hours) in one of LBCC's professional technical programs.
- Scholarships are awarded for up to $200 per term and may be renewed for up to six terms.
- Additional information about eligible professional technical programs and renewability criteria is available from the LBCC Financial Aid Office.

TALENT GRANTS

- You must demonstrate an outstanding ability in athletics, drama, journalism, agriculture or business.
- Full or partial tuition awards are made available to high school seniors and other prospective students.
- Interested students should contact the appropriate LBCC division office.

PROGRAM GRANTS

- Awarded to new full-time students.
- You must have at least a 2.00 GPA from the last high school attended, two letters of reference, and attend LBCC full-time the term for which the award is granted.
- Students who are undecided or intend to pursue an Associate of General Studies degree cannot be considered.
- One-term, full and partial tuition grants are available.
- Interested students should contact LBCC division offices for more. information and an application
- Students may not receive Board or Talent Awards in addition to Program Grants.

	ELIGIBILITY REQUIREMENTS	AMOUNTS AVAILABLE	SPECIAL INFORMATION
LBCC AWARDS			
AUSTIN AND CATHERINE EVANSON MEMORIAL (LBCC FOUNDATION)	• Awarded to a Nursing student.	• $300	• Contact LBCC Financial Aid Office or Health Occupations Department.
ED STEWART SCHOLARSHIP (LBCC FOUNDATION)	• Awarded to a full-time Welding student.	• Amount varies.	• Contact LBCC Financial Aid Office or Welding Department.
MARILYN LIEBERMAN SCHOLARSHIP (LBCC FOUNDATION)	• Assists students in Math and Data Processing programs.	• Amounts vary.	• More information available from the LBCC Financial Aid Office.
MICHAEL F. KLOPPING SCHOLARSHIPS (LBCC FOUNDATION)	• Awarded to three second-year EMT students each year.	• Amounts vary.	• Contact LBCC Financial Aid Office or Evon Bergstrom, Health Occupations/ Services Education Center.
WATER/WASTEWATER SCHOLARSHIP (LBCC FOUNDATION)	• Awarded to a second-year student in Water/Wastewater.	• $200	• Contact LBCC Financial Aid Office or Ron Sharman, Water/Wastewater.
CASCADE CORPORATION SCHOLARSHIP (LBCC FOUNDATION)	• Awarded to a second-year Welding or Manufacturing Technology with a first-year GPA of 3.00.	• One-year tuition and fees.	• Contact LBCC Financial Aid Office.
FARRIER SCHOOL/ AGRICULTURE/ HORTICULTURE SCHOLARSHIP (LBCC FOUNDATION)	• Funds awarded to encourage entry into the farrier trade or to increase skill levels. Awards may be made to agriculture, horticulture or animal science majors.	• Amount varies.	• More information available in the LBCC Financial Aid Office.
OFFICE TECHNOLOGY SCHOLARSHIPS (LBCC FOUNDATION)	• Awarded to full-time students enrolled in a certificate or degree program offered by the Business Technology department.	• Amounts vary.	• More information available in the LBCC Financial Aid Office.
ZONTA SCHOLARSHIPS (LBCC FOUNDATION)	• Awards based on the following criteria: 1. Prior life experience. 2. Demonstrated interest or willingness to work with children. 3. Demonstrated interest or work in areas that especially impact women.	• $1,000	• Contact LBCC Financial Aid Office or Ann Smart, Extenion Services Division.
CORVALLIS CLINIC FOUNDATION INC., JAMES A. RILEY, M.D. HEALTH OCCUPATIONS SCHOLARSHIP FUND (LBCC FOUNDATION)	• Awarded to four full-time students enrolled in Health Occupations program. Minimum GPA of 3.25 required.	• $500	• More information available in the LBCC Financial Aid Office.
TBD CENTER SHORT-TERM GRANTS/LOANS (LBCC FOUNDATION)	• Funds to assist students in short-term training programs.	• Funds may pay tuition and/or books.	• More information available in the LBCC Financial Aid Office.

	ELIGIBILITY REQUIREMENTS	AMOUNTS AVAILABLE	SPECIAL INFORMATION
STUDENT LOANS			
TURNING POINT TRANSITIONS GRANT (LBCC FOUNDATION)	• Assists single parents, displaced homemakers, dislocated workers and their spouses, who are graduates of the Turning Point class.	• Funds awarded for child care, workshop or testing fees, or textbooks.	• More information available in the LBCC Financial Aid Office.
GERRY CONNER AWARD FOR EXCELLENCE IN THE STUDY OF ECONOMICS (LBCC FOUNDATION)	• Awarded to recognize a student demonstrating excellence in the field of Economics.	• Amount varies.	• Contact Gerry Conner, Business Department.
FRITZ KLEINSCHMIDT ENDOWMENT (LBCC FOUNDATION)	• Awarded to a second-year student in the Associate Degree Civil Engineering Technology program.	• One year's tuition.	• Contact LBCC Financial Aid Office or David Kidd.
SUSAN LILJEBERG ENDOWMENT (LBCC FOUNDATION)	• Awarded to a second-year Nursing student.	• Tuition, books and uniform.	• Contact LBCC Financial Aid Office or Health Occupations Department.
DAVID JORDAN MEMORIAL ENDOWMENT (LBCC FOUNDATION)	• Awarded to students in the mechanical, metals, agriculture or related fields of study, with preference given to graduates of West or South Albany high schools.	• Amount varies.	• More information available in the LBCC Financial Aid Office.
LOIS MARCHBANKS MEMORIAL ENDOWMENT (LBCC FOUNDATION)	• Awarded to a second-year Nursing student.	• Amount varies.	• Contact LBCC Financial Aid Office or Health Occupations Department.
CULINARY ARTS ENDOWMENT (LBCC FOUNDATION)	• Awarded to Culinary Arts students.	• Amount varies.	• Contact LBCC Financial Aid Office or Scott Anselm, Culinary Arts Department.
RASMUSSEN ENDOWMENT (LBCC FOUNDATION)	• Awarded to an outstanding student enrolled for two terms in either of the college transfer physics sequences.	• One full-term tuition	• Contact John Griffith, Physical Sciences Department.
GERRY CONNER SCHOLARSHIP ENDOWMENT (LBCC FOUNDATION)	• Award made to a Business Administration major who is over 25 years old and has a GPA of 3.25 and a minimum of 30 credits towards a Business degree.	• One-term tuition; renewable up to three terms	• Contact Gerry Conner, Business Department.
PARENT EDUCATION SCHOLARSHIPS (LBCC FOUNDATION)	• Awarded to Parent Education students.	• 50 percent tuition reduction.	• More information available from Family Resources Department.
CHILD CARE PROVIDER TRAINING (LBCC FOUNDATION)	• Awarded to practicing child care providers.	• Amount varies.	• More information available from Family Resources Department.
ALBANY BUSINESS/ PROFESSIONAL WOMEN'S LOAN FUND (LBCC FOUNDATION)	• Awarded to women in the greater Albany area to further education or update job skills.	• Up to $250 loan for tuition and/or books, at zero interest, to be repaid within one year.	• Contact Financial Aid Office or Business Division.

	ELIGIBILITY REQUIREMENTS	AMOUNTS AVAILABLE	SPECIAL INFORMATION
STUDENT LOANS			
DAN & DAISY ASHTON SCHOLARSHIP ENDOWMENT (LBCC FOUNDATION)	• Awarded to residents of Sweet Home Unified School District.	• Amount varies.	• Contact Financial Aid Office or Sweet Home High School.
PETER DEFAZIO SCHOLARSHIP	Awarded to residents of Oregon's 4th Congressional District who: 1. are dislocated timber workers, 3. are full-time LBCC students, 4. have applied for Federal Financial Aid, 5. have successfully completed 12 credit hours at LBCC.	• Up to $975 total for three terms.	• Contact Financial Aid Office.
GENERAL SCHOLARSHIP (LBCC FOUNDATION)	• Awarded to two second-year students with 3.0 GPA's who received the LBCC Scholars Award their first year.	• Full-year tuition	• Contact Financial Aid Office.
GOLF TOURNAMENT SCHOLARSHIP — DIVISION AWARDS (LBCC FOUNDATION)	• Awarded to students in each college division: Liberal Arts and Humanities, Culinary Arts, Business Training Health Occupations, and Science and Industry.	• Amount varies. • To be used for tuition and/or books winter and/or spring terms.	• Contact Financial Aid Office or the director of each division.
DR. ROBERT HYLAND MEMORIAL SCHOLARSHIP ENDOWMENT (LBCC FOUNDATION)	• Awarded to a second-year transfer student majoring in science or engineering and who has a 3.0GPA during the last term graded. Preference given to a student over 25 years of age, is married or has children.	• Amount varies.	• Contact Financial Aid Office.
FORD KIMPTON MEMORIAL SCHOLARSHIP (LBCC FOUNDATION)	• Awarded to a second-year athlete who displays team commitment, sportsmanship and strong academics.	• $500 awarded spring term.	• Contact Teresa Thomas, Health and Human Performance Department.
JELD-WEN FOUNDATION	• Awarded to a new student who is a Brownsville resident.	• $2,000 to be used for tuition and/or books only.	• Contact Financial Aid Office.
OREGON STATE SHERIFF'S ASSOCIATION	• Awarded to a full-time, second-year student in Law Enforcement and Corrections.	• $500	• Contact Financial Aid Office.
J. DONNA SCHUETZ MEMORIAL SCHOLARSHIP (LBCC FOUNDATION)	• Awarded to a freshman athlete on an LBCC athletic team who will have completed 40 credit hours by the end of freshman year.	• $250 for the sophomore year at LBCC.	• Contact Teresa Thomas, Health and Human Performance Department.
GEORGE & EDNA MCDOWELL CHARITABLE TRUST (LBCC FOUNDATION)	• Awarded to students who have successfully completed two terms of study in Nursing or Industrial Arts Programs.	• $500	• Contact Financial Aid Office.
DAN ASHTON MEMORIAL (LBCC FOUNDATION)	• Emergency grants to students from Sweet Home.	• Amount varies.	• Contact East Linn centers.

	ELIGIBILITY REQUIREMENTS	AMOUNTS AVAILABLE	SPECIAL INFORMATION
LBCC AWARDS			
FULL-TIME EMERGENCY GRANT (LBCC FOUNDATION)	• Awarded to full-time students with unexpected expenses or financial difficulties.	• Up to $100	• Application at the Financial Aid Office.
EARL LIVERMAN MEMORIAL FUND (LBCC FOUNDATION)	• Emergency grant for students who have received a previous emergency grant and who might not otherwise be able to stay in school.	• $75	• More information available at the Financial Aid Office.
WOMEN'S CENTER SCHOLARSHIP FUND (LBCC FOUNDATION)		• Amount varies up to $250.	• Contact Financial Aid Office.
NURSING GRANT (LBCC FOUNDATION)	• Awarded to Nursing program students.	• Amount varies.	• Contact Health Occupations Department.
GRAPHIC COMMUNICATION LOAN (LBCC FOUNDATION)	• Loans made to students in Graphic Communication program.	• Amount varies.	• Contact John Aikman.
PART-TIME EMERGENCY LOAN/ GRANT (LBCC FOUNDATION)	• Tuition or book expense loan or grant to part-time students not qualifying for other aid. • Awarded to students attending the Extended Learning centers.	• Amount varies.	• Contact Ann Smart, Extension Services Division.
OTHER SOURCES			
TUITION REDUCTION FOR THE UNEMPLOYED	• District residents who attend part time and are unemployed are eligible to apply.	• 50 percent tuition reduction for up to six credits of enrollment.	• Application available at Registration Office and Extended Learning centers.
GOLDEN AGE PROGRAM	• Oregon residents 62 years of age or older are eligible.	• 50 percent tuition reduction.	• Inquire at time of registration for classes at main campus or Extended Learning centers.
GED TUITION WAIVER	• Students who complete 60 consecutive hours of GED prep classes at LBCC and who successfully complete their GED will be offered this waiver.	• Waiver of the tuition for the term immediately following successful completion of attendance and GED requirements.	• Form available from GED instructors.
CAREER INFORMATION SYSTEM (CIS) AID SORT	• Computer program identifies thousands of national, state and local sources of scholarships, loans and other awards.	• Varies.	• Call the Career Center, (541)917-4780, for an appointment at the computer to use AID SORT.

Warning!

If you receive federal and/or state aid based on inaccurate information, you will have to pay it back; you also may have to pay fines and fees. If you purposely give false or misleading information on any documents used to determine your aid eligibility, you may be subject to a fine of $10,000 or receive a prison term or both.

SERVICES FOR STUDENTS

Academic Advising

(541)917-4780
Takena 103

The academic advising program at LBCC helps students plan and carry out programs of study. At orientation, each student is assigned an academic advisor from the instructional staff or the program in which he or she is enrolled. Students who have not selected a major or who will spend a term or more in developmental skills classes are assigned an advisor from the counseling staff.

Part-time students also are encouraged to meet with an advisor periodically for academic advising. Contact the Career and Counseling Center for more information.

Adult Basic Skills Development

(541)917-4683
Learning Resource Center 200

The ABSD program offers a variety of free classes to adults who want to earn a high school diploma, improve basic skills in reading, communication, computing, and critical thinking, learn computer basics, or complete personal goals. Instruction is varied to meet individual learning styles and to provide a positive learning environment. A credit class in Applied Communications is offered for students to improve workplace skills, including reading, writing, listening and speaking.

Instruction is available morning, afternoons and evenings in Albany. Day and evening classes are available at the Benton, Sweet Home and Lebanon Extended Learning centers.

The college also will endeavor to match students with volunteer tutors if students are unable to attend classes or need extra help outside of class. This is a free, confidential, usually one-on-one arrangement in a location convenient to both student and tutor.

Tuition is free for ABSD/GED classes. New students must attend an ABSD/GED orientation before enrolling. Enrollment is open through the ninth week of each term.

Students under age 18 must present a signed release from compulsory attendance (ORS 339.30) or referral, which may be obtained from a local school district.

English for Speakers of Other Languages (ESOL)

ESOL is for adults whose native language is not English. Students are taught integrated skills in reading, writing, speaking and listening. Free classes are offered for beginning, intermediate and advanced levels. Volunteer tutors may be available for some individualized instruction. A credit class is offered for college-level ESOL students.

General Education Development (GED) and Adult High School Diploma (AHSD)

See "Diplomas" in the "Programs of Study" section of this catalog.

Assessment Center

(541)917-4781
Takena 227

A variety of tests are offered for currently enrolled students and members of the community, including:

1. the General Education Development (GED) test for the certificate of high school equivalency;
2. the Computerized Placement Test (CPT) to properly place students in classes;
3. the College Level Exam Program (CLEP) test for college credit by examination;
4. course challenges that enable students to earn college credit by examination without completing regular credit course work; and
5. individualized testing for on-campus courses or programs.

Bookstore

(541)917-4950
College Center 111

The Bookstore sells texts and supplies for LBCC main campus courses. Art and school supplies, general interest books, soft goods and gift items also are available. Textbooks for classes offered at the off-campus Extended Learning centers are available at the centers only, not at the LBCC Bookstore on the main campus.

The campus Bookstore is open from 8 a.m. to 4 p.m. Monday through Friday. Evening hours are scheduled the first week of each term for the convenience of evening students. The off-campus Extended Learning centers are open 8 a.m. to 9:30 p.m. Monday through Thursday. The Benton and Lebanon centers are open 8 a.m. to 4:30 p.m. on Friday. Books for sale at these locations, however, are for classes offered through the center.

Some classroom supplies are available at the snack bar in Takena Hall. Used texts may be sold back during designated hours.

Career and Counseling Center

(541)917-4780
Takena 103

The Career and Counseling Center provides information to district residents who want career, educational or personal counseling. A counselor may help with personal demands of college life or with selecting appropriate course work. Regular contact with a counselor can help the student clarify goals and progress smoothly through the college system.

The counseling staff offers classes that are designed to provide students with a special kind of assistance. Career planning, stress management, assertiveness training and other courses are intended to help the student clarify goals and develop life management skills.

Interest testing and career classes are available on a fee basis, while the career decision-making program "CIS" is available free to the public.

Counselors also are available part time at the Benton, Lebanon and Sweet Home Extended Learning centers. Call the center for an appointment.

Child Care

(541)917-4898

Family Resource Center:

On-campus child care for LBCC families is provided through the Family Resources Department. The Family Resource Center is a full-day program accredited by the National Academy of Early Childhood Programs, as well as being state licensed. The 75 children in four classrooms are cared for by nine educated and experienced teachers, along with parents and auxiliary staff. Children must be at least two and one-half years of age and not yet eligible for kindergarten. Priority is given to student families on a first-come, first-served basis. Families must commit to using the Center for at least one term at the time of enrollment. For additional information, contact Family Connections, (541)917-4899, or the Family Resource Center, (541)917-4898.

Family Connections:

Family Connections, located in room 101 of the Workforce Education Building, offers help and information to parents seeking child care, parent education classes, recreational activities and other forms of family support. The service is offered free to all LBCC credit students through a contract with ASLBCC. For more information or to access the Parent Advice Line, call (541)917-4899.

Computer Lab

Day/Night Number: (541)917-4470
Forum 204

The LBCC Forum Computer Lab is open to currently registered LBCC students. The lab is open a variety of hours seven days a week to meet student needs. Friendly service is provided by trained staff whose primary concern is to help students master the skills needed to complete course assignments easily and quickly on IBM-compatible computers. Software programs available include everything from simple word processing and spreadsheets to graphics, page layout and programming languages. Software reference books and self-paced tutorials are available to guide students in learning new programs. To serve community members not enrolled in classes at LBCC, non-credit computer lab hours can be purchased through open registration. A current ID card is required for entrance to the lab.

Computer labs also are available at the Benton, Lebanon and Sweet Home Extended Learning centers. See the "Community Outreach" section in this catalog or call:

Benton Center: (541)757-8944
Lebanon Center: (541)451-1014
Sweet Home Center: (541)367-6901

Disability Services

(541)917-4683
TDD (541)917-4703
Learning Resource Center 200

Students with disabilities will find buildings and classrooms at LBCC accessible. Transportation to and from the Albany campus is available through the local bus system from Albany and Corvallis. Buses running from the Albany area are accessible.

Designated parking spaces are available for people with disabilities. To use them, you must obtain a disabled parking permit from the Oregon Department of Motor Vehicles. Storage lockers are available for people with disabilities. They are assigned through the Student Programs Office.

Students who are unable to stand in the registration line due to a physical disability may obtain a "Disabled Student Line Reservation Slip" from the Admissions Office.

Students and community members who are deaf or hearing impaired can receive information about LBCC classes or make appointments with LBCC staff by calling the Office of Disability Services TDD number (541)917-4703 or the Registration/Admissions TDD number, (541)917-4825.

The Office of Disability Services staff are advocates for students with disabilities and assist them with their needs and concerns. The staff provide a number of services that are specific to individual student needs and may include one or more of the following:

- Advising and scheduling of classes
- Interpreting
- Note taking
- Taped texts
- Test accommodations
- Tutoring
- Learning strategies instruction
- Adaptive equipment
- Living Skills classes
- Other accommodations specific to a student's needs and disability

Students must provide documentation of disability to receive these free services.

Distance Education

(541) 917-4672
Learning Resource Center 104A

LBCC's distance education courses allow students to earn degrees or upgrade existing skills at their own convenience, so they no longer need be denied access to education because of time, location or personal circumstances. Through an ever-increasing variety of technologies, LBCC's distance education brings educational opportunities directly to the student, whether in the home, in the workplace or in a distant community.

Utilizing cable, broadcast, videotape and computer technologies accessible on the Internet, LBCC has taught distance ed classes to more than 10,000 students since 1979. At present, courses are delivered in three different formats: telecourses, Internet courses, and instructional television courses. In the near future, courses will be available by live television to the college's extended learning centers and elsewhere in the district.

Telecourses:
An alternative to attending classes on campus, telecourses enable students to earn college credit at home. Although much of the course content is televised, the majority of information is contained in specially designed text and workbook materials. Classes usually are aired on Oregon Public Broadcasting (channel 7) and on TCI Public Access Cable in Albany and Corvallis (channels 68, 69, 98 or 99, depending on converter type). Programs usually are aired once or twice during the week, and they are one hour in length. For students who own VHS video recorders (VCRs), the complete telecourse is available at no charge on two VHS tapes from the LBCC Library. Enrolled students may check out the tapes for the entire term. Registration procedures are the same as for regular LBCC courses. In addition to regular tuition, there is a $20 telecourse fee. On-campus attendance is required three or four times for review and testing. Attendance at the first class meeting (listed in the schedule) is important because it serves as the student orientation session.

Computer Online Internet Courses:
Delivered via the Internet, an online course includes lectures, notes, class discussion and assignments available to students through computers at home, work or school. The World Wide Web is used as a research tool, and it also allows students to communicate with each other and the instructor through web pages and e-mail.

Students enrolling in online courses must have a good working knowledge of Windows' or Macintosh's graphical user interface; should understand basic functions, such as point and click, double-click, drag, select, file, choose and alias; and should be familiar with such terms as uploading/downloading, login, modem operations and plain text format. Students are expected to log on at least four times per week and to respond regularly to online discussions and e-mail listings. Students must have their own equipment and must have access to the Internet through their own provider. On-campus access is available in computer labs and in the library. Limited e-mail access will be provided to all enrolled online students by request.

Attending the first class meeting is important because it serves as the orientation session. For complete class information, visit the LBCC website at http://www.lbcc.cc.or.us/dist-ed/

ITV Courses:
ITV courses are live instructional television courses that either are transmitted from the main LBCC campus to the outlying centers or are received at the main campus from other institutions. In cooperation with Oregon State University, the University of Oregon, Western Oregon University and Lane Community College, LBCC is undertaking a project to construct a microwave television network in the Willamette Valley. It should be completed next year.

For specific distance education information, look in the distance education section of the LBCC class schedule published each term. It will give class listings, registration procedures, costs, and other information about courses available that quarter.

Evening Services

(541)917-4840
Takena 105

The Evening Services Office is available to assist students and staff with emergency needs during evening hours. Staff, students and family members who must communicate with one another regarding urgent needs may seek assistance from the secretary in the Evening Services Office.

First Aid Station

(541)917-4440
(926-6855 after hours)
College Center 123

The Security and Safety Services Office maintains first aid supplies to care for basic, minor injuries. For life-threatening emergencies call 9+911 and then notify the Security and Safety Services Office (on campus, ext. 4440).

Food Service

(541)917-4385
College Center 214B

Cafeteria:
The cafeteria is located on the second floor of the College Center. Service is available from 8:30 a.m. to 1:30 p.m., Monday through Friday.

Santiam Restaurant:
The Santiam Restaurant is student operated and is located in CC 201. Daily menus are prepared and served by Culinary Arts students Monday through Thursday during the school year. Lunch is served from 11 a.m. to 12:30 p.m. Coffee and pastries are served from 9:30 a.m. to 11 a.m.

Camas Room:
Located on the first floor of Takena Hall, the Camas Room serves a selection of soups, sandwiches, fruits, espresso and other beverages. Service is available from 7:30 a.m. to 9 p.m. Monday through Thursday and 7:30 a.m. to 3:30 p.m. on Friday.

In addition, the Food Service operation caters within the LBCC facility for special activities

sponsored by the college or community. The Hospitality Services Office, (541)917-4385, may be contacted for more information.

Learning Center

(541)917-4684
Learning Resource Center 212

The Learning Center is an open study area where equipment, resources and assistance are available for students approximately 55 hours a week. The atmosphere is relaxed and friendly, and students may use thecenter during any of the open hours. Learning Center areas and functions include:

Mathematics Assistance:
Students enrolled in any LBCC mathematics class can study and receive assistance in the Learning Center. At least one mathematics instructional assistant staffs the Learning Center during open hours. Students can get help with homework problems, have questions answered, have concepts clarified or study for a test. A classroom dedicated to mathematics is located adjacent to the Learning Center. The room is equipped with computers and other instructional equipment to accommodate a variety of learning styles.

Writing Assistance:
Students enrolled in writing classes, particularly WR 115: Introduction to Writing and WR 121: English Composition, as well as students in other classes that have a writing assignment, can visit the Writing Desk, where an instructional assistant will critique their writing. The Writing Desk assistants help students interpret their writing assignments, help them write what they want to say, and generally guide students to a better completed paper. No appointment is needed.

Computer Assisted Instruction:
The 34 computers in the Learning Center are networked and run software for writing, reading and study skills, plus additional software of general interest, such as a Learning Styles Inventory. These computers are connected to the Internet. A computer technician is on duty from 8 a.m. to 4:30 p.m. weekdays.

Developmental English Assistance:
Students enrolled in The Write Course can use the services of the center to complete assignments and to take tests. Instructional assistants explain concepts and direct students to additional resources. In addition, students in this course may use the numerous computer software programs that are accessible on the center's computers. The instructional assistants also offer extra grammar practice to students in Writing 115 and Editing Skills for Information Processing.

Reading Assistance:
Students enrolled in reading improvement classes will find a wide variety of supplemental materials in the Learning Center. Computer software programs include materials covering roots, prefixes, comprehension, vocabulary and textbook reading. Dictionaries and other reference books are available for use within the center.

Testing:
The Learning Center provides testing for some math classes, for developmental classes, and for other subject area classes at the request of the instructor. This service is particularly helpful when students need to make up an exam or take a retest.

Mini-Courses:
Students may discover after a quarter begins that they need help with a specific learning skill, such as reading a textbook, taking lecture notes or studying for tests. These students may enroll in one or more mini-courses, which are self-paced modules that vary in credit from .25 to 1.00, and can be found in the Schedule of Classes. The time required to complete a mini-course varies depending upon the student, but students benefit by immediately applying what they learn to their other classes. A list of mini-courses is also available in the Learning Center. Of course, students may register for a mini-course at the beginning of the term.

Study Skills Enhancement:
The center includes an expanding library of materials that support the two study-skills classes. Materials include videotapes, audiotapes, computer software, video-disks and many written reference works.

Tutoring:
When students decide they need additional one-to-one assistance in a particular course, they may sign up for one to three hours of free tutoring. Tutoring is available for a wide variety of LBCC classes. In general, tutors are students who have taken classes at LBCC and who have been successful. They are approved by faculty members and take a 10-hour tutor training course. Students who want to be tutored can sign up at the center between 8 a.m. and 5 p.m. weekdays. Most tutoring appointments occur during the day; however, some tutors have evening appointment times.

Library

Circulation and Evening: (541)917-4638
Reference: (541)917-4645
Department Chair: (541)917-4649
Media Services: (541)917-4672

The LBCC Library contains about 40,000 volumes, which are accessible via an online catalog, and subscribes to approximately 200 periodicals and newspapers. It provides a basic reference collection and a sizeable collection of non-print materials, including audio tapes, videotapes, film strips, slide sets, and multimedia CDs, plus the equipment for using these materials.

In addition, the library provides access to a variety of online resources, including periodical and newspaper indexes and full text databases, as well as the Internet. Typewriters, word processing computers and photocopiers for student use also are located in the library. Students may receive instruction in how to use the library and the equipment from library staff members on a drop-in basis or by scheduled library tours. Library materials not available in the LBCC Library often may be obtained through interlibrary loans via OCLC, an international library network. Also, LBCC students may borrow books from the OSU Library.

Lost and Found

(541)917-4440
College Center 123

The lost and found service is maintained by the Security and Safety Services Office. Lost items may be reported and found items turned into the office between 7:30 a.m. and 5:15 p.m., Monday through Friday.

Printing Services

(541)917-4673
Industrial Building 110

Printing Services offers a wide range of print-related services and supplies to LBCC staff and students. The Print Shop can provide printing (resumes, business cards, brochures, etc.), color copies, custom typesetting and image scanning. Our system can utilize your Macintosh or IBM-compatible disk. Supplies available include: cut paper, computer paper, labels, and printer and typewriter cartridges and ribbons. Hours are Monday through Friday, 8 a.m. to 4:30 p.m.

Hospitality Services

(541)917-4385
College Center 214

Scheduling rooms and coordinating related services (such as food, media and custodial services) can be made through Hospitality Services between the hours of 8 a.m. and 4:30 p.m.

Security and Safety Services

(541)917-4440
(926-6855 after hours)
College Center 123

The Security and Safety Services Office is open 7:30 a.m. to 5:15 p.m. Monday through Friday. Available services include FAX machine, first aid, lost and found, parking management, public safety communication systems and college-issued keys. Security is available 24 hours a day by calling 926-6855. For life-threatening emergencies, dial 9 + 911 and then notify the Security and Safety Services Office, ext. 4440.

Student Employment Center/ Cooperative Work Experience Services

(541)917-4780
Takena 101

The Student Employment Center, a part of the Career and Counseling Center, assists current students, graduates and alumni of the college in obtaining part-time, full-time, temporary and permanent employment. Job sources include local employment listings, current Oregon Civil Service openings, federal job information and a

variety of listings solicited from other states. A Job Hotline, (541) 917-4798, also lists the local job openings advertised through the center. Labor market information available includes projected demand (employment and openings), salary data and employment outlook analysis of a wide variety of occupations in the state of Oregon. The center also has national labor trend information available.

The center maintains a library of local employer information to assist students in researching company data. An annual employer fair is held to help acquaint all students with the employment needs of local industries. Students also can receive help in resume and cover letter preparation, application form preparation, interviewing techniques and job search strategies.

Students have the opportunity to gain college credit through work experience. This service is coordinated by Cooperative Work Experience faculty. For more information on CWE, see the description in the "Programs of Study" section of this catalog.

Student Life and Leadership

(541)917-4457
College Center 213

The college encourages activities that complement a student's academic program. The Student Life and Leadership Office, which houses the Associated Student Government, Student Programming Board and the Student Ambassador program, provides students with opportunities for leadership, cooperative planning and development of social, cultural and athletic/physical fitness interests.

This office also maintains the Fireside Lounge and the Recreation Room. The Fireside Lounge has comfortable furniture, study tables and a big screen TV for students. The Recreation Room has four pool tables, a ping pong table, and various video games available for students. Equipment for pool and ping pong is issued by our staff and there is a small charge for use. These rooms are located on the second floor of the College Center Building, near the cafeteria.

Students at LBCC can also get involved with clubs and organizations that enhance their college experience. Some of the currently active club interests include religious affiliatiions, computer technology, animal science, horticulture, racing performance, drama and music. Student activities, organizations and intramural sports are open to all students. For information, contact the Student Life and Leadership Office, (541) 917-4457, CC room 213.

ASLBCC Student Government:
The Associated Student Government provides opportunities for students to serve on college committees, participate in student government, and participate in leadership activities that enhance student life. The Associated Student Government is a student organization that serves as a representative and advisory group to faculty, administration and the LBCC Board of Education. The government is composed of president, vice president, public relations specialist, one representative from each academic division and one at-large representative. Any matriculated student who is in good standing and enrolled in at least six credits at LBCC is eligible to hold a representative position; one Student Services and Extended Learning position is open to students enrolled in non-credit courses in the division. Interested students may contact the Student Life and Leadership Office, CC 213, (541) 917-4462.

LBCC Student Programming Board:
The Student Programming Board (SPB) is responsible for the coordination of student activities and intramural/recreational sports. Events include free trips and tickets to special events, blood drives, service learning projects, diversity programming, and basketball and volleyball tournaments. Special events include all-campus picnics, the annual Winter Festival and Dinner Theater, a Martin Luther King Jr. Celebration and many others. The group consists of eight members, one team coordinator, one intramural recreation coordinator, and six events specialists. The Board serves for three terms and is appointed through an application process. Interested students should contact Student Life and Leadership Office, CC 213, (541) 917-4457.

Student Ambassador Program:
The Student Ambassador program consists of students who work to enhance college recruitment and retention. Some of the activities include campus tours, high school visitations, welcome back tables, and assisting with on- and off-campus events. Student Ambassador Program consists of seven students who are paid an hourly wage for their services.

Intercollegiate Athletics:
Linn-Benton Community College has developed a comprehensive program of intercollegiate athletics in affiliation with the Northwest Athletic Association of Community Colleges. Programs projected for the coming school year include women's volleyball, men's and women's basketball, men's and women's track, and men's baseball.

Athletic programs are funded through student fees.

For more information, contact the Health and Human Performance Department, (541)917-4235, AC 102.

International Education:
The Student Life and Leadership Office supports LBCC staff and students with information; encourages and supports a global perspective in the curriculum; and promotes intercultural communication and understanding through various programs and events.

LBCC is a member of the National Association for Foreign Student Affairs (NAFSA) and the Northwest International Education Association (NIEA).

Intramural and Recreational Sports:
An intramural and recreational sports program is offered to all students jointly through the Physical Education Department and Student Life and Leadership Office. A member of the Student Programming Board serves as the student coordinator for this program. Interested students should contact the Student Life and Leadership Office, (541) 917-4457.

Music:
The college offers several opportunities for student participation in vocal and instrumental music, including Chamber Choir, Concert Choir, Community Chorale, and some performance groups in conjunction with the Music Department at Oregon State University. Interested students may contact the Performing Arts Department for more information.

Publications:
The students of LBCC are responsible for publishing the college newspaper, *The Commuter*, which has won many awards for excellence. The paper is published weekly during most of the school year. Students interested in participating may contact the Fine and Applied Arts Department or the Liberal Arts and Human Performance Division, AHSS 101.

Each spring, students also publish *The Eloquent Umbrella,* a literary journal for poetry, fiction, essays and graphic arts that features works from students, staff and the community. Submissions are due by the end of the second week of winter term. *The Eloquent Umbrella* is available for sale in the LBCC Bookstore and is sponsored by the ASLBCC and the English Department. If you would like more information, please contact the English Department at (541)917-4556.

Theatre:
LBCC's Performing Arts Department provides several opportunities each year for students and community members to participate in theatre productions. Those interested in theatre may contact the Performing Arts Department for more information.

Supplemental Instruction (SI)

(541)917-4699
Learning Resource Center 212

Supplemental Instruction (SI) is available in subject areas such as chemistry, psychology, and anatomy and physiology. Data indicate that regular attendance at these out-of-class study sessions helps students earn better grades than they would on their own. Sessions are led by students who have successfully completed the course. The session leaders attend classes, take notes, and meet with students weekly to help them earn higher grades. Check with your instructor or in the Learning Center to find out which courses currently have SI.

PROGRAMS OF STUDY

All credit offerings of the college, either lower-division transfer or professional technical non-transfer, are taught as college-level classes.

Courses with letter prefixes and numbers of 100 or higher (for example, WR 121, BI 103, MTH 111) are generally transferrable to four-year colleges and universities. Courses numbered 100-199 are considered freshman-level courses and those numbered 200-299 are considered sophomore-level courses. *Transferable courses do not have a decimal point in the numbers.*

Letter prefix courses that have numbers below 100 or numbers that include decimal points (for example, MTH 50, BA 2.530) generally will not transfer to a four-year college or university. In the case of professional technical courses, however, there are some exceptions to this rule. Students should see an advisor concerning the transferability of professional-technical courses.

Courses with the AT prefix are professional technical courses that may not be accepted by four-year institutions. Please see a program advisor if you have questions.

Degrees, Certificates and Diplomas

LBCC offers Associate of Applied Science, Associate of Arts (Oregon transfer degree), Associate of General Studies and Associate of Science (with a major emphasis in a subject area) degrees, professional technical certificates and diplomas for high school completion.

Associate of Applied Science Degrees

The AAS degrees are primarily intended to lead students directly to employment in a specific career. This degree is awarded to those students who complete the requirements of a specified, two-year professional technical (non-transfer) program. Associate of Applied Science degrees are offered in:

Accounting Technology
Administrative Assistant
Administrative Medical Assistant
Agriculture
Animal Technology
Animal Technology/Horse Management
Apprenticeship Program
Automotive Technology
Business Computer Systems
Business and Supervisory Management
Chef Training
Child and Family Studies
Computer User Support
Criminal Justice
Digital Imaging/Prepress Technology
Engineering Graphics Technology
Engineering Systems Technology
Graphic Design
Heavy Equipment Mechanics/Diesel
Horticulture
Legal Secretary
Medical Assistant
Metallurgy and Materials Technology
Nursing
Refrigeration, Heating and Air Conditioning
Restaurant and Catering Management
Water/Wastewater Technology
Welding Technology

Associate of Arts Degree (Oregon Transfer)

The college offers an AAOT degree without a designated major that will transfer to any Oregon University System institution as meeting their lower division general education requirements, but not necessarily school, department or major requirements with regard to courses or grade point average (GPA). Students may work with an advisor to concentrate their studies in the following areas:

General Transfer
Business Administration
Child and Family Studies
Criminal Justice
Economics
Education
Liberal Studies
- Anthropology
- Geography
- History
- Political Science
- Psychology
- Sociology

Associate of General Studies

This degree is awarded to students who complete a two-year curriculum, which may include transfer and/or non-transfer credit course work. General Studies degrees may be non-specific or include a technology option.

Associate of Science Degree (with a major emphasis in a specific subject area)

The college offers an Associate of Science degree that is a lower-division transfer program that transfers on a course-by-course basis to any four-year college or university and is designed to transfer to Oregon State University. Associate of Science degrees are offered in:

Agricultural Education
Agriculture Business Management
Animal Science
Automotive Technology (Special Agreement)
Biological Sciences
Business Administration
Child and Family Studies
Computer Science
Economics
Engineering Transfer
Exercise and Sport Science
Fine Art
Health Promotion and Education
Heavy Equipment/Diesel Technology (Special Agreement)
Home Economics
Journalism/Mass Communications
Liberal Studies
- English
- Fine Art
- Music
- Social Sciences
- Speech Communications
- Theatre

Mathematics

After Four Program

Five degree opportunities currently are offered through LBCC's After Four program. The general transfer (undeclared major) Associate of Arts (Oregon transfer) degree provides the two-year lower-division credits that enable students to transfer with junior standing to a four-year college or university. The Associate of Science with a major emphasis in Business Administration is for the student who plans to transfer to a four-year institution to complete a bachelor's degree in business administration. The Associate of Science with a major emphasis in Liberal Studies is intended especially to facilitate transfer to Oregon State University's College of Liberal Arts. The Associate of General Studies is awarded to those students who complete a non-specified degree curriculum that includes transfer and/or non-transfer credit course work. The General Studies degree may be non-specific or include a technical option.

An Associate of Applied Science degree in Supervisory Management is for individuals who are currently supervising or preparing to supervise personnel.

Certificates in Accounting Clerk and Basic and Advanced Supervisory Management also can be earned through evening courses.

Certificates

The college awards certificates to students who complete specific requirements within a professional technical major, on recommendation of instructional staff within that field.

One-year certificates are offered in:

Accounting Clerk
Advanced Supervisory Management
Agriculture
Child and Family Studies
Civil Engineering Technology
Collision Repair Technology
Dental Assistant
Educational Assistant
Emergency Medical Technician
Heating
Horticulture
Juvenile Corrections
Machine Tool Technology
Medical Office Specialist
Medical Transcriptionist
Nondestructive Testing
Occupational Skills Training
Office Specialist
Water/Wastewater Plant Operations
Welding Technology

Two-year certificates are offered in:
Automotive Technology
Heavy Equipment Mechanics/Diesel
Refrigeration, Heating and Air Conditioning
Welding Technology

General certificates are offered in:
Basic Supervisory Management
Farrier Science
Nursing Assistant

Diplomas

LBCC offers several programs for students to obtain a high school diploma or high school equivalent.

1. ***Adult High School Diploma (AHSD):*** LBCC is authorized by the state of Oregon to issue a competency-based adult high school diploma to adults (age 18 or older) who meet high school graduation requirements established by the college.

   Information about the Adult High School Diploma program is available through the Student Development Office, the Counseling Center or Extended Learning centers. Admission applications are available from the Admissions Office.

2. ***General Education Development (GED):*** GED preparatory classes are offered for adults who want to improve their general knowledge and skills in the five GED testing subject areas: writing, reading, math, science and social studies. Individualized study and group work are provided.

   No tuition is charged for GED studies, but students may purchase some texts and study materials. New students must attend a GED orientation before enrolling. Enrollment is open through the ninth week of each term.

   Students who already have a GED or high school diploma are still eligible to attend classes to upgrade skills.

Regional Programs

The LBCC Board of Education has designated the following as Regional Programs, thereby reducing tuition for out-of-state students to in-state tuition for the first term of their enrollment. For subsequent terms, these students must establish and meet LBCC's residency requirements to qualify for in-state tuition rate. Residency requirements are outlined in the Admissions section of this catalog.
Regional programs include:

Agriculture
Animal Technology
Animal Technology: Horse Management
Farrier Science
Horticulture
Metallurgy and Materials Technology
Refrigeration, Heating and Air Conditioning
Water/Wastewater Technology

Special Training Programs

Cooperative Work Experience

CWE Coordinator:
Richard Horton
(541)917-4787
Takena 101
Cooperative Work Experience is an instructional program providing opportunity for students enrolled in LBCC programs to earn up to 14 hours of college credit for what they learn on the job.

CWE 280/CWE 1.280 Cooperative Work Experience is a course that allows the student to work at a job that closely parallels his or her field of study while enrolled in school.

Through work experience, the student may test interest in and suitability for an occupation while learning, being exposed to work methods not taught in the classroom, and having access to equipment not normally available in the college laboratory. The student is prepared for the ever-changing needs in industry, government and service agencies, making the transition from school to work under the guidance of a coordinator.

WE 202/WE1.201 CWE Seminar is required for all students enrolled in Cooperative Work Experience and provides the opportunity to share work-related experiences with the CWE coordinator and fellow CWE students.

Students interested in building Cooperative Work Experience into a program at LBCC should discuss it with their major area instructors and the CWE coordinator to plan the best term for registration and to allow ample time for locating a training station.

Reserve Officer Training Corps

ROTC Coordinator: Richard Horton
(541)917-4787
Takena 101
Through cooperation with Oregon State University, Linn-Benton Community College provides an opportunity for both men and women to participate in a Reserve Officers Training Corps program while attending LBCC.

The ROTC selects and prepares young men and women, through a program of instruction coordinated with the student's normal academic curriculum, to serve as officers in the regular and reserve components of the Army and Air Force. Each unit strives to develop in students a capacity for leadership; to develop them morally, mentally and physically; and to provide them with the basic working knowledge required of a young officer.

Aerospace Studies (Air Force ROTC):
Air Force ROTC allows students to compete for commissions as officers in the United States Air Force. Opportunities exist for well-qualified students from all fields. Scholarship opportunities are especially bright for students with scientific-, engineering- and mathematics-related majors. The Air Force is particularly interested in students who are interested in aviation careers as pilots or navigators. Two- and four-year programs are available.

Army ROTC:
This program offers each eligible man and woman the opportunity to compete for a commission as an officer in the United States Army while earning a college degree. Both basic and advanced programs with multiple entry points can be tailored to a student's needs. Those interested in aviation careers have the opportunity to become officer pilots in fixed or rotary wing aircraft. Merit scholarship opportunities exist for students in any approved academic discipline, particularly in engineering, science, business and social science.

Students interested in enrolling in one of these programs should contact Rich Horton.

Transfer Opportunities

Advanced Degree Programs on LBCC Campus

LBCC Contact:
Director of Extended Learning and Evening Services (541)917-4840

Linfield College:
Linfield College offers off-campus degree programs on the LBCC campus. Evening courses are offered that lead to a Bachelor of Arts or a Bachelor of Science degree in Accounting, Arts and Humanities, Business Information Systems, International Business, Management, and Social and Behavioral Sciences. Up to 108 LBCC credits may be transferred to Linfield College. You also may be able to receive up to 31 credits toward your degree through the Prior Learning Portfolio Program. Contact the Linfield academic advisor at (541)917-4846, for additional information.

Portland State University:
PSU offers its statewide MBA (Master of Business Administration) program on the LBCC campus. The program consists of 72 quarter credits of graduate work. Students enroll in two courses per term over a three-year period. Contact Portland State University at 1-800-547-8887, ext. 4822, for more information.

Oregon State University:
The OSU Office of Continuing Higher Education (OCHE) offers an Individualized Directed Learning program that enables you to enroll in regular Oregon State University undergraduate courses on a guided, independent-study basis. Traditional study through evening courses also is available. Contact OCHE at (541)737-2676 or 1-800-235-6559 for further information.

Transfer Student Alert: All Oregon University System institutions require two years of high school second language for admission. This admission requirement can also be satisfied by two quarters of a college-level second language or demonstrated proficiency in a second language. For additional information, contact your advisor or counselor.

GRADUATION REQUIREMENTS

General Graduation Requirements

Students must be fully admitted (matriculated) in order to receive degrees and certificates from Linn-Benton Community College.

Requirements for degrees, certificates and diplomas are subject to approval of the LBCC Board of Education, as well as the Oregon State Department of Education, Office of Community College Services.

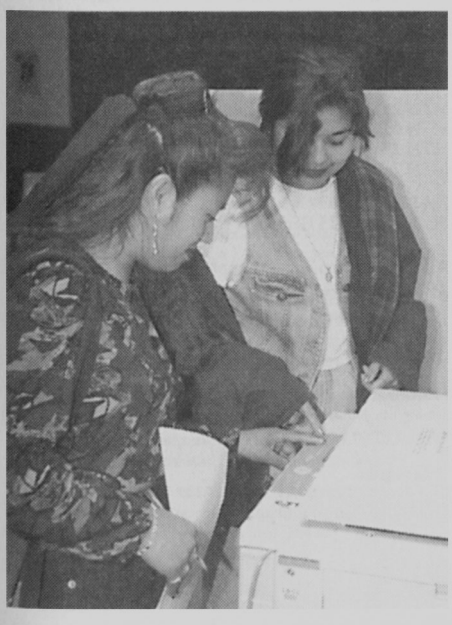
Students who want to complete more than one major or degree must complete (24) additional credits at LBCC for each program above the original requirements. Students completing requirements must apply for graduation at the Admissions Office in Takena Hall by the end of the second week of the term in which the student intends to receive a degree or certificate.

Students who enroll in variable credit courses must complete all course credits if the course is to be used to meet general education requirements.

Students must earn at least 24 credits at Linn-Benton Community College with a minimum of 15 credits of program requirements as endorsed by the department in which the degree is to be awarded. The department chair and appropriate administrator may waive the 15-credit program requirement in some circumstances. Students must apply and graduate within one calendar year from the date the requirements are completed. Twenty-four of the last 35 credits must be taken at Linn-Benton Community College.

Limitation Policy

Students may choose, within a five-year limit, to graduate under the requirements that existed when they started their program.



Students always may elect to graduate under the graduation requirements of the current catalog.

Requirements for the Associate of Applied Science Degree

To receive an Associate of Applied Science degree from LBCC, the student must:

1. Complete the general education requirements and the required major curriculum as outlined.
2. Complete a minimum of 90 credits (some programs may have requirements that exceed this amount).
3. Complete a minimum of 24 credits at Linn-Benton Community College.
4. Maintain a minimum accumulative grade point average of 2.00 or better.
5. Where options exist in the general education area, see a department advisor for assistance.

General Education Requirements 19
Courses numbered with 0. (zero decimal point) will not apply toward this degree

Composition ..... (3)
WR 121 English Composition 3
(Students must have passed WR 115 with a grade of "C" or better or attained an appropriate score on the Placement Test to enroll in WR 121.)

Speech ..... (3)
Select one course:
SP 1.103 Occupational Speech 3
SP 111 Fundamentals of Speech 3
SP 112 Introduction to Persuasion 3
SP 218 Interpersonal Communication 3

Math ..... (4)
MTH 61 Survey of Math Fundamentals 3
and one of the following:
MTH 62 Occupational Trigonometry 1
MTH 63 Industrial Shop Math 1
MTH 64 Business Applications of Math Fundamentals 1
OA 2.557 Advanced Business Math Applications 1
or higher level math courses
(Students must have attained an appropriate score on the Placement Test to enroll in the above Math courses.)

Health and Physical Education ..... (3)
Select three credits:
HE 112 Emergency First Aid 1
HE 125 Occupational Safety 3
HE 250 Personal Health 3
HE 252 First Aid 3
HE 261 CPR 1
PE 180 Activity Courses 1
PE 185 Activity Courses 1
PE 190 Activity Courses 1
PE 231 Lifetime Wellness 3
(Only one activity course may be taken twice to meet general education requirements, and no more than two activity courses per term will count toward general education requirements.)

Perspectives* 6

Science, Technology and Society ..... (3)
The following courses have been approved by the Curricular Issues Committee to meet the Science, Technology and Society general education requirement for the Associate of Applied Science degree:
GS 151 Energy in Society
GS 152 Science, Technology and Society
HST 150 Science and Culture in the Western Tradition
HSTS 151 History of Science
RH 3.527 Alternative Energy Sources
ST 1.106 Science and Culture/Western Tradition
ST 1.107 Technology, Science and Our Society
WW 6.190 Intro. to Environmental Sciences

Cultural Diversity and Global Awareness ..... (3)
The following courses have been approved by the Curricular Issues Committee to meet the Cultural Diversity and Global Awareness general education requirement for the Associate of Applied Science degree:
ANTH 107 Anthropology Today
ANTH 210 Comparative Cultures
ANTH 232 Native North Americans

ART 102 Understanding Art

ART 204, 205, 206 Survey of Art History

BA 203 International Business
BA 224 Human Resource Management
BA 285 Business Relations in a Global Economy

EC 115 Outline of Economics
EC 201 Intro to Microeconomics
EC 202 Intro to Macroeconomics
EC 220 Contemporary U.S. Economic Issues

ENG 104 Intro to Literature: Fiction
ENG 105 Intro to Literature: Drama
ENG 107, 108, 109 Literature of the Western World
ENG 204, 205, 206 Survey of English Literature
ENG 207 Literature of the Non-Western World: Asia
ENG 208 Literature of the Non-Western World: Africa
ENG 209 Literature of the Non-Western World: Latin America
ENG 211 Literature in Athletics
ENG 221 Intro to Children's Literature
ENG 275 Bible as Literature

GEOG 190 Environmental Studies
GEOG 202 World Regional Geography: Latin America/Caribbean
GEOG 203 World Regional Geography: Asia
GEOG 204 World Regional Geography: Africa/Middle East

HST 101, 102, 103 History of Western Civilization
HST 157 History of the Middle East and Africa
HST 158 History of Latin America
HST 159 History of Asia
HST 203 U.S. History: Rise to World Power
HST 240 War and the Modern World

HUM 100 Introduction to Humanities

MUS 105 Intro to Rock Music
MUS 161 Music Appreciation
MUS 205 Intro to Jazz

PHL 201 Intro to Philosophy
PHL 202 Elementary Ethics

PS 104 Problems in American Politics
PS 205 Intro. to International Relations
PS 220 U.S. Foreign Policy

R 102 Religions of Western World
R 103 Religions of Eastern World
R 211 The Old Testament: Historical Background
R 212 The New Testament: Historical Background

SPN 201, 202, 203 Second-Year Spanish I, II, III

Computer Competency for Degree:
The computer competency requirement is being revised for the 1998-99 academic year. See an advisor for current information.

** Additional classes may have been added since this catalog was published. Please check with the Counseling Office or division offices for a current list.*

(Continued on next page)

Requirements for the Associate of Arts (Oregon Transfer) Degree

The Associate of Arts (Oregon Transfer) or AAOT degree is an agreement between the Oregon University System and Oregon's community colleges to provide transfer of community college course work to a state four-year institution (Oregon State University, University of Oregon, Eastern Oregon State University, Portland State University, Southern Oregon State University, Western Oregon University and Oregon Institute of Technology). Completing this degree can lead to junior standing upon transfer but does not guarantee automatic admission by the college or university. The AAOT degree is recognized by the colleges and universities as meeting institutional lower-division general education requirements but not necessarily school, department or major requirements with regard to courses or GPA. Students are encouraged to contact an advisor at the school they plan to attend.

General Education Requirements

(The required math, writing and speech courses must be passed with a grade of "C" or higher.)

Writing ..... (9)

WR 121 English Composition
Select two courses:
WR 122 English Composition
WR 123 English Composition
WR 227 Technical Report Writing

Speech ..... (3)

Select one course:
SP 111 Fundamentals of Speech
SP 112 Intro to Persuasion
SP 218 Interpersonal Communication

College Level Math ..... (4)

MTH 105 Intro to Contemporary Mathematics ***or a higher numbered math course.***

Health/Wellness/Physical Education ..... (3)

HE 250 Personal Health
PE 180 Activity Classes
PE 185 Activity Classes
PE 190 Activity Classes
PE 231 Lifetime Wellness
(Only one activity course may be taken twice to meet general education requirements, and no more than two activity courses per term will count toward general education requirements.)

Computer Competency for Degree:

The computer competency requirement is being revised for the 1998-99 academic year. See an advisor for current information.

Distribution Requirements*

Arts and Letters/Social Science ..... (27)

Arts and Letters 12
Select a minimum of 12 credits from at least two disciplines. Must include a cluster; additional courses may be selected from the Clusters list or the Individual Courses list.

Clusters (separated by underscores)
In each cluster, the courses may be taken in any order.

ART 204, 205, 206 Survey of Art History

ENG 104,105,106 Intro to Literature

ENG 107, 108, 109 Literature of the Western World

ENG 201, 202, 203 Shakespeare

ENG 204, 205, 206 Survey of English Literature

ENG 207, 208, 209 Literature of the Non-Western World

ENG 253, 254, 255 Survey of American Literature

MUS 105 Intro to Rock Music
MUS 161 Music Appreciation
MUS 205 Intro to Jazz

SPN 201, 202, 203 Second-Year Spanish

Individual Courses
ART 102 Understanding Art

ENG 121 Mystery Fiction
ENG 211 Literature in Athletics
ENG 260 Intro to Women Writers
ENG 261 Intro to Science Fiction
ENG 275 Bible as Literature

HUM 100 Intro to Humanities

MUS 101 Music Fundamentals

TA 106 Intro to Theatre

WR 240 Personal Journal Writing
WR 241, 242 Intro to Imaginative Writing

Social Science 15
Select a minimum of 15 credits from at least two disciplines. Must include a cluster; additional courses may be selected from the Clusters list or the Individual Courses list.

Clusters (separated by underscores)
In each cluster, excluding the economics courses, the courses may be taken in any order.
ANTH 103 Intro to Cultural Anthropology
ANTH 230 Time Travelers
ANTH 232 Native North Americans

EC 201, 202 Intro to Micro- and Macroeconomics

GEOG 202, 203, 204 World Regional Geography

HST 101, 102, 103 History of Western Civilization

HST 157, 158, 159 History of Middle East and Africa; Latin America; Asia

HST 201, 202, 203 U.S. History

Select any three of the following:
PS 200 Intro. to Politics
PS 201 Intro to American Politics and Govt.
PS 203 State and Local Govt.: Politics in Oregon
PS 204 Intro to Comparative Politics
PS 205 Intro. to International Relations

PSY 200 Psychology as a Natural Science
PSY 205 Psychology as a Social Science

PSY 235, 236, 237 Human Development

SOC 204, 205, 206 General Sociology

Individual Courses
ANTH 210 Comparative Cultures

CJ 100 Survey of the Criminal Justice System
CJ 101 Intro. to Criminology
CJ 110 Intro to Law Enforcement
CJ 120 Intro to Judicial Process
CJ 130 Intro to Corrections
CJ 201 Juvenile Delinquency
CJ 202 Violence and Aggression
CJ 220 Intro to Substantive Law

EC 115 Outline of Economics
EC 215 Economic Development in the U.S.
EC 220 Contemporary U.S. Economic Issues: Discrimination

GEOG 190 Environmental Studies

HDFS 200 Human Sexuality
HDFS 201 Individual and Family Development
HDFS 225 Child Development

HST 240 War and the Modern World

PHL 201 Intro to Philosophy
PHL 202 Elementary Ethics
PHL 215 History of Western Philosophy

PS 104 Problems in American Politics
PS 220 U.S. Foreign Policy
PS 240 Intro. to Public Policy
PS 252 Constitutional Law

PSY 101 Psychology and Human Relations
PSY 212 Psychology of Learning
PSY 215 Intro to Developmental Psychology
PSY 216 Social Psychology
PSY 231 Human Sexuality

R 101 Intro to Religious Studies
R 102 Religions of Western World
R 103 Religions of Eastern World
R 211 The Old Testament
R 212 The New Testament

SP219 Small Group Communication

Science/Mathematics/ Computer Science ..... (15)

Select a minimum of 15 credits, including at least 12 credits in biological or physical science courses that include laboratories. Choose from at least two disciplines.
BI 101, 102, 103 General Biology**
BI 211, 212, 213 Biology**
BI 231, 232, 233 Human Anatomy & Physiology**
BI 234 Microbiology**
BI 235 Elementary Medical Microbiology**
BI 236 Molecular Biotechnology**
BI 251 Principles of Wildlife Conservation
BI 252 Wildlife Resources: Birds**

CH 121, 122, 123 College Chemistry**
CH 221, 222, 223 General Chemistry**

CH 241, 242, 243 Organic Chemistry**

CS 161 Intro to Computer Science I
CS 162 Intro to Computer Science II
CS 261 Data Structures

GEOG 121 Physical Geography**

GS 104, 105, 106 Physical Science**
GS 107 Astronomy**
GS 108 Oceanography**

MTH 105 Intro to Contemporary Math
MTH 111 College Algebra
MTH 112 Trigonometry
MTH 116 Calculus Preparation
MTH 211, 212, 213 Fundamentals of Elementary Mathematics I, II, III
MTH 231, 232 Elements of Discrete Math
MTH 241, 245 Math for Biological/Management/Social
MTH 243, Intro to Statistics

MTH 251, 252, 253, 254 Calculus
MTH 255 Vector Calculus
MTH 256 Applied Differential Equations
MTH 265 Statistics for Scientists and Engineers

PH 201, 202, 203 General Physics**
PH 211, 212, 213 General Physics with Calculus**

Additional college transfer courses for a total of 90 credits.

90

** Additional courses may have been added since this catalog was published. Please check counseling or division offices for current list.*

*** Lab classes.*

(Continued on next page)

Requirements for the Associate of General Studies Degree

To receive an Associate of General Studies degree at LBCC, the student must:

1. Complete the general education requirements and 55 quarter credits of electives.
2. Complete a minimum of 90 credits.
3. Complete a minimum of 24 credits at Linn-Benton Community College.
4. Maintain a minimum accumulative grade point average of 2.00 or better.

General Education Requirements 35
(Courses numbered 0. (zero decimal) will ***not*** apply toward general education requirements. Symbols in the Course Description section of this catalog indicate which classes will apply toward the general education requirements.)

Composition ..... (3)
WR 121 English Composition 3
(Student must have passed WR 115 with a grade "C" or better or attained appropriate placement test score on the Placement Test to enroll in WR 121.)

Speech ..... (3)
Select one course.
SP 1.103 Occupational Speech 3
SP 111 Fundamentals of Speech 3
SP 112 Intro to Persuasion 3
SP 218 Interpersonal Communication 3

Math ..... (4)
MTH 61 Survey of Math Fundamentals 3
and one of the following:
MTH 62 Occupational Trigonometry 1
MTH 63 Industrial Shop Math 1
MTH 64 Business Applications of Math Fundamentals 1
OA 2.557 Adv. Bus. Math Applications 1
or higher level math courses
(Student must have attained an appropriate score on the Placement Test to enroll in the above math courses.)

Health and Physical Education ..... (4)
Select four credits
HE 112 Emergency First Aid 1
HE 125 Occupational Safety 3
HE 250 Personal Health 3
HE 252 First Aid 3
HE 261 CPR 1
PE 185 Activity Courses 1
PE 231 Lifetime Wellness 3
(Only one activity course may be taken twice to meet general education requirements, and no more than two activity courses per quarter will count toward general education requirements.)

Humanities/Arts, Social Science, Math/Science* ..... (21)
Select 21 credits from the following areas with a minimum of three credits from each of the three groups:
The Humanities/Arts group includes fine art, creative writing, foreign languages (200 level courses only), literature, music, philosophy, religion and theatre.
The Social Science group includes criminal justice, history, psychology, sociology, political science, anthropology/archaeology, economics, geography and women's studies.
The Math/Science group includes mathematics, biology, botany, physical science, physics and zoology.

Computer Competency for Degree:
The computer competency requirement is being revised for the 1998-99 academic year. See an advisor for current information.

* **Note:** To determine if a class may be applied toward fulfilling these requirements for the Associate of General Studies degree look for the proper symbol in the "Course Description" section in the back of this catalog. Humanities/Arts courses will be marked with the symbol ➤; Social Science classes will be marked with the symbol ■; and Math/Science classes will be marked with the symbol ●.

Requirements for the Associate of General Studies Degree: Technology Option

To receive an Associate of General Studies degree at LBCC, the student must:

1. Complete the general education requirements and 55 quarter credits of electives.
2. Complete a minimum of 90 credits.
3. Complete a minimum of 24 credits at Linn-Benton Community College.
4. Maintain a minimum accumulative grade point average of 2.00 or better.

General Education Requirements 35
(Courses numbered 0. (zero decimal) will ***not*** apply toward general ed requirements.Symbols in the "Course Description" section of this catalog indicate which courses will apply toward the general education requirements.)

Composition ..... (3)
WR 121 English Composition 3
(Student must have passed WR 115 with a grade "C" or better or attained appropriate score on the Placement Test to enroll in WR 121.)

Speech ..... (3)
Select one course.
SP 1.103 Occupational Speech 3
SP 111 Fundamentals of Speech 3
SP 112 Intro to Persuasion 3
SP 218 Interpersonal Communication 3

Math ..... (4)
MTH 61 Survey of Math Fundamentals 3
and one of the following:
MTH 62 Occupational Trigonometry 1
MTH 63 Industrial Shop Math 1
MTH 64 Business Applications of Math Fundamentals 1
OA 2.557 Adv. Bus. Math Applications 1
or higher level math courses
(Student must have attained an appropriate score on the Placement Test to enroll in the above math courses.)

Health and Physical Education ..... (4)
Select four credits
HE 112 Emergency First Aid 1
HE 125 Occupational Safety 3
HE 250 Personal Health 3
HE 252 First Aid 3
HE 261 CPR 1
PE 185 Activity Courses 1
PE 231 Lifetime Wellness 3
(Only one activity course may be taken twice to meet general education requirements, and no more than two activity courses per quarter will count toward general education requirements.)

Technology ..... (21)
Select 21 credits of professional technical courses that are required in one- and two-year programs.

Computer Competency for Degree:
The computer competency requirement is being revised for the 1998-99 academic year. See an advisor for current information.

Requirements for the Associate of Science Degree

The Associate of Science is an institutional transfer degree organized in relationship to subject areas of major emphasis. Intended especially to facilitate the transfer of LBCC students to Oregon State University, the general education requirements of the Associate of Science degree align with OSU's lower-division baccalaureate core requirements. They also have broad application to the general education requirements of other colleges and universities. Associate of Science degree credits transfer to all four-year institutions on a course-by-course basis. The assignment of LBCC credit to particular requirements of other schools is made by the college or university to which the transfer is being made.

Students pursuing the Associate of Science degree must meet additional program requirements in a specific major-emphasis subject area. See "Programs of Study" for a listing of available major-emphasis programs.

General Education Core Requirements
Skills 16

Writing I ..... 3 credits
WR 121 English Composition

Writing II ..... 3 credits
JN 216 News Reporting and Writing
WR 122, 123 English Composition
WR 214 Business Communications
WR 227 Technical Report Writing
WR 241 Intro to Imaginative Writing: Fiction
WR 242 Intro to Imaginative Writing: Poetry

Speech ..... 3 credits
SP 111 Fundamentals of Speech
SP 112 Intro to Persuasion
SP 218 Interpersonal Communications

Mathematics ..... 4 credits
MTH 105 Intro to Contemporary Mathematics
MTH 111 College Algebra
MTH 112 Trigonometry
MTH 116 Calculus Preparation
MTH 211, 212, 213 Fundamentals of Elementary Math I, II, III
MTH 231, 232 Elements of Discrete Mathematics
MTH 241, 245 Math for Biological, Management and Social Sciences
MTH 243 Intro to Statistics
MTH 251, 252, 253, 254 Calculus
MTH 255 Vector Calculus
MTH 256 Applied Differential Equations
MTH 265 Statistics for Scientists and Engineers

Fitness ..... 3 credits
PE 231 Lifetime Wellness

Computer Competency for Degree:
The computer competency requirement is being revised for the 1998-99 academic year. See an advisor for current information.

***Perspectives 27**
In addition to meeting the perspectives requirements of the LBCC Associate of Science degree, the following list of courses will be routinely accepted by OSU in fulfillment of the indicated baccalaureate core perspectives requirement.

(Continued on next page)

Biological Science 4
BI 101, 102, 103 General Biology
BI 211, 212, 213 Biology
BI 234 Microbiology
BI 235 Elementary Medical Microbiology
BI 236 Molecular Biotechnology

Physical Science 4
CH 121, 122, 123 College Chemistry
CH 221, 222, 223 General Chemistry
GEOG 121 Physical Geography
GS 104, 105, 106 Physical Science
GS 107 Astronomy
GS 108 Oceanography
PH 201, 202, 203 General Physics
PH 211, 212, 213 General Physics with Calculus

Plus a choice of either a Physical Science or a Biological Science course 4

Cultural Diversity 3
ANTH 230 Time Travelers
ANTH 232 Native North Americans
ENG 207 Literature of the Non-Western World: Asia
ENG 208 Literature of the Non-Western World: Africa
ENG 209 Literature of the Non-Western World: Latin America

GEOG 202 World Regional Geography: Latin America/Caribbean
GEOG 203 World Regional Geography: Asia
GEOG 204 World Regional Geography: Africa/Middle East

HST 157 History of the Middle East and Africa
HST 158 History of Latin America
HST 159 History of Asia

R 102 Religions of Western World
R 103 Religions of Eastern World

Difference, Power and Discrimination 3
HST 201, 202 or 203 U.S. History

Literature and the Arts 3
ART 102 Understanding Art
ART 204, 205, 206 Survey of Art History

ENG 104 Intro to Literature: Fiction
ENG 105 Intro to Literature: Drama
ENG 106 Intro to Literature: Poetry
ENG 107, 108, 109 Literature of the Western World
ENG 110 Intro to Film Studies
ENG 121 Mystery Fiction
ENG 201, 202, 203 Shakespeare
ENG 204, 205, 206 Survey of English Literature
ENG 207 Literature of the Non-Western World: Asia
ENG 208 Literature of the Non-Western World: Africa
ENG 209 Literature of the Non-Western World: Latin America
ENG 253, 254, 255 Survey of American Literature
ENG 260 Intro to Women Writers
ENG 261 Intro. to Science Fiction
ENG 275 Bible as Literature

HUM 100 Intro to Humanities

MUS 105 Intro to Rock Music
MUS 161 Music Appreciation
MUS 205 Intro to Jazz

TA 106 Intro to Theatre

Social Processes and Institutions 3
ANTH 103 Intro to Cultural Anthropology

EC 201 Intro to Microeconomics
EC 202 Intro to Macroeconomics

HDFS 201 Individual and Family Development

PS 104 Problems in American Politics
PS 200 Intro. to Politics
PS 201 Intro. to American Politics and Government

SOC 204, 205 General Sociology

Western Culture 3
ART 204, 205, 206 Survey of Art History

EC 215 Economic Development of the U.S.

ENG 105 Intro to Literature: Drama
ENG 107, 108, 109 Literature of the Western World
ENG 110 Intro to Film Studies
ENG 201, 202, 203 Shakespeare
ENG 204, 205, 206 Survey of English Literature
ENG 253, 254, 255 Survey of American Literature

HST 101, 102, 103 History of Western Civilization
HST 150 Science & Culture in the Western Tradition
HST 201, 202, 203 History of the U.S.

PHL 201 Intro to Philosophy
PHL 202 Elementary Ethics

R 102 Religions of the Western World
R 211 The Old Testament: Historical Background
R 212 The New Testament: Historical Background

Major-Emphasis Requirements and Electives 47
See specific program information.

90

Requirements for Certificates

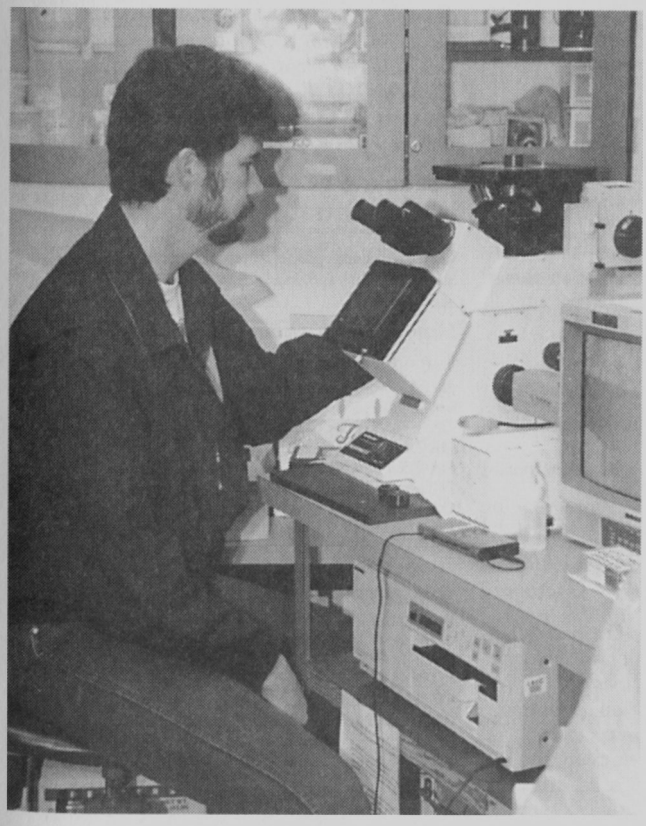
Generally, students must have an accumulative grade point average of at least 2.00 to qualify for the one-year certificate. General certificates require a specified number of credit hours. Refer to the "professional technical programs" section in this catalog for specific requirements.

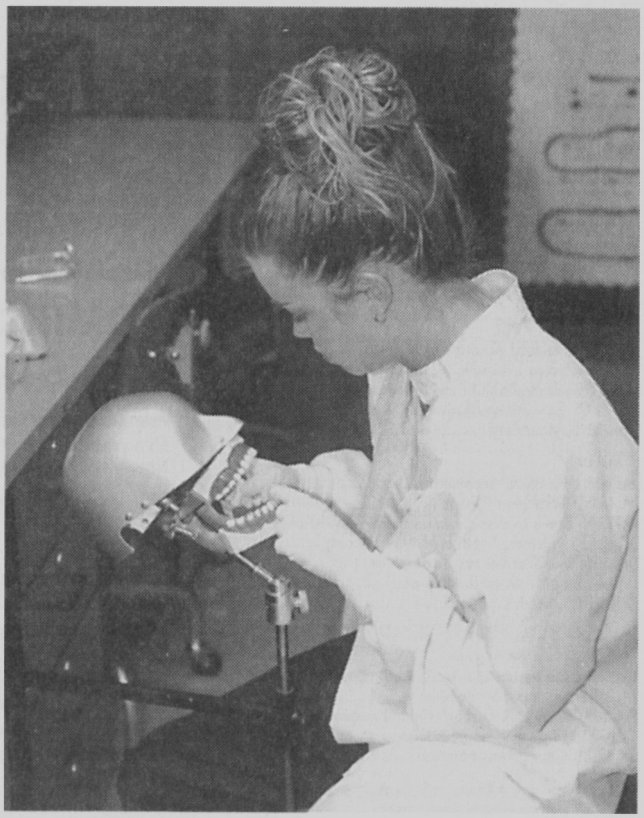
Requirements for Diplomas

Refer to Diplomas in the "Programs of Study" section of this catalog.

PROFESSIONAL TECHNICAL PROGRAMS

- Accounting Clerk
- Accounting Technology
- Administrative Assistant
- Administrative Medical Assistant
- Agriculture
- Animal Technology
- Animal Technology: Horse Management Option
- Apprenticeship Program
- Automotive Technology
- Business Computer Systems
- Business and Supervisory Management
- Chef Training
- Child and Family Studies
- Civil Engineering Technology
- Collision Repair Technology
- Computer User Support
- Criminal Justice
- Dental Assistant
- Digital Imaging and Prepress Technology
- Educational Assistant
- Emergency Medical Technician
- Engineering Graphics Technology
- Engineering Systems Technology
- Farrier Science
- Graphic Design
- Heavy Equipment Mechanics/Diesel
- Horticulture
- Juvenile Corrections
- Legal Secretary
- Machine Tool Technology
- Medical Assistant
- Medical Office Specialist
- Medical Transcriptionist
- Metallurgy and Materials Technology
- Nondestructive Testing
- Nursing
- Nursing Assistant
- Occupational Skills Training
- Office Specialist
- Refrigeration, Heating and Air Conditioning
- Restaurant and Catering Management
- Water/Wastewater Plant Operations
- Water/Wastewater Technology
- Welding Technology





ACCOUNTING TECHNOLOGY

Program Contact:
Ed Knudson

Additional Faculty:
Maynard Chambers, Gerry Conner, Myrna Gusdorf, Wendy Krislen, Larry Schuetz

Two programs are available for students interested in accounting but not desiring a four-year degree: the Accounting Clerk certificate (one year) and the Accounting Technology degree (two years). Both prepare the student for entry-level positions in bookkeeping and accounting; however, the degree students from the two-year program should be able to enter at a higher level and most likely will advance further. Overall employment opportunities in accounting and bookkeeping are good to excellent most of the time.

The two-year program is designed to prepare students for career positions in accounting. Accounting positions exist in public accounting firms; retail, industrial and manufacturing businesses; and in various government agencies. Career opportunities include accounting clerk, full-charge bookkeeper, junior accountant, internal auditor and management trainee.

Students wanting to take individual courses to qualify for specific employment opportunities may do so with the consent of the Business Management Department.

The Accounting Technology curriculums lead to an Associate of Applied Science degree in Accounting Technology or to a one-year certificate in Accounting Clerk.

Associate of Applied Science in Accounting Technology

General Education Requirements 19
See graduation requirements for Associate of Applied Science degree.

Major Requirements 80-81

Fall - First Year
BA 2.530 Practical Accounting I 4
BA 101 Intro to Business 4
BA 131 Business Productivity Software 3
MTH 65 Elementary Algebra ..... (4)
OA 121 Keyboarding 2

Winter
BA 2.531 Practical Accounting II 4
BA 110O Windows 95 2
BA 110S Spreadsheets 2
OA 2.515 Business Math with Calculators 2
OA 201 WordPerfect for Business ***or***
OA 202 MS Word for Business 3
WR 121 English Composition ..... (3)

Spring
BA 2.532 Practical Accounting III 4
BA 2.684 Computerized Accounting 3
BA 210S Advanced Spreadsheets 2
BA 285 Business Relations/Global Economy ***or***
BA 224 Human Resources Management ..... (3)
SP 1.103 Occupational Speech ..... (3)

Fall - Second Year
BA 2.127 Governmental Accounting 3
BA 2.595 Professional Accounting I 3
BA 206 Principles of Management 3
BA 223 Principles of Marketing 3
Science, Technology and Society ..... (3)

Winter
BA 2.132 Basic Bus. Stat w/Qual Mgmt. 3
BA 2.534 Cost Accounting 3
BA 2.535 Payroll Accounting 2
BA 2.596 Professional Accounting II 3
Business/Computer Elective or CWE 3
❒ Law Option 3-4
Select one:
BA 2.518 Commercial Law 3
or BA 230 Business Law 4

Spring
BA 2.597 Professional Accounting III 3
BA 207 Labor Management Relations 3
BA 222 Financial Management 3
EC 115 Outline of Economics 4
Business/Computer Elective or CWE 3
Health or PE ..... (3)

99-100

One-Year Certificate in Accounting Clerk

Major Requirements 51

Fall
BA 2.530 Practical Accounting I 4
BA 101 Intro to Business 4
BA 131 Business Productivity Software 3
MTH 65 Elementary Algebra 4
OA 121 Keyboarding 2

Winter
BA 2.518 Commercial Law 3
BA 2.531 Practical Accounting II 4
BA 110O Windows 95 2
BA 110S Spreadsheets 2
OA 2.515 Business Math with Calculators 2
WR 121 English Composition 3

Spring
BA 2.532 Practical Accounting III 4
BA 2.535 Payroll Accounting 2
BA 2.684 Computerized Accounting 3
BA 285 Business Relations/Global Economy 3
OA 201 WordPerfect for Business ***or***
OA 202 MS Word for Business 3
SP 1.103 Occupational Speech 3

51

Applies toward general education requirements. Credits not included in major requirements total.

ADMINISTRATIVE ASSISTANT

Program Contact:
Mary Ann Lammers

This two-year professional technical program is the first Tech Prep Associate degree option in the Business Technology Department. Students in the Administrative Assistant (AA) TPAD will develop new skills for new roles and responsibilities needed in today's fast-paced business settings. Upon completion the student will be eligible to sit for the Certified Professional Secretaries examination sponsored by Professional Secretaries International Inc. If successful in passing the written exam, the student will become credentialed as a Certified Professional Secretary after working full time for one year.

The AA TPAD offers new class formats and new teaching methodologies designed to attain proficiencies and outcomes formulated from local, as well as national, standards. The program emphasizes working in a high-performance environment, incorporating the new workplace standards of teamwork and collaborative projects. Students will also develop software, computer, and general office-related skills with additional emphasis on accounting, law, and economics. Students will be part of a learning community that provides the opportunity to network, collaborate with other classmates in completing assigned projects, and develop high standards of quality and participation. The advanced skills and certification offered by this program will put the student a step above other applicants upon graduation.

The Administrative Assistant program is designed to be completed in two years. This assumes, however, that the entering student already knows how to type by touch and has been placed at or above the following levels on the Placement Test: WR 121 English Composition and MTH 65 Elementary Algebra. It is advisable to take the Placement Test as early as possible. If developmental course work is required, we recommend that it be taken the summer term prior to enrolling in the regular degree program. Pre-training might include some or all of the following courses: *OA 121 Keyboarding (2 Credits), RD 1.175 or RD 1.176 Reading Improvement I or II (3 credits), EN 1.133 The Write Course (required if Writing Score is less than 40th percentile) (4 credits), MTH 60 Intro to Algebra (4 credits), OA 123A Typing Skillbuilding (2 credits), OA 123B Advanced Typing Skillbuilding (2 credits), OA 124 Typing: Speed and Accuracy Development (3 credits) or 60 wpm, WR 115 Intro to Writing (3 credits).*

Associate of Applied Science in Administrative Assistant

General Education Requirements 19
See graduation requirements for Associate of Applied Science degree.

Major Requirements 81-82

Fall - First Year
BA 101 Intro to Business 4
OA 2.500 Business Orientation 1
OA 2.588 Editing Skills for Info Processing 3
OA 2.652 Filing 1
OA 122 Formatting 2
❒ Typing Option 3-4
OA 123A Typing Skillbuilding (5 wks, 2 cr) ***and***
OA 123B Adv. Typing Skillbuilding (5 wks, 2 cr) ... 4
or OA 124 Typing Speed and Accuracy 3
OA 201 WordPerfect for Business 3

Winter
BA 210 Software Applications 4
OA 2.515C Electronic Calculator 1
OA 2.527 Transcribing Machines 3
OA 2.683 Computerized Records Management ... 3
WR 121W English Composition: Workplace . (3)
BA 2.518 Commercial Law 3

Spring
OA 2.551 Office Communications 3
OA 2.579 Integrated Software Applications 3

(Continued on next page)

OA 2.616 Job Success Skills 1
OA 203 Advanced Word Processing 3
SP 218B Interpersonal Communication: Business ..... (3)
Science, Technology and Society ..... (3)

Fall - Second Year
BA 2.530 Practical Accounting I 4
EC 115 Outline of Economics ..... (3)1
OA 2.645 Administrative Procedures I. 6
*PE 231 Lifetime Wellness ..... (3)

Winter
BA 2.531 Practical Accounting II 4
BA 2.535 Payroll Accounting 2
MTH 65 Elementary Algebra ..... (4)
OA 2.613 CWE for Office Professionals 4
OA 2.646 Administrative Procedures II 4

Spring
BA 2.532 Practical Accounting III 4
BA 2.684 Computerized Accounting 3
OA 2.612 CWE Seminar 1
OA 2.613 CWE for Office Professionals 4
OA 2.682 Desktop Publishing 3

100-101

Applies toward general education requirements. Credits not included in major requirements total.
* HE 250, HE 252 and/or First Aid and/or PE activity courses may be substituted for PE 231 Lifetime Wellness.

ADMINISTRATIVE MEDICAL ASSISTANT

Program Contact:
Sally Stouder

The Administrative Medical Assistant program prepares students to do front office work in doctors' offices, clinics or hospitals. Duties may include scheduling and receiving patients; obtaining patient's data; maintaining medical records, typing and medical transcription; handling telephone calls, correspondence, reports and manuscripts; and assuming responsibility for office management, insurance matters, office accounts, fees and collections. Students work 240 hours in a medical office during their second year; this provides a bridge between classroom and career.

Skills classes are taught in self-paced laboratory classrooms. New technology is introduced both through concepts courses and through hands-on experience with modern equipment.

The Administrative Medical Assistant program is designed to be completed in two years. This assumes, however, that the entering student already knows how to type by touch and has been placed at or above the following levels on the Placement Test: WR 121 English Composition and MTH 60 Intro to Algebra. It is advisable to take the Placement Test as early as possible. If developmental course work is required, we recommend that it be taken the summer term prior to enrolling in the regular degree program. Pre-training might include some or all of the following courses: *OA 121 Keyboarding (2 credits), RD 1.175 or RD 1.176 Reading Improvement I or II (3 credits), EN 1.133 The Write Course (4 credits), MTH 20 Basic Mathematics (4 credits), MTH 60 Intro to Algebra (4 credits), WR 115 Intro to Writing (3 credits).*

Associate of Applied Science in Administrative Medical Assistant

General Education Requirements 19
See graduation requirements for Associate of Applied Science degree.

Major Requirements 77

Fall - First Year
BA 110O Windows 95 (second 5 wks) 2
MO 5.630 Medical Terminology I 3
OA 2.500C Business Orientation: Medical 1
OA 2.515M Business Math w/Calculators: Medical ... 2
OA 2.588 Editing Skills for Info. Proc. 3
OA 2.652 Filing (5 wks) 1
OA 122 Formatting (first 5 wks) 2
OA 123A Typing Skillbuilding (5 wks) 2

Winter
MO 5.414 Drug Classifications and Names 2
MO 5.631 Medical Terminology II 3
OA 2.671 Medical Law and Ethics 2
OA 124 Typing: Speed and Accuracy Develop. 3
OA 201 WordPerfect for Business ***or***
OA 202 MS Word for Business 3
Science, Technology and Society ..... (3)

Spring
HE 252 First Aid ..... (3)
MO 5.625 Clinical Office Procedures I 3
MO 5.632 Medical Terminology III 3
OA 2.527 Transcribing Machines 3
OA 2.616 Job Success Skills: Medical 1
OA 2.656M Info. Processing: Medical Reports 3

Fall - Second Year
BA 2.530 Practical Accounting I 4
BA 224 Human Resources Management ***or***
BA 285 Business Relations: Global Economy (3)
OA 2.524 Medical Transcription I 3
OA 2.551 Office Communications 3
OA 2.670 Medical Office Procedures 3

Winter
OA 2.525 Medical Transcription II 3
OA 2.565 Coding and Insurance Procedures 3
OA 2.613 CWE for Office Professionals 4
OA 2.647 High Performance Office 3
OA 2.673 Computerized Medical Accounts Receivable 3

Spring
BA 110S Spreadsheets 2
MTH 61 Survey of Math Fundamentals ..... (3)
OA 2.557 Adv. Business Math Applications .... (1)
OA 2.613 CWE for Office Professionals 4
SP 218 Interpersonal Communication ..... (3)
WR 121W English Composition: Workplace .. (3)

96

Applies toward general education requirements. Credits not included in major requirements total.

AGRICULTURE

Program Contact:
Gregory Paulson

The Agriculture curriculum is based on necessary competencies identified by industry and reviewed by advisory committees. Students learn facts and skills necessary for entry-level technical employment.

Neither the certificate nor the Associate of Applied Science degree programs have official prerequisites. Students take a variety of science-oriented courses, however, and are expected to have basic mathematics skills. To graduate with an AAS degree, each student needs to complete a four-credit algebra course while at LBCC.

All Agriculture program classes are offered during the day. Part-time enrollment is common. Many students start in the middle of the academic year, but two full years are required to complete the AAS degree. Students attending part time will need to attend longer to complete the program. Not every course listed in the Agriculture program must be taken in the order shown in the curriculum, but some courses are offered only every other year. Consequently, students need to take those particular courses in the order they are offered.

Instructional facilities, including a greenhouse, labs, vegetable and ornamental gardens, a land lab and the campus grounds, are used for demonstrations, skillbuilding and evaluation.

The Agriculture curriculums lead to an Associate of Applied Science degree or a one-year certificate.

Associate of Applied Science in Agriculture

General Education Requirements 19
See graduation requirements for Associate of Applied Science degree.

Major Requirements 66

Fall - First Year
AG 8.125 Soils I 3
AG 8.165 Plant Science 4
AG 111 Computers in Agriculture 3

Winter
AG 8.126 Soils II 3
AG 8.138 Irrigation Systems 3
HT 8.102 Career Exploration: Horticulture 1

Spring
CSS 105 Soils and Man 3
CSS 200 Principles of Crop Science 4
CSS 210 Forage Crops 3

Fall - Second Year
AG 8.131 Pest Management 3
ARE 211 Management in Agriculture 4
*Laboratory Science 4
SPN 101 First-Year Spanish I 4

Winter
AG 8.130 Agricultural Chemicals 4
ARE 221 Marketing in Agriculture 3
*Laboratory Science 4

Spring
HE 252 First Aid ..... (3)
HE 261 CPR 1
WE 1.201 CWE Seminar 1
WE 1.2801 CWE Agriculture 11

Electives 12
Business, Humanities, Industrial, Spanish or Animal Technology courses

97

One-Year Certificate in Agriculture

Major Requirements 34

Fall
AG 8.125 Soils I 3
AG 8.131 Pest Management 3
AG 8.165 Plant Science 4
AG 111 Computers in Agriculture 3

(Continued on next page)

Winter
AG 8.126 Soils II 3
AG 8.130 Agricultural Chemicals 4
AG 8.138 Irrigation Systems 3
HT 8.102 Career Exploration: Horticulture 1

Spring
CSS 105 Soils and Man 3
CSS 200 Principles of Crop Science 4
CSS 210 Forage Crops 3

Math and writing courses at appropriate level (based on Placement Test scores) 7

41

* Biological or Physical Science
Applies toward general education requirements.
Credits not included in major requirements total.

ANIMAL TECHNOLOGY

Program Contacts:
Rick Klampe, James Lucas

LBCC is the only community college in the Willamette Valley with an Animal Technology program. The program uses the community as a natural instructional laboratory and provides students with knowledge and skills useful in returning to the farm, in working in production livestock occupations, in entering into livestock-related fields or in transferring to four-year institutions to continue study.

The animal technology courses are designed to provide a maximum of practical experience through hands-on laboratory sessions. For those already employed in specific agricultural fields, skills can be upgraded. Students in the program also have an opportunity to participate in competitive collegiate livestock judging.

The Animal Technology program is designed to be completed in two years. This assumes, however, that the entering student has been placed at or above the following levels on the College Placement Test: WR 115 Introduction to Writing and MTH 60 Introduction to Algebra. It is advisable to take the college Placement Test as early as possible. If developmental course work is required, it may take the student longer than two years to complete the program. The program has an open-door policy so that students interested in a particular aspect of the program may enroll for any portion of the program. The institution supplies an adequate line of equipment and tools that are utilized during lab sessions.

The Animal Technology curriculum leads to an Associate of Applied Science degree.

Associate of Applied Science in Animal Technology

General Education Requirements 19
See graduation requirements for Associate of Applied Science degree.

Major Requirements 53
❒ Production Courses Option 8
Select two:
ANS 215 Applied Beef Production 4
ANS 216A Applied Sheep Production 4
ANS 216B Applied Swine Production 4
ANS 220 Introductory Horse Science 4

Fall - First Year
AG 8.125 Soils I 3
AG 111 Computers in Agriculture 3
MTH 65 Elementary Algebra ..... (4)

Winter
AG 8.126 Soils II 3
ANS 278 Genetic Improvement/Livestock 4

Spring
ANS 207 Careers in Animal Agriculture 1
ANS 231 Livestock Evaluation 3
CSS 210 Forage Crops 3

Fall - Second Year
ARE 211 Management in Agriculture 4
BI 101 General Biology 4

Winter
ANS 210 Feeds and Feed Processing 4
ARE 221 Marketing in Agriculture 3
BI 102 General Biology 4

Spring
ANS 211 Applied Animal Nutrition 3
AT 156 Livestock Diseases and Parasites 3

Electives 18
Additional courses or approved CWE for a total of no fewer than 90 credits.

90

Applies toward general education requirements.
Credits not included in major requirements total.

ANIMAL TECHNOLOGY: HORSE MANAGEMENT

Program Contact:
James Lucas

Additional Faculty:
Rick Klampe

The Animal Technology Department offers a two-year Associate of Applied Science degree in Horse Management. The degree provides students with the knowledge and skills useful in entering occupations in the horse industry or in transferring to four-year institutions to continue study. The program uses the local horse community as a natural instructional laboratory, and the courses are designed to provide a maximum of practical hands-on experience. The program maintains and operates a small training and breeding facility at which a limited number of student horses may be boarded.

The Animal Technology/Horse Management program is designed to be completed in two years. This assumes, however, that the entering student has placed at or above the following levels on the College Placement Test: WR 115 Introduction to Writing and MTH 60 Introduction to Algebra. It is advisable to take the college Placement Test as early as possible. If developmental course work is required, it may take the student longer than two years to complete the program.

Associate of Applied Science in Animal Technology: Horse Management Option

General Education Requirements 19
See graduation requirements for Associate of Applied Science degree.

Major Requirements 56

Fall - First Year
AG 111 Computers in Agriculture 3
ANS 121 Intro to Animal Science 4
ANS 220 Introductory Horse Science 4

Winter
ANS 210 Feeds and Feed Processing 4
ANS 278 Genetic Improvement/Livestock 4
MTH 65 Elementary Algebra ..... (4)

Spring
ANS 211 Applied Animal Nutrition 3
ANS 221 Equine Industries 3
CSS 210 Forage Crops 3

Fall - Second Year
ANS 222 Young Horse Training 2
ARE 211 Management in Agriculture 4
BI 101 General Biology 4

Winter
ANS 223 Equine Marketing 2
AT 155 Equine Diseases and Parasites 3
AT 163 Schooling the Horse I 3
AT 277 Horse Breeding Management 3
BI 102 General Biology 4

Spring
AT 164 Schooling the Horse II 3

Electives 15
Additional courses or approved CWE for a total of no fewer than 90 credits.

90

Applies toward general education requirements.
Credits not included in major requirements total.

APPRENTICESHIP PROGRAM

Program Contact:
Holly Ploetz

The Apprenticeship Office in IA 202 serves as the center for apprenticeship training on campus. This office provides training and specialized recordkeeping for apprentices employed in the various trade professions in the area. In order to participate in the apprenticeship program, students must be employed by an identified training agent and enrolled in an established apprenticeship program with the employer.

Apprenticeship is a two-fold program: the apprentice learns skills through on-the-job documented work experience and receives approximately 144 hours of related training in the classroom per year. Typical apprenticeship programs require four years to complete.

Classes currently being offered for the following crafts and trades on campus include: millwright, welder, instrument repairer, machinist, electrician, pipefitter and law enforcement.

(Continued on next page)

Selected classes can be attended by the general public but will not count toward attaining journey status without specific trade apprenticeship committee approval.

Once an apprentice has attained journey status, the journey card can count toward attaining an Associate of Applied Science degree in Crafts and Trades. The recognized journeymen will be granted 22 credits toward the degree. Additional credits must be applied to equal the 90 credits required for graduation. Many of these credits will have been received in the course of the apprenticeship program. Of these 90 credits, 19 credits must be in general education courses.

Information on entrance procedures and requirements for apprenticeship-related training is available from the Apprenticeship Office, 917-4636.

Associate of Applied Science in Crafts and Trades

General Education Requirements 19

***Major Requirements (minimum) 71**

90

* The journey card replaces 22 of these major requirement credits.

AUTOMOTIVE TECHNOLOGY

Program Contact:

Additional Faculty:
Mike Henich, Allan Jackson, Bryan Schiedler

The Automotive Technology program provides students with the facilities, equipment and instruction necessary to develop skills and abilities in auto mechanical work. The curriculum is designed to permit student entry into the program at the beginning of each term.

Upon completing the program, a student may enter the auto service trades as an auto technician, specialty shop operator or in a related position. Starting salaries range from $7 to $14 per hour.

Former LBCC students are employed in many other states, signifying the mobility of the auto technician. The Student Placement Center of the college or department faculty will provide assistance in obtaining a post-college position.

The Auto Tech program supports student participation in Vocational Industrial Clubs of America (VICA) and student competition in United States Skills Olympics (USSO). Through student involvement in fund-raising projects, funds are made available to pay student cost of travel, lodging and entry fees in the annual state VICA skills contest. Any student who earns a first place at the state level qualifies for USSO and also will have expenses paid to participate in the national competition.

In addition to the usual books and supplies, students should expect to purchase a general mechanics tool set, as prescribed by the department.

Mechanical Processes I, II and III are required for all Automotive Technology majors and must be taken concurrently with their major field of study. Course content may be challenged for full or partial credit.

The Automotive Technology curriculums lead to an Associate of Applied Science degree or a two-year certificate.

Associate of Applied Science in Automotive Technology

General Education Requirements 19
See graduation requirements for Associate of Applied Science degree.

Major Requirements 81

Fall - First Year
AU 3.295 Power Train Systems 10
*AU 3.307 Mechanical Processes I 2
WD 4.151 Welding I 2

Winter
AU 3.296 Steering/Suspension/Braking Systems 10
*AU 3.308 Mechanical Processes II 2
HE 125 Occupational Safety ..... (3)
*ME 3.447 Metallurgy for Mechanics 2

Spring
AU 3.297 Electrical and Fuel Systems 10
AU 3.301 Service and Repair Practices/CWE 1
*AU 3.309 Mechanical Processes III 2
MA 4.130 Machine Processes 2
MTH 61 Survey of Math Fundamentals ..... (3)
MTH 63 Industrial Shop Math ..... (1)

Fall - Second Year
*AU 3.298 Automotive Tune-up and Diagnosis . 10
AU 3.301 Service and Repair Practices/CWE 1
Cultural Diversity and Global Awareness ..... (3)

Winter
*AU 3.299 Automotive Engines 10
AU 3.301 Service and Repair Practices/CWE 1
*AU 3.303 Mobile A/C and Comfort Systems I ... 3
WR 121 English Composition ..... (3)

Spring
*AU 3.300 Automatic Transmissions 10
*AU 3.304 Mobile A/C and Comfort Systems II .. 3
Science, Technology and Society ..... (3)
*SP 1.103 Occupational Speech ..... (3)

100

Two-Year Certificate in Automotive Technology

Major Requirements 93

Fall - First Year
AU 3.295 Power Train Systems 10
*AU 3.307 Mechanical Processes I 2
MA 4.130 Machine Processes 2
WD 4.151 Welding I 2

Winter
AU 3.296 Steering/Suspension/Braking Systems 10
*AU 3.308 Mechanical Processes II 2
HE 125 Occupational Safety 3
*ME 3.447 Metallurgy for Mechanics 2

Spring
AU 3.297 Electrical and Fuel Systems 10
*AU 3.309 Mechanical Processes III 2
MTH 61 Survey of Math Fundamentals 3
MTH 63 Industrial Shop Math 1

Fall - Second Year
*AU 3.298 Automotive Tune-Up and Diagnosis 10
AU 3.301 Service and Repair Practices/CWE 1
WR 115 Intro to Writing 3

Winter
*AU 3.299 Automotive Engines 10
AU 3.301 Service and Repair Practices/CWE 1
*AU 3.303 Mobile A/C and Comfort Systems I ... 3

Spring
*AU 3.300 Automatic Transmissions 10
*AU 3.304 Mobile A/C and Comfort Systems II .. 3
*SP 1.103 Occupational Speech 3
Computer competency is required.

93

* Courses marked with an asterisk are offered that term only.
Applies toward general education requirements. Credits not included in major requirements total.

BUSINESS COMPUTER SYSTEMS

Program Contact:
Peggy Weems

The Business Computer Systems program develops graduates able to successfully enter the job market in a variety of business computer-related fields. The student learns to apply training in accounting, business programming languages, various application programs and analysis skills to solving actual business problems. Students successfully completing the two-year curriculum are granted an Associate of Applied Science degree in Business Computer Systems.

Students in this program spend a considerable amount of their time in the computer center working on terminals that interact with a mainframe and on microcomputers. The lab is well equipped with modern hardware and software. Students have access to a mainframe and networked IBM-compatible personal computers for completing assignments.

The program should be attractive to a wide range of students, including those who are part time and want only certain courses to upgrade computer-related skills and those who desire career changes. The courses are easily transferrable to four-year degree programs in Management Information Systems or related fields.

Associate of Applied Science in Business Computer Systems

General Education Requirements 19
See graduation requirements for Associate of Applied Science degree.

Major Requirements 71

Fall - First Year
BA 101 Intro to Business 4
BA 131 Business Productivity Software 3
CS 133V Beg. Programming: Visual BASIC 4
Health or PE ..... (1)
MTH 111 College Algebra ..... (4)
(Four math credits apply toward general education requirements; one credit applies toward major.)

(Continued on next page)

Winter
SP 1.103 Occupational Speech ..... (3)
CS 133U Beginning Programming: C++ 4
Health or PE ..... (1)
WR 121 English Composition ..... (3)
Science, Technology and Society ..... (3)

Spring
BA 110H Advanced DOS and Hard Disk Management 2
CS 145 Hardware/Software Selection and Support 3
CS 161 Intro to Computer Science I 4
OA 201 WordPerfect for Business *or*
OA 202 MS Word for Business *or*
OA 203 Advanced Word Processing 3
WR 227 Tech Report Writing 3

Fall - Second Year
BA 285 Business Relations in a Global Economy *or*
BA 224 Human Resource Mgmt ..... (3)
BA 2.530 Practical Accounting I *or*
BA 211 Principles of Accounting: Financial 4
CS 244 Systems Analysis and Design 4
CS 279 Network Management (NOVELL) 3
Selectives (see list below) 4

Winter
BA 2.531 Practical Accounting II *or*
BA 213 Principles of Accounting: Managerial . 4
BA 271 Information Technology in Business 3
CS 275 Database Systems: SQL and Oracle 4
Selectives (see list below) 4

Spring
CS 233V Adv. Programming: Visual BASIC 4
Health or PE ..... (1)
WE 1.280T CWE Data Processing 7

90

Selectives:
BA 275 Business Quantitative Methods 4
CS 261 Data Structures 4
ENGR 201 Electrical Fundamentals 4
ENGR 271 Digital Logic Design 4
MTH 245 Math for Biological/Mgmt/Social Sci.. 4

Applies toward general education requirements.
Credits not included in major requirements total.

BUSINESS AND SUPERVISORY MANAGEMENT

Program Contact:
Myrna Gusdorf, Ed Knudson

Additional Faculty:
Maynard Chambers, Gerry Conner, Wendy Krislen, Larry Schuetz

This program is designed to meet the needs of individuals currently supervising or preparing to supervise personnel in a wide variety of business or industry settings. Successful completion should afford the graduate an entry-level position leading to middle-management positions in both public and private firms.

Three curriculum options are available. Students may complete an 18-credit program in Basic Supervisory Management, a 45-credit program in Advanced Supervisory Management or the 90-credit program leading to the Associate of Applied Science Degree in Business and Supervisory Management. To accommodate the needs of working individuals, the program includes a number of classes offered during evening and weekend hours. During the second year of the program, students can choose from a variety of electives and earn credit for work experience.

Associate of Applied Science in Business and Supervisory Management

General Educations Requirements 19
BA 203 International Business *or*
BA 285 Business Relations: Global Economy .. 3
HE 125 Occupational Safety 3
HST 150 Science/Culture in Western Tradition 3
MTH 65 Elementary Algebra 4
SP111 Fundamentals of Speech 3
WR 121 English Composition 3

Major Requirements 46-47
BA 101 Introduction to Business 4
BA 207 Labor Management Relations 3
BA 215 Survey of Accounting 4
BA 224 Human Resource Management 3
BA 230 Business Law 4
BA 271 Information Technology in Business 3
EC 115 Outline of Economics 4
SD 101 Supervision: Fundamentals 3
SD 102 Supervision: Techniques 3
SD 103 Issues in Supervision 3
SD 104 Supervision: Applied Communications 3
WR 214 Business Communications *or*
WR 227 Technical Report Writing 3

Computer Skills **4**
Select two:
BA 110D Database ..... (2)
BA 110O Windows 95 ..... (2)
BA 110P Powerpoint ..... (2)
BA 110S Spreadsheets ..... (2)

Word Processing **2-3**
Select one:
OA 122 Formatting ..... (2)
OA 201 WordPerfect for Business ..... (3)
OA 201B Intro to WordPerfect w/ Windows .... (2)
OA 202 MS Word for Business ..... (3)
OA 202A Intro to MS Word ..... (2)

CWE 10

Electives 15-16
Select from list below:
BA 2.132 Basic Business Statistics w/Qual Management ..... (3)
BA 203 International Business ..... (3)
BA 206 Principles of Management ..... (3)
BA 222 Financial Management ..... (3)
BA 223 Principles of Marketing ..... (3)
BA 271 Information Technology in Business .... (3)
BA 285 Business Relations: Global Economy .... (3)
MTH 95 Intermediate Algebra ..... (4)
WR 214 Business Communications ..... (3)
WR 227 Technical Report Writing ..... (3)

90

Certificate in Basic Supervisory Management

HE 125 Occupational Safety 3
SD 101 Supervision: Fundamentals 3
SD 102 Supervision: Techniques 3
SD 103 Issues in Supervision 3
WR 121 English Composition 3
Elective (See program advisor) 3

18

Certificate in Advanced Supervisory Management

BA 101 Introduction to Business 4
BA 224 Human Resource Management 3
HE 125 Occupational Safety 3
MTH 65 Elementary Algebra 4
SD 101 Supervision: Fundamentals 3
SD 102 Supervision: Techniques 3
SD 103 Issues in Supervision 3
SD 104 Supervision: Applied Communication 3
WR 121 English Composition 3

Computer Skills **4**
Select two:
BA 110D Database ..... (2)
BA 110O Windows 95 ..... (2)
BA 110P Powerpoint ..... (2)
BA 110S Spreadsheets ..... (2)

Word Processing **2-3**
Select one:
OA 122 Formatting ..... (2)
OA 201 WordPerfect for Business ..... (3)
OA 201B Intro to WordPerfect w/Windows ..... (2)
OA 202 MS Word for Windows ..... (3)
OA 202A Intro to MS Word ..... (2)
Electives (See program advisor) 9-10

45

Applies toward general education requirements.

BUSINESS TECHNOLOGY

See the individual program listings in the Professional Technical Programs section for Administrative Assistant, Administrative Medical Assistant, Legal Secretary, Medical Transcriptionist, Medical Office Specialist, Office Specialist or Medical Assistant.

CHEF TRAINING

Program Contact:
Scott Anselm

Additional Faculty:
Mark Whitehead

The Chef Training program is an extensive hands-on and theory-based program that prepares the student for a career as a professional chef. In the two-year program, students gain skill in virtually all aspects of food preparation, including pantry, bakery, garde manger, grill, sandwich making, ala carte, quantity food, production, soups, sauces and meat preparation.

Students must be 18 years of age and have a high school diploma or a General Education Development (GED) certificate. Students should possess good basic math and reading skills. They should be able to work under pressure; demonstrate dexterity, physical stamina, concentration and good memory; and be able to work cooperatively with others.

Students should note that this is a complete and comprehensive program based on classical French and European cuisine. All aspects of Culinary Arts are covered, including meats, fish and poultry. Handling and tasting these products is an integral part of many of our

(Continued on next page)

courses. If you have any medical, religious, moral or other reasons that may prevent this, please make an appointment with the program coordinator prior to registering.

In addition to regular college costs, students spend about $350 to purchase uniforms, knives, shoes, books and other equipment. Students should wait until after the first day of class to purchase these items.

LBCC has an outstanding food service facility with a wide variety of modern equipment. The students become skilled at working with virtually all types of standard kitchen equipment and tools. The kitchen provides service for the cafeteria, catering functions, a snack bar and a working sit-down restaurant. By working in this excellent learning environment, students learn to care for and maintain a full-service kitchen.

Associate of Applied Science in Culinary Arts with a Chef Training Option

General Education Requirements 19
See graduation requirements for Associate of Applied Science degree.

Major Requirements 82

Fall - First year
CA 8.310 Culinary Arts Practicum I 7
CA 8.336 Food Service Safety and Sanitation 1
CA 8.337 Station, Tools and Culinary Techniques 3
CA 8.345 Service Techniques 1
CA 8.347 Beverage Server Training 1
*CA 8.354 Banquet and Buffet Lab E ..... (1)

Winter
CA 8.311 Culinary Arts Practicum II 8
CA 8.350 Banquet and Buffet Lab A 1
CA 8.373 Costing 1

Spring
CA 8.312 Culinary Arts Practicum III 8
CA 8.351 Banquet and Buffet Lab B 2

Fall - Second Year
CA 8.321 Adv. Cooking Management I 7
*CA 8.354 Banquet and Buffet Lab E ..... (1)
CA 8.368 Creating the Menu 2
CA 8.409 Meats 3
CA 8.419 Nutrition and Special Diets 1

Winter
CA 8.309 Purchasing for Chefs 2
CA 8.322 Adv. Cooking Management II 7
CA 8.341 Soups and Sauces 3
CA 8.352 Banquet and Buffet Lab C 1
CA 8.418 Beverage Operations 2

Spring
CA 8.323 Adv. Cooking Management III 7
CA 8.353 Banquet and Buffet Lab D 2
CA 8.355 Banquets and Buffet Planning 1
CA 8.414 Garde Manger 3
CA 8.421 International Cuisine 2

Other Required Courses
BA 101 Intro to Business 4
SD 101 Supervision Fundamentals 3
SP1.103 Occupational Speech. ..... (3)

*Optional.
Applies toward general education requirements.
Credits not included in major requirements total.

CHILD AND FAMILY STUDIES

Program Contact:
Beth Hogeland

Additional Faculty:
Sue Doescher

The Family Resources Department offers a one-year certificate and an AAS in Child and Family Studies for students planning to work with young children after completing their program of studies at LBCC. Most graduates of the one-year certificate program enter the field as assistant teachers. The Associate of Applied Science offers graduates more advanced career options.

Students who complete the one-year certificate may become assistant teachers of young children in child care centers, Head Start programs or public schools. They also may become registered family child care providers. Assistant teachers implement daily educational programs planned by the teacher; provide input for purchasing supplies and equipment; maintain the classroom; keep written records; report and record accidents; and communicate with the director and other staff about routines, family concerns, events, problems and maintenance needs. Graduates employed in the public schools may work with students in grades K-12 and with students with learning disabilities and other special needs.

Students entering the one-year certificate program may have completed child care provider trainings and professional technical courses offered through LBCC's Family Resources Department. Combinations of short trainings may be used to challenge courses required in the one-year certificate. For information about parent education, work and family, and child care provider training, see the Family Resources Department in the "Community Outreach" section of this catalog.

Students earning the certificate will complete 46 credit hours of the 90 credit Associate of Applied Science degree in Child and Family Studies. Graduates may also elect to pursue a transfer degree, either the Associate of Science or Associate of Arts in Child and Family Studies, by applying credit hours completed in the certificate to these degrees. Another option is to transfer to a professional technical program at a neighboring community college that also offers early childhood education; Chemeketa Community College has an established program.

The Associate of Applied Science degree is designed for students who plan to enter the workforce upon completing the degree. Two-year degree graduates may become teachers of young children in child care centers, family child care homes, Head Start programs, or parent cooperatives. They plan and implement developmentally appropriate learning experiences in music, science, art, math, and language arts. They also design indoor and outdoor environments, keep records and confer with parents. Graduates may also work as program and social service aides. With experience, they can become case managers and social service workers.

Students entering the AAS program as freshmen, who plan to enroll in at least 12 credits, are asked to join the Human Resources Learning Community. This integrated block of classes gives students the opportunity to get to know others who are interested in working with young children, while completing needed general education courses. Transfer students and students who select Child and Family Studies as a major after their first term may also select the Learning Community. See the "Human Resources Learning Community" section of this catalog for details.

In their second year, students complete general education and program requirements. ED 101, ED 102, ED 103 and HDFS 280 are practical experiences in children's classrooms that give students the opportunity to learn classroom teaching and management skills. LBCC's Family Resource Center and area schools have requirements for safety and health, including inoculations, that must be met before students enroll in practica. Students should work with an advisor, prior to enrolling in practica, to ensure that these requirements are met.

Students who complete the Associate of Applied Science degree may elect to complete additional hours of general education courses and earn an Associate of Arts or Associate of Science transfer degree. This often can be accomplished by completing one additional term of course work.

Associate of Applied Science in Child and Family Studies

General Education Requirements 19

Major Requirements 70

Fall - First Year
HD 110A Career Planning: Child and Family Studies 1
PSY 200 Psychology as a Natural Science 4
WR 115 Intro to Writing ***and***
SS 1.150 Techniques of Studying ..... (4)
or WR 121 English Composition ***and***
+ENG 104 Introduction to Literature: Fiction (6)

Electives 3-6

Winter
CJ 202 Violence and Aggression 3
HD 110B Career Planning 1
HDFS 201 Individual and Family Development .. 3
SOC 206 General Sociology 3
WR 121 English Composition ***or***
WR 122 English Composition 3
Electives 3-4

Spring
HDFS 280 CWE Child and Family Studies 3
PSY 205 Psychology as a Social Science 4
+SP 218 Interpersonal Communication ..... (3)
WR 122 English Composition ***or***
WR 123 English Composition 3

Fall - Second Year
ED 101 Observation and Guidance 3
ED 152 Creative Activities/Dramatic Play 3
ED 282 Working with Children with Special Needs 3

(Continued on next page)

HDFS 225 Child Development 3
MTH 211 Fundamentals of Elementary Mathematics I ..... (4)

Winter
ED 102 Practicum 3
HDFS 248 Learning Experiences with Children ... 3
HDFS 285 Professional Issues in Child/Family Studies 3
Health and PE ..... (3)
Science, Technology and Society ..... (3)

Spring
ED 103 Advanced Practicum 6
ED 179 Literature, Science, and Math 3
HDFS 222 Partner and Family Relationships 3
HDFS 257 Family, School, and Community 3

90

One-Year Certificate in Child and Family Studies

Major Requirements 46

Fall
ED 101 Observation and Guidance 3
ED 152 Creative Activities/Dramatic Play 3
ED 282 Working with Children with Special Needs .. 3
HDFS 225 Child Development 3
SP 218 Interpersonal Communication 3

Winter
ED 102 Practicum 3
ENG 104 Intro to Literature: Fiction 3
HDFS 248 Learning Experiences with Children ... 3
HDFS 285 Professional Issues in Child/Family Studies 3
WR 121 English Composition 3

Spring
ED 103 Advanced Practicum 6
ED 179 Literature, Science and Math 3
HDFS 222 Partner and Family Relationships ***or*** HDFS 257 Family, School and Community 3
MTH 65 Elementary Algebra 4
or MTH 61 Survey of Math Fundamentals ***and*** Math 64 Business Applications of Math Fundamentals 4

46

Applies toward general education requirements.
Credits not included in major requirements total.
+These courses are part of the Human Resources Learning Community. Other courses may substitute.

CIVIL ENGINEERING TECHNOLOGY

Program Contact:
David Kidd

The Civil Engineering Technology certificate program trains students to work as surveyors, drafters, and designers in civil engineering and surveying offices. The program takes four quarters to complete and emphasizes the use of mathematics and computers in engineering work.

Students take course work in math, writing, first aid, computer usage, drafting, CAD, hydraulics, public works, surveying, and engineering mechanics. The curriculum starts with background courses in math, drafting, and CAD and works up to project surveys and public works designs. Students in the program should have a strong aptitude for math and computers, and should expect to work outdoors.

Graduates of the program can expect to work as entry level engineering technicians, or they can continue their education to complete Associate of Science degrees in Engineering Graphics (at Linn-Benton Community College) or Civil Engineering Technology (at Chemeketa Community College).

Certificate in Civil Engineering Technology

Fall
EG 4.411 Drafting I: CAD Basics 4
HE 112 First Aid 1
MTH 97 Practical Geometry 4
WR 121 English Composition 3

Winter
EG 4.421 Drafting II: Applied CAD 4
EG 4.455 Structural Drafting 2
MTH 111 College Algebra 5
WW 6.235 Applied Hydraulics 3

Spring
BA 110S Spreadsheets 2
CEM 263 Plane Surveying 3
EG 4.456 Civil Drafting Lab 1
MTH 112 Trigonometry 5
WW. 6.167 Water Distribution and Collection Lab 1

Fall
CE 6.488 Advanced Surveying and Civil Design .. 4
EG 4.465 Civil Drafting II 3
ME 4.122 Strength of Materials 3

48

COLLISION REPAIR TECHNOLOGY

Program Contact:
Tom Smithburg

The Collision Repair program is designed to develop the skills and knowledge necessary in vehicle collision repair and refinishing. The program provides variable credit, hands-on instruction in an industry-type environment.

Block classes are held Monday through Thursday. Additional technical course work is scheduled on Friday.

Previous collision repair experience may be accredited through a performance test and/or written test.

A variety of collision repair hand tools are required for use in the courses offered. In addition to $300 for books and supplies, students should expect to spend up to $800 for a basic set of tools.

The Collision Repair curriculum leads to a one-year certificate.

One-Year Certificate in Collision Repair Technology

Course sequence required for students beginning fall term.

Major Requirements 52

Fall - First Year
CR 3.511 Auto Collision Basics 12
MTH 20 Basic Math 4
WD 4.151 Welding I 2

Winter
CR 3.512 Auto Collision Procedures 12
HE 125 Occupational Safety 3
WD 4.152 Welding II 2

Spring
CR 3.513 Shop Procedures 12
CR 3.514 Auto Body Electrical Reconstruction 2
WR 115 Intro to Writing 3

52

COMPUTER PROGRAMMING

See Business Computer Systems. Also see Computer Science in the "Transfer Programs" section.

COMPUTER USER SUPPORT

Program Contact:
Peggy Weems

Computer User Support classes prepare students for entry-level positions that provide technical support, assistance, troubleshooting, training and documentation to end users. Common entry-level job titles include End-User Computer Support Specialist, Help Desk Assistant, Computer Lab Assistant, Computer Services Representative, Network Support Assistant, Software Trainer and Documentation Specialist. Students who successfully complete the full two-year curriculum are granted an Associate of Applied Science degree in Computer User Support.

Computer facilities for students in this program are provided by the Forum Computer Lab and the Business Management Department. The lab is well equipped with modern hardware and software. Students have access to networked IBM-compatible personal computers for completing assignments.

Associate of Applied Science in Computer User Support

General Education Requirements 19
See graduation requirements for Associate of Applied Science degree.

Major Requirements 71

Fall - First Year
BA 110O Windows 95 2
BA 110S Spreadsheets 2
BA 215 Survey of Accounting ***or*** BA 211 Principles of Accounting: Financial ***or*** BA 2.530 Practical Accounting I 4
Health or PE ..... (1)
OA 201 WordPerfect for Business ***or*** OA 202 MS Word for Business 3
Science, Technology and Society ..... (3)

(Continued on next page)

Winter
BA 271 Information Technology in Business 3
CS 133V Beg. Programming: Visual BASIC 4
Health or PE ..... (1)
MTH 95 Intermediate Algebra (or higher) ..... (4)
WR 121 English Composition ..... (3)

Spring
BA 110H Advanced DOS/Hard Disk Mgmt. 2
BA 210S Advanced Spreadsheets 2
BA 285 Business Relations in a Global Economy ..... .(3)
CS 145 Hardware/Software Selection/Support 3
WR 227 Technical Report Writing 3
SP 1.103 Occupational Speech ..... (3)

Fall - Second Year
CS 227A Systems Support: Applications 2
CS 244 Systems Analysis and Design 4
CS 279 Network Management (Novell) 3
Health or PE ..... (1)
OA 203 Advanced Word Processing 3

Winter
CS 199 Special Studies: Consulting 2
CS 225 End User Computing Support 4
CS 227H Systems Support: Hardware 2
CS 275 Database Systems: SQL and Oracle 4
Business or Economics electives 3

Spring
CS 226 Advanced Computer User Support 4
CS 227N Systems Support: Network/Operating Systems 2
CS 280 CWE Computer User Support 3
SD 102 Supervision: Techniques 3
❒ Advanced Programming Option
Select one: 4
CS 162 Intro to Computer Science II
CS 233V Advanced Programming: Visual BASIC

90

Applies toward general education requirements. Credits not included in major requirements total.

CRAFTS and TRADES

See Apprenticeship program.

CRIMINAL JUSTICE

Program Contact:
Jackie Turle

The primary objective of the Criminal Justice program is to provide students with a balanced inquiry into the complex process of administering justice in society. A secondary objective is to help students prepare for entry into, and advancement within, a variety of public service careers in the criminal justice field.

Criminal justice majors are presented with an opportunity to gain a basic understanding of criminal behavior theory, of historical and current criminal justice processes, and how to utilize more efficiently and effectively those resources available to the criminal justice system.

Students are given the opportunity to earn credit through the Cooperative Work Experience program (CWE) by active participation in criminal justice agencies, including police departments and sheriff offices, probation and parole offices, jails and other correctional facilities, halfway houses and juvenile group homes.

Students entering LBCC as freshmen, who plan to enroll in at least 12 credits, are strongly advised to join the Human Resources Learning Community. This integrated block of classes give students the opportunity to get to know others who are interested in becoming criminal justice system employees, while also completing needed general education courses. Transfer students and students who select Criminal Justice as a major after their first term may also be able to join the Human Resources Learning Community.

For details on Human Resources Learning Community courses and credits, see the "Transfer Program" section of this catalog. Students unable to participate in the Learning Community should consult an advisor before registering for classes.

Associate of Applied Science in Criminal Justice

General Education Requirements 19

Core Requirements 30
CJ 100 Survey of Criminal Justice Systems 3
CJ 101 Intro to Criminology 3
CJ 110 Intro to Law Enforcement 3
CJ 120 Intro to Judicial Process 3
CJ 130 Intro to Corrections 3
CJ 201 Juvenile Delinquency 3
CJ 202 Violence and Aggression 3
CJ 220 Substantive Law 3
CJ 222 Procedural Law 3
PS 252 Constitutional Law 3

Electives 41

90

One-Year Certificate in Juvenile Corrections

General Education Requirements 7
WR 121 English Composition
MTH 65 Elementary Algebra

Program Requirements 38
CJ 101 Introduction to Criminology 3
CJ 201 Juvenile Delinquency 3
CJ 203 Crisis Intervention 1
CJ 230 Introduction to Juvenile Corrections 3
CJ 232 Introduction to Correctional Casework 3
CJ 280A Cooperative Work Experience 5
HS 205 Youth Addiction 3
PSY 200 Psychology as a Natural Science 4
PSY 205 Psychology as a Social Science 4
PSY 215 Intro to Developmental Psychology 3
PSY 219 Introduction to Abnormal Psychology ... 3
SOC 206 General Sociology 3

45

CULINARY ARTS

See individual program listings under Chef Training and Restaurant and Catering Management.

DATA PROCESSING

See Business Computer Systems and Computer User Support. Also see Computer Science in the "Transfer Programs" section.

DENTAL ASSISTANT

Program Contact:
Sharon Billetter

Additional Faculty:
Linda Kihs

The Dental Assistant program offers technical training to persons who want to work in dental offices or clinics. The program prepares its graduates for employment in dentistry by emphasizing current concepts in clinical dental assisting, developing proper work ethics, particularly in regard to accuracy, safety, conduct on the job, and recognizing the value of continuing education.

The dental assistant is a professional member of the dental health team who works with and assists the dentist in all procedures. Duties and responsibilities include preparing treatment rooms, mixing materials, passing instruments to the dentist, disinfecting and sterilizing instruments, exposing and processing radiographs. Fabricating study models, custom trays and temporary crowns is an integral part of the laboratory procedures. Responsibilities of the office assistant includes scheduling appointments, making financial arrangements.

The Dental Assistant program has special admission requirements and enrollment limits. One class of limited size is accepted fall term. (See Special Admissions Programs in the "Entering College" section of this catalog.) Students unable to meet the required competency level may be advised of other alternatives. All dental assisting classes and supportive classes are presented in a specific sequence. Students must complete these with a "C" or better to remain in the program.

Prior to beginning the Dental Assistant program, students must provide proof of initiation of the hepatitis B vaccination series, MMR vaccination, and a negative tuberculin test.

The program has been designed to allow the student to take the Infection Control Examination administered by DANB at the end of the fall term, when the Infection Control class requirements have been successfully completed.

Clinical and expanded function experience is gained utilizing individual stations with anatomical mannequins. Three fully equipped radiology rooms and dark room processing equipment are available for the student to acquire competence in exposing and developing radiographs. Office records prepares the student

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for managing the business aspects through scheduling appointments, keeping accounts and records, and generating statements with computerized dental software. Practical experience is gained during the summer term when the student is placed in general practice and specialty offices in Linn and Benton counties.

Upon successful completion of the program, a Certificate of Dental Assisting is awarded. The program is accredited by the American Dental Association's Commission on Dental Accreditation and by the United States Department of Education. Graduating students are eligible to take the Dental Assisting National Board and the Radiation Health and Safety Examinations. Successful applicants are awarded a Certified Dental Assisting Certificate and the Oregon Expanded Function and Radiological Proficiency Certificates.

One-Year Certificate in Dental Assistant

Major Requirements 64

Fall
BI 4.220 Survey of the Human Body 3
DA 5.461 Dental Radiology 3
DA 5.494 Clinical Practice I 3
DA 5.484 Dental Materials I 3
DA 5.500 Dental Anatomy/Histology 2
DA 5.501 Dental Infection Control 1
OA 201B Intro to WordPerfect w/Windows 2

Winter
BI 4.221 Basic Dental Sciences 3
DA 5.462 Dental Radiology II 3
DA 5.485 Dental Materials II 3
DA 5.488 Expanded Duties I 2
DA 5.495 Clinical Practice II 4
DA 5.497 Dental Health Education 1
SP 1.103 Occupational Speech 3

Spring
DA 5.453 Dental Pathology/Pharmacology 2
DA 5.463 Dental Radiology III 3
DA 5.489 Expanded Duties II 2
DA 5.491 Dental Office Records 2
DA 5.492 Dental Office Emergencies 2
DA 5.496 Clinical Practice III 3
DA 5.498 Dental Health/Nutrition 1
PSY 101 Psychology and Human Relations 3

Summer
DA 5.510 Office Practicum 8
DA 5.515 Office Practicum Seminar 2

64

Pre-Professional Program

Linn-Benton Community College offers a pre-professional program in dental hygiene in preparation for transfer to the Oregon Institute of Technology Hygiene program. Students should take the following pre-dental hygiene courses to prepare for either OIT's associate or bachelor degree program:

BI 231, 232, 233 Human Anatomy and Physiology
BI 234 Microbiology
CH 121, 122, 123 College Chemistry
MTH 95 Intermediate Algebra
PSY 200 Psychology as a Natural Science
PSY 205 Psychology as a Social Science
WR 121, 122 English Composition
Introductory Computer Science Course

DIGITAL IMAGING AND PREPRESS TECHNOLOGY

Program Contact:
Dennis Bechtel

The exciting field of graphic communications offers countless opportunities in graphic-related occupations in a wide variety of design and production environments.

The Digital Imaging and Prepress Technology program is dedicated to training students for entry-level positions in the printing and publishing fields. The curriculum prepares students for employment with advertising agencies, service bureaus, prepress trade houses and printing/publishing firms. Graduates carry with them an extensive, professional portfolio. The program also is committed to upgrading the skills of those already employed in the industry through evening desktop publishing workshops that offer training in the latest industry-standard imaging software applications.

The curriculum provides learning experiences consistent with the needs of potential employers in the industry. The equipment available for use is similar to that in the offices of printers, designers and the print media throughout the country. Projects in design and imaging provide opportunities for students to deal with clients and to accept responsibility for deadlines and quality control. Cooperative Work Experience (CWE) may offer on-the-job learning experiences.

The graphics facilities are well equipped, are handicapped accessible and include a printing technology classroom, a digital imaging laboratory, and graphic design and fine art studios. Completely equipped darkroom facilities support classes in photography. Display galleries provide space for presenting student work and the work of other artists and designers.

Students in the program should anticipate expenses of $400 per term during the first year and $600 each term during the second year for books, tools, supplies and materials.

Courses are highly sequential. Only those students who follow the recommended sequences for the degree may be assured of completing the program in two years. Students entering at times other than fall term may find it necessary to take more than six terms to complete degree requirements.

The Digital Imaging and Prepress Technology curriculum leads to an Associate of Applied Science degree. (Also see Graphic Design.)

Associate of Applied Science in Digital Imaging and Prepress Technology

General Education Requirements 19
See graduation requirements for Associate of Applied Science degree.
ART 102 Understanding Art and SP1.103 Occupational Speech are required.

Program Requirements 71

Fall - First Year
ART 115 Basic Design I: Composition 4
ART 131 Drawing I 4
GA 3.150 Intro to Printing and Graphic Arts 3
GA 3.151 Intro to Digital Imaging 3
GA 3.152 Art and Copy Preparation 3

Winter
ART 116 Basic Design II: Color 4
GA 3.153 Digital Illustration I 3
GA 3.156 Digital Page Layout I 3
SP 1.103 Occupational Speech ..... (3)

Spring
GA 3.157 Digital Image Manipulation I 3
GA 3.158 Digital Prepress I 3
Health and PE ..... (3)
MTH 61 Survey of Math Fundamentals ..... (3)
WR 121 English Composition ..... (3)

Fall - Second Year
ART 102 Understanding Art ..... (3)
GA 3.154 Digital Illustration II 3
GA 3.159 Digital Prepress II 4
GA 3.160 Digital Page Layout II 3
Science, Technology and Society ..... (3)

Winter
GA 3.161 Digital Image Manipulation II 3
GA 3.162 Multimedia I 3
GA 3.164 Digital Design Principles I 4
Cooperative Work Experience ***or***
Electives 4

Spring
GA 3.163 Multimedia II 3
GA 3.165 Digital Design Principles II 4
GA 3.172 Digital Project Management 4
MTH 64 Business Applications of Math Fundamentals ..... (1)
Cooperative Work Experience ***or***
Elective 3

90

Applies toward general education requirements. Credits not included in major requirements total.

EDUCATIONAL ASSISTANT

Program Contact:
May Garland

The one-year certificate in Educational Assisting is designed to prepare educational assistants to help teachers maximize learning for all students now and in the 21st century. Assistant teachers typically implement daily educational programs planned with the teacher; maintain the environment, supplies, and equipment; maintain records; and participate in staff and team meetings. Graduates may work with students in grades 1-12 and with students with learning disabilities and other special needs.

(Continued on next page)

Full-time students may complete this program in one year. Currently employed educational assistants who are upgrading their skills can complete the program in two years by taking courses in the evenings and summer.

Students who earn the certificate will have completed course work required in the two-year Associate of Arts Oregon Transfer, Associate of Science or Associate of Applied Science degrees in Child and Family Studies. Students interested in working with children eight years of age and younger are encouraged to work with an advisor in Child and Family Studies. Students interested in working with children in grades 4-12 are encouraged to work with an advisor in Education.

One-Year Certificate in Educational Assistant

General Education 16
ENG 104 Intro to Literature: Fiction 3
HDFS 201 Individual and Family Development ***or***
PSY 215 Intro to Developmental Psychology 3
MTH 105 Intro to Contemporary Math ***or***
MTH 211 Fundamentals of Elementary Math I . 4
SP 218 Interpersonal Communication 3
WR 121 English Composition. 3

Program Requirements 21
ED 101 Observation and Guidance.. 3
ED 102 Practicum. 3
ED 103 Advanced Practicum 6
HDFS 248 Learning Experience with Children 3
PSY 212 Psychology of Learning 3
ED 282 Working with Children with Special Needs 3

Suggested Electives 9
Courses beginning with the prefixes HDFS, PSY, ED, HS or SPN will automatically meet this requirement. Selected courses with the CJ or OA prefix may qualify but require apporval of the program advisor. Students wanting to use courses other than those listed above should consult the program advisor.

46

EMERGENCY MEDICAL TECHNICIAN

Program Contact:
Faye Melius

The Emergency Medical Technician (EMT) certificate program provides opportunities for both the rural volunteer and career EMT. LBCC provides training that leads to Oregon state certification as an EMT Basic or an EMT Intermediate.

Currently, the college does not provide paramedic training. We do provide, however, a path for the career EMT who wants to become certified at the paramedic level. All first-year courses required for the associate degree in Emergency Medical Services are offered at LBCC. Because of low demand for many of the EMT courses, these courses are not offered every year. Consequently, it may take more than one year to complete all courses in the certificate program. Please check with the program coordinator for the schedule of courses. Upon completion, the student is eligible for a one-year certificate in EMT. Those planning to continue to the paramedic level must transfer to another participating paramedic training institution to receive their associate degree in EMS.

The EMT certificate program is accredited by the Oregon Health Division's EMS and Trauma Systems Section and the Oregon Department of Education. The curriculum utilized is the National Department of Transportation (USDOT) National Standard Curriculum and the Oregon EMT Intermediate Curriculum.

The EMT program utilizes qualified paramedic instructors for its course content. In addition, we maintain agreements with local fire departments and hospital emergency rooms for field experience and clinical rotation.

EMT students have the opportunity to work in field and clinical settings. Although not required for admission, all students are strongly encouraged to become affiliated with their local fire department or ambulance agency to gain additional skills and experience. Cooperative Work Experience is available for all students in a work in many different areas and in many different roles. Whether they are involved with public paid or volunteer fire departments or work for privately owned businesses, competent EMTs are always in demand. Currently, paid positions are competitive with wages ranging from entry-level minimum wage to EMT-paramedic positions starting at $2,500 per month.

One-Year Certificate in Emergency Medical Technician

Major Requirements 53

Fall
BI 231 Human Anatomy and Physiology 4
EM 5.801 Intro to EMS 3
EM 5.810 EMT Basic: Part A 3
EM 5.811 EMT Basic: Part B 3
MTH 95 Intermediate Algebra 4

Winter
BI 232 Human Anatomy and Physiology 4
EM 5.812 EMT Basic: Part C 4
EM 5.820 Emergency Communication and Patient Transportation 3
MO 5.630 Medical Terminology I 3
WE 1.280 CWE EMT 3
WR 121 English Composition 3

Spring
BI 233 Human Anatomy and Physiology 4
EM 5.825 EMT Rescue 3
EM 5.830 Crisis Intervention 3
PSY 101 Psychology and Human Relations 3
WE 1.280 CWE EMT 3

53

ENGINEERING GRAPHICS TECHNOLOGY

Program Contact:
Tony Shires

Additional Faculty:
David Kidd

The two-year Engineering Graphics Technology program is a technical curriculum designed to assist students in acquiring basic attitudes, skills and knowledge necessary to successfully enter drafting occupations. The first year of study provides a sound, general background, while the second year provides more specific coverage of major occupational areas, such as civil, mechanical, electronic, architectural and technical illustration.

All Engineering Graphics students planning to complete the program within a two-year period are advised, as minimal requirements, to have a ninth-grade reading level and be prepared to register for MTH 97 Practical Geometry. Mathematics are important in this program. Students are required to complete MTH 111T College Algebra: Technical, as well as several engineering courses that require math skills. Students may take general education courses at nights, but most technical courses are offered only during the day. Students may attend on a part-time basis or start in the fall with little difficulty. Students starting winter, spring or summer terms may encounter some difficulty in scheduling sequence courses with prerequisites. Many of the technical courses must be taken in a sequential order.

Engineering Graphics students are expected to achieve a minimum "C" grade in each required course. Required courses are to be taken in the sequence specified in the Engineering Graphics curriculum.

Classes are held in well-equipped classrooms and laboratories. Computer Aided Drafting work stations are used in all courses. Current industry-standard versions of AutoCAD® and Mechanical Desktop® are utilized in engineering graphics classes.

Associate of Applied Science in Engineering Graphics Technology

General Education Requirements 19
See graduation requirements for Associate of Applied Science degree.

Major Requirements 77

Fall - First Year
ART 131 Drawing I 4
EE 6.336 Technical Electricity 3
EG 4.403 Basic Blueprint Reading for Metals 2
EG 4.411 Drafting I: CAD Basics 4
MTH 97 Practical Geometry ..... (4)

Winter
EG 4.423 Architectural Design 1 4
EG 4.421 Drafting II: Applied CAD 4

(Continued on next page)

EG 4.455 Structural Drafting 2
MTH 111T College Algebra: Technical 5
WR 121W English Composition: Workplace .. (3)

Spring
EG 4.431 Drafting III: 3-D CAD 4
EG 4.433 Production Methods 4
SP 112 Introduction to Persuasion ..... (3)
CWE 1.280R Cooperative Work Experience 3

Fall - Second Year
EG 4.451 Advanced Drafting I: Solids 4
EG 4.443 Schematics 4
EG 4.445 Surveying/Civil Drafting 4
ME 4.122 Strength of Materials 3
Cultural Diversity and Global Awareness ..... (3)

Winter
EG 4.441 Advanced Drafting II: Surfaces 4
EG 4.453 Customizing CAD for Productivity 4
EG 4.465 Civil Drafting II 3
WR 227 Technical Report Writing 3
Science, Technology and Society ..... (3)

Spring
EG 4.461 Advanced Drafting III: Rendering 4
EG 4.463 Architectural Design II 4
EG 4.467 Technical Project 3
HE 125 Occupational Safety ..... (3)

98

Applies toward general education requirements.
Credits not included in major requirements total.

ENGINEERING SYSTEMS TECHNOLOGY

Program Contacts:
Sam Hoskinson, John Sweet

Additional Faculty:
Albert Baily, Jeffrey Franzone

The Engineering Systems Technology (EST) Department offers a two-year program that prepares students for occupations as electronics technicians, maintenance technicians or for further education. Departmental course work includes DC and AC Circuit Analysis, Semiconductor Devices, Mechanical Skills and Concepts, Pneumatics and Fluid Power, Programmable Logic Controllers, Analog Circuits, Operational Amplifiers, Integrated Systems, Combinational and Sequential Logic Circuits, Microprocessors, and Industrial Motor and Process Controls. These courses are approximately half theoretical (lecture) and half practical (lab) in content. Department courses and instructional techniques are continually reviewed to assure that they are meeting the needs of both student and industry.

The department has three labs with a combined area of more than 6,000 square feet. The labs are equipped with industrial-quality instruments and work stations for the students.

LBCC has an active placement service, and the department faculty and advisory committee members also are active in promoting good industrial relations and seeking out prospective employers for LBCC graduates. Some of the companies employing former students are: Tektronix, Intel, Applied Theory, Hewlett-Packard, White's Electronics, General Instruments, City of Corvallis, General Technology and GE Medical Systems.

Other options available include further education at the Oregon Institute of Technology (OIT). An agreement with OIT allows an LBCC EST graduate to enter OIT and pursue the Bachelor of Science in Electronic Engineering Technology (BSEET). The BSEET program provides additional training for an engineering technologist-type assignment in industry. This degree may be pursued either at Klamath Falls or at OIT's Portland satellite campus.

Students entering LBCC's Engineering Systems Technology program must be prepared to enroll in MTH 112 Trigonometry and WR 121 English composition in fall term of the first year. Students are expected to have 12th-grade reading and communication abilities and the motivation to become involved in an increasingly complex technical field. Students are expected to achieve a minimum "C" grade in each required sequential electronics course.

The Engineering Systems Technology curriculum leads to an Associate of Applied Science degree. The EST program prepares the student for Certified Electronics Technician (CET) certification. The CET exam is administered locally by ISCET and is available at LBCC.

Associate of Applied Science in Engineering Systems Technology

General Education Requirements 19
See graduation requirements for Associate of Applied Science degree.
SP 1.103 Occupational Speech, WR 121W Composition: Workplace, and HE 125 Occupational Safety are required.

Major Requirements 77

Fall - First Year
EE 6.320 DC Circuit Analysis 5
EE 6.327 Mechanical Skills and Concepts 3
MTH 112 College Trigonometry ..... (4) 1
(Four math credits apply toward general education requirements. One credit applies toward major.)

Winter
EE 6.321 AC Circuit Analysis 5
EE 6.328 Pneumatics and Fluid Power 3
PH 201 General Physics 5

Spring
EE 6.322 Semiconductor Devices 5
EE 6.329 Programmable Logic Controllers 3
PH 202 General Physics 5

Fall - Second Year
EE 6.333 Analog Circuits 5
EE 6.337 Technical Computer Practices 3
EE 6.346 Combinational Logic Circuits 5
WR 227 Technical Report Writing 3

Winter
EE 6.334 Operational Amplifiers 5
EE 6.338 Industrial Motor Controls 3
EE 6.347 Sequential Logic Circuits 5

Spring
EE 6.335 Integrated Systems 5
EE 6.339 Industrial Process Controls 3
EE 6.348 Basic Microprocessors 5

96

Applies toward general education requirements.
Credits not included in major requirements total.

FARRIER SCIENCE

Program Contact:
Linda Versteeg

Additional Faculty:
Larry Bewley

Dates for Farrier School terms are:

Fall Term 1998 ..... Sept. 7-Dec. 10*
Winter Term 1999 ..... Jan. 4-April 8*
Spring Term 1999 ..... April 19-July 22*

The 14-week program provides comprehensive training in horseshoeing and basic forging. Training may be sought by those engaged in farming or related occupations or by those who wish to operate a part-time or full-time horseshoeing business. The Farrier Science curriculum leads to a certificate. Advanced instruction is available for those who have received a certificate in Farrier Science.

The program is located in Manchester Arena on the Oregon State University campus. The Farrier Science program maintains an active association with Oregon State University Animal Science and Veterinary Medicine departments. Instruction is provided in one of the newest and best equipped farrier training facilities in the western United States. Students also participate in field trips to shoe horses in realistic work settings. Class sessions last from 8 a.m. to 4 p.m. daily, Monday through Friday. Admission is on a first-come, first-served basis and early application is advised.

In addition to books and supplies, students should expect to spend about $800–$850 on a personal set of tools.

Two tuition grants of $100 each are available each term for Farrier School students. Applicants who want to be considered for a grant should address a letter to the attention of the program contact and attach their admission application. Grants are awarded based on individual needs of students and are used to pay $100 of their tuition.

*Depending on space availability, a limited number of new students may be accepted to the program during the mid-point of the fall and winter terms. Applicants for these dates should clearly state their request for a mid-term starting date on their admission application. Mid-point starting and ending dates are determined on an individual-term basis.

Certificate in Farrier Science

Major Requirements 23
BA 2.123 Entrepreneurship for the Farrier 1
FA 8.200 Farrier Science 22

23

(Continued on next page)

GRAPHIC DESIGN

Program Contact:
John Aikman

The exciting field of graphic communications offers countless opportunities in graphic-related occupations in a wide variety of design and production environments.

The Graphic Design program is dedicated to training students for entry-level positions in the design, illustration, printing and publishing fields. The curriculum prepares students for employment with advertising agencies and in-house graphic design departments as graphic designers and/or illustrators or as self-employed free-lance graphic artists.

Emphasizing an integrated approach in which the Fine Arts, Digital Imaging and Graphic Arts faculty work together, students are immersed in both the creative demands of problem solving and the technical demands involved in producing the finished product. Graduates carry with them an extensive, professional portfolio.

The curriculum provides learning experiences consistent with the needs of potential employers in the industry. The equipment available for use is similar to that in the offices of printers, designers, illustrators and the print media throughout the country. Projects in design and imaging provide opportunities for students to deal with clients and to accept responsibility for deadlines and quality control. Cooperative Work Experience (CWE) may offer on-the-job learning experiences.

The graphics facilities are well equipped, are handicapped accessible and include a printing technology classroom, a Macintosh-equipped electronic imaging laboratory, and graphic design and fine art studios. Completely equipped darkroom facilities support classes in photography. Display galleries provide space for presenting student work and the work of other artists and designers.

Students in the program should anticipate expenses of $400 per term during the first year and $600 each term during the second year for books, tools, supplies and materials.

Courses are highly sequential. Only those students who follow the recommended sequences for the degree may be assured of completing the program in two years. Students entering at times other than fall term may find it necessary to take more than six terms to complete degree requirements.

The Graphic Design curriculum leads to an Associate of Applied Science degree. (Also see the Digital Imaging and Prepress Technology.)

Associate of Applied Science in Graphic Design

General Education Requirements 19
See graduation requirements for Associate of Applied Science degree.
ART 206 Survey of Art History and SP1.103 Occupational Speech are required.

Program Requirements 89

AA 221 Graphic Design I	4
AA 222 Graphic Design II	4
AA 223 Graphic Design III	4
AA 224 Typographical Design I	4
AA 225 Packaging and 3-D Design	4
AA 226 Typographical Design II	4
AA 228 Portfolio Prep. and Prof. Practices	3
AA 237 Illustration I	4
AA 238 Illustration II	4
AA 239 Illustration III	4
ART 115 Basic Design: Composition	4
ART 116 Basic Design: Color	4
ART 131 Drawing I	4
ART 132 Drawing II	4
ART 133 Drawing III	4
ART 204 Survey of Art History	3
ART 205 Survey of Art History	3
GA 3.150 Intro to Printing and Graphic Arts	3
GA 3.151 Intro to Digital Imaging	3
GA 3.152 Art and Copy Preparation	3
GA 3.153 Digital Illustration I	3
GA 3.156 Digital Page Layout I	3
GA 3.157 Digital Image Manipulation I	3
GA 3.158 Digital Prepress I	3
PHO 261 Intro to Photography	3

108

HEAVY EQUIPMENT MECHANICS/DIESEL

Program Contact:
Allan Jackson

Additional Faculty:
Mike Henich, Bryan Schiedler

The curriculum of the Heavy Equipment Mechanics/Diesel program is designed to give the student a balance of theory and practical experience gained by diagnosing, servicing, repairing and rebuilding components and live equipment.

Diesel technicians repair and maintain diesel engines, which power railroad trains; ships; generators; and construction, highway and farm equipment. To become a diesel technician, a student should have a mechanical aptitude and a knack for shop work, mathematics and science. Being able to read with understanding also is essential because considerable time is spent in reading service manuals.

Students may be admitted to advanced standing upon confirmation of appropriate education or experience, which is evaluated through transcripts, work experience and competence examination. Permission of the division director is required to gain advanced standing.

The Heavy Equipment Mechanics/Diesel program supports student participation in Postsecondary Agricultural Student (PSA) and Vocational Industrial Clubs of America (VICA), and student competition in the United States Skills Olympics (USSO). Funds are made available to pay students cost of travel, lodging and entry fees in the annual state skills contest. Any student who earns a first place at state level also will have expenses paid to participate in the national competition.

In addition to the usual books and supplies, students should expect to spend about $550 for a personal set of diesel mechanic hand tools.

Upon completing the program, the student may gain employment in service departments of distributors and dealers that sell diesel-powered autos, trucks, and farm and construction equipment. Bus lines, railways, and truck and marine industries also employ diesel technicians. Electric power plants, local industries, and both state and federal government have a great need for trained technicians. Starting salaries range from $1,300 to $2,500 per month.

Mechanical Processes I, II and III are required for all Heavy Equipment Mechanics/Diesel majors and must be taken concurrently with their major field of study. Course content may be challenged for full or partial credit. Students also can improve their skills through laboratory experience in HV 3.131 Service and Repair Practices.

The Heavy Equipment Mechanics/Diesel curriculums lead to an Associate of Applied Science degree or a two-year certificate.

Associate of Applied Science in Heavy Equipment Mechanics/Diesel

General Education Requirements 19
See graduation requirements for Associate of Applied Science degree.

Major Requirements 81

Fall - First Year

HE 125 Occupational Safety	(3)
HV 3.295 Power Train Systems	10
*HV 3. 307 Mechanical Processes I	2
WD 4.151 Welding I	2

Winter

HV 3.296 Steering/Suspension/Braking Systems	10
*HV 3.308 Mechanical Processes II	2
MTH 61 Survey of Math Fundamentals	(3)
MTH 63 Industrial Shop Math	(1)
WD 4.152 Welding II	2
WR 121 English Composition	(3)

Spring

HV 3.131 Heavy Equip. Service and Repair ***or*** CWE ***or*** HV 3.137 Agricultural Machinery Service and Repair	1
HV 3.297 Electrical and Fuel Systems	10
*HV 3.309 Mechanical Processes III	2

Fall - Second Year

*HV 3.128 Pneumatic Braking and Fuel Injection Systems	10
*HV 3.303 Mobile A/C and Comfort Systems I	3

Winter

HV 3.129 Heavy Equip./Diesel Engines	10
HV 3.131 Heavy Equip. Service and Repair ***or*** CWE ***or*** HV 3.137 Agricultural Machinery Service and Repair	1
*HV 3.134 Basic Hydraulics	3
Cultural Diversity and Global Awareness	(3)

Spring

*HV 3.130 Heavy Equip./Diesel Tune-Up	10
HV 3.131 Heavy Equip. Service and Repair ***or*** CWE ***or*** HV 3.137 Agricultural Machinery Service and Repair	1
*HV 3.132 Advanced Mobile Hydraulics	2
*SP 1.103 Occupational Speech	(3)
Science, Technology and Society	(3)

100

(Continued on next page)

Two-Year Certificate in Heavy Equipment Mechanics/Diesel

HV 3.131 Heavy Equip. Service and Repair is recommended every term.

Major Requirements 92

Fall - First Year
HE 125 Occupational Safety 3
HV 3.295 Power Train Systems 10
*HV 3.307 Mechanical Processes I 2
WD 4.151 Welding I 2

Winter
HV 3.296 Steering/ Suspension/Braking Systems 10
*HV 3.308 Mechanical Processes II 2
MTH 60 Intro to Algebra 4
WD 4.152 Welding II 2

Spring
HV 3.297 Electrical and Fuel Systems 10
*HV 3.309 Mechanical Processes III 2
WR 115 Intro to Writing 3

Fall - Second Year
*HV 3.128 Pneumatic Braking and Fuel Injection Systems 10
*HV 3.303 Mobile A/C and Comfort Systems I ... 3

Winter
HV 3.129 HE/Diesel Engines 10
HV 3.131 Service and Repair Practices *or* CWE .. 1
*HV 3.134 Basic Hydraulics 3

Spring
*HV 3.130 HE/Diesel Tune-Up 10
*HV 3.132 Advanced Mobile Hydraulics 2
*SP 1.103 Occupational Speech 3

92

* Courses marked with an asterisk are offered that term only.
Applies toward general education requirements.
Credits not included in major requirements total.

HORTICULTURE

Program Contact:
Gregory Paulson

The Horticulture curriculums are based on necessary competencies identified by industry and reviewed by advisory committees. Students learn facts and skills necessary for entry-level technical employment.

Neither the certificate nor the Associate of Applied Science degree programs have official prerequisites. Students do take a variety of science-oriented courses, however, and are expected to have basic mathematical skills. In order to graduate with an AAS degree, each student needs to complete a four-credit algebra course while at LBCC.

All of the Horticulture program classes are offered during the day and part-time enrollment is common. Many students start in the middle of the academic year, but two full years are required to complete the AAS degree. If students attend part time, they will need to attend longer to complete the program. While not every course listed in the Horticulture program must be taken in the order shown in the curriculum, some courses are offered only every other year. Consequently, students need to take those particular courses in the order they are offered.

Instructional facilities, including a greenhouse, labs, vegetable and ornamental gardens, a land lab and the campus grounds, are used for demonstrations, skill building and evaluation.

The Horticulture curriculums lead to an Associate of Applied Science degree or a one-year certificate.

Associate of Applied Science in Horticulture

General Education Requirements 19
See graduation requirements for Associate of Applied Science degree.

Major Requirements 71

Fall - First Year
AG 8.125 Soils I 3
AG 8.165 Plant Science 4
AG 111 Computers in Agriculture 3
HT 8.140 Landscape Maintenance 3

Winter
AG 8.126 Soils II 3
AG 8.138 Irrigation Systems 3
HT 8.102 Career Exploration: Horticulture 1
HT 8.135 Turf Management I 3

Spring
CSS 105 Soils and Man 3
HT 8.136 Turf Management II 3
HT 8.168 Plant Identification 3

Fall - Second Year
AG 8.131 Pest Management 3
HT 8.169 Tree Identification 3
*Laboratory Science 4
SPN 101 First-Year Spanish I 4

Winter
AG 8.130 Agricultural Chemicals 4
HT 8.132 Arboriculture I 3
HT 8.141 Landscape Planning 3
*Laboratory Science 4

Spring
HE 252 First Aid ..... (3)
HE 261 CPR 1
HT 8.133 Arboriculture II 3
HT 8.137 Plant Propagation 4
CWE Horticulture 3

Electives 8
Additional courses or approved CWE.
Recommended: Business, math, science, industrial, communication skills, drafting, graphics, Spanish.

* Biological or Physical Science.
Applies toward general education requirements.
Credits not included in major requirements total.

98

One-Year Certificate in Horticulture

Major Requirements 36

Fall
AG 8.125 Soils I 3
AG 8.165 Plant Science 4
AG 111 Computers in Agriculture 3
HT 8.140 Landscape Maintenance (offered alternate years) *or* HT 8.169 Tree Identification (offered alternate years) 3

Winter
AG 8.126 Soils II 3
AG 8.138 Irrigation Systems 3
HT 8.102 Career Exploration: Horticulture 1
HT 8.132 Arboriculture I (offered alternate years) *or* HT 8.135 Turf Management I (offered alternate years) 3

Spring
CSS 105 Soils and Man 3
HT 8.133 Arboriculture II (offered alternate years) *or* HT 8.136 Turf Management II (offered alternate years) 3
HT 8.137 Plant Propagation 4
HT 8.168 Plant Identification 3

Math and writing courses at appropriate level (based on Placement Test scores).....7

43

LEGAL SECRETARY

Program Contact:
Sue Trautwein

Graduates of the Legal Secretary program may expect to work in the court system for attorneys or for large corporations that have legal departments. Course work emphasizes legal terminology; preparing legal documents; and developing good word processing, English and communication skills. As a part of the program, students work for 240 hours in a legal-related office. The Legal Secretary program represents exciting and challenging opportunities for secretaries. Students training in this field can easily enter other secretarial areas as well. Skills classes are taught in self-paced laboratory classrooms. New technology is introduced both through concepts courses and through hands-on experience with computer applications.

The Legal Secretary program is designed to be completed in two years. This assumes, however, that the entering student already knows how to type by touch and has been placed at or above the following levels on the college Placement Test: WR 121 English Composition and MTH 65 Elementary Algebra. It is advisable to take the Placement Test as early as possible. If developmental course work is required, we recommend that it be taken summer term prior to enrolling in the regular degree program. Pre-training might include some or all of the following courses: *OA 121 Keyboarding (2 credits) and/or OA 123A Typing: Skillbuilding (2 credits); RD 1.175 or RD 1.176 Reading Improvement I or II (3 credits); EN 1.133 The Write Course (4 credits) and/or WR 115 Intro to Writing (3 credits); MTH 20 Basic Mathematics and/or MTH 60 Intro to Algebra (4 credits).*

Students should work with an advisor to interpret the test scores and get help in planning their program.

Associate of Applied Science in Legal Secretary

General Education Requirements... 19
See graduation requirements for Associate of Applied Science degree.

Major Requirements 77-78

Fall - First Year
BA 101 Intro to Business 4
OA 2.500B Business Orientation: Legal 1
OA 2.515 Business Math with Calculators 2
OA 122 Formatting 2
OA 201 WordPerfect for Business 3
WR 121W English Composition: Workplace .. (3)

(Continued on next page)

Winter
BA 2.518 Commercial Law 3
BA 210 Software Applications 4

MTH 65 Elementary Algebra ..... (4)
OA 2.557 Adv. Business Math Applications 1
OA 2.588 Editing Skills for Info Proc 3
OA 2.652 Filing 1

Spring
OA 2.527 Transcribing Machines 3
OA 2.551 Office Communications 3
OA 2.616 Job Success Skills: Legal 1
OA 2.675 Legal Practices, Procedures and Terminology I 3
OA 203 Advanced Word Processing 3
SP 218B Interpersonal Communications: Business (3)

Fall - Second Year
BA 2.530 Practical Accounting I 4
OA 2.645 Administrative Procedures I 6
OA 2.676 Legal Practices, Procedures and Terminology II 3
OA 124 Typing: Speed and Accuracy Development ... 3

Winter
OA 2.613 CWE for Office Professionals 4
OA 2.646 Administrative Procedures II 4
OA 2.662 Legal Transcription 3
OA 2.683 Computerized Records Management ... 3
*PE 231 Lifetime Wellness ..... (3)

Spring
BA 2.684 Computerized Accounting 3
BA 285 Business Relations/Global Economy (3)
or EC 115 Outline of Economics (3) 1
or BA 224 Human Resource Management ..... (3)
OA 2.613 CWE for Office Professionals 4
Science, Technology and Society ..... (3)
OA 2.682 Desktop Publishing 3

96-97

*HE 250 Personal Health and HE 252 First Aid and/or PE activity courses may be substituted for Lifetime Wellness.
Applies toward general education requirements. Credits not included in major requirements total.

MACHINE TOOL TECHNOLOGY

Program Contact:
Tony Shires

The Machine Tool Technology curriculum is designed to develop skills in a wide variety of machining processes. These include the operation of the drill press, engine lathe, vertical and horizontal milling machine, CNC mills and lathes, surface and cylindrical grinders, tool and cutter grinders and other machines associated with the machinist's trade.

Students learn the basics of transforming raw material into finished parts. They study the principles of blueprint interpretation, material selection, operational sequence, machine operation, metal removal rates, deburring and final dimensional inspection.

Students work through a sequence of assignments ranging from simple exercises to complex assemblies. Hands-on experience, lecture and discussion, textbooks, manuals, audio-visual aids and field trips are employed throughout. The "people skills" in finding and keeping a job are emphasized continually.

The lab facilities and machine selection are designed to allow comprehensive instruction in the basic tools of the machinist's trade. Care has been taken to allot enough time in actual machine operation for the student to become competent. Students need not have their own tools to enter the program; however, they are urged to purchase tools before graduation and employment.

Prior machining experience is optional. It is recommended, however, that the student have mechanical interest or some demonstrated aptitude toward manipulative skills.

The Machine Tool Technology program supports student participation in Vocational Industrial Clubs of America (VICA) and the Society of Manufacturing Engineers (SME). These associations provide for professional development and skills competition.

The Machine Tool Technology curriculum leads to a one-year certificate, which certifies competency as an entry-level machinist.

Machine Tool Technology One-Year Certificate

Fall
EG 4.403 Basic Blueprint Reading for Metals 2
HE 125 Occupational Safety 3
IN 3.4421 ITS Machine Tool 1
MA 3.396 Operations and Processes I 3
MA 3.422 Manufacturing Lab I 5
MTH 61 Survey of Math Fundamentals 3

Winter
MA 3.397 Operations and Processes II 2
MA 3.420 Numerical Control: Mill 3
MA 3.423 Manufacturing Lab II 4
MA 3.425 Machinery's Handbook I 2
ME 3.446 Metals Investigation and Eval. 2
MTH 62 Occupational Trigonometry 1
WR 115W Introduction to Writing: Workplace .. 3

Spring
MA 3.398 Operations and Processes III 2
MA 3.424 Manufacturing Lab III 4
MA 3.426 Machinery's Handbook II 2
MA 3. 421 Numerical Control: Lathe 3
SP 1.103 Occupational Speech 3
WD 4.151 Welding I 2

51

MEDICAL ASSISTANT

Program Contact:
Peggy Krueger

The Medical Assistant program is a two-year program in which students are trained in office administrative and medical skills. Some classes may be held off campus in a medical facility. A supervised externship is required in a participating health care facility. New technology is introduced through concepts courses and through hands-on experience with modern equipment.

Typical physical demands and working conditions for medical assistants: Requires full range of motion including ability to lift/carry/push/pull/move heavy objects, patients, supplies and equipment (may be up to 50 lbs. or more); requires full range of manual and finger dexterity and eye-hand coordination. There are prolonged periods of standing and walking; requires reaching, stooping, bending, kneeling, crouching, stretching and squatting. Requires ability to distinguish letters and symbols, corrected normal vision and normal hearing to distinguish changes in patient's condition; requires absence of color blindness.

Graduates are eligible to take the national certifying examination given through the American Association of Medical Assistants (AAMA). Successful completion of the examination gives the medical assistant the credentials of a Certified Medical Assistant.

Students successfully completing the full two-year curriculum are granted an Associate of Applied Science degree.

The Medical Assistant program is designed to be completed in two years. This assumes, however, that the entering student already knows how to type by touch and has been placed at or above the following levels on the College Placement Test: WR 121 English Composition and MTH 60 Intro to Algebra. It is advisable to take the Placement Test as early as possible. If developmental course work is required, we recommend that it be taken the summer term prior to enrolling in the regular degree program. Pre-training might include some or all of the following courses:
OA 121 Keyboarding (2 credits), RD 1.175 or RD 1.176 Reading Improvement I or II (3 credits), EN 1.133 The Write Course (4 credits), MTH 20 Basic Mathematics (4 credits), MTH 60 Intro to Algebra (4 credits).

All students enrolling in the program must have completed the hepatitis B immunizations series prior to enrollment in the phlebotomy class. It is the student's responsibility to obtain and pay for the necessary immunizations.

Students should work with an advisor to interpret the test scores and get help in planning their program.

The ability to work well with people is the primary requisite for wanting to become a medical assistant.

Associate of Applied Science in Medical Assistant

General Education Requirements 19
See graduation requirements for Associate of Applied Science degree.

Major Requirements 75

Fall - First Year
MO 5.630 Medical Terminology I 3
OA 2.500C Business Orientation/Medical 1
OA 2.515M Business Math with Calculator: Medical 2
OA 2.588 Editing Skills for Info. Proc. 3
OA 2.652 Filing (5 wks) 1
OA 123A Typing Skillbuilding (5 wks) 2
OA 201 WordPerfect for Business ***or***
OA 202 MS Word for Business 3

(Continued on next page)

Winter
BA 110S Spreadsheets (second 5 wks) 2
BA 110O Windows 95 (first 5 wks) 2
BI 4.220 Survey of the Human Body 3
MO 5.414 Drug Classifications and Names 2
OA 2.527 Transcribing Machines 3
OA 2.565 Coding and Insurance Procedures 3
OA 2.671 Medical Law and Ethics 2

Spring
BA 224 Human Resources Management *or*
BA 285 Business Relations: Global Economy . (3)
BA 2.530 Practical Accounting I 4
HE 252 First Aid ..... (3)
Science, Technology and Society ..... (3)
OA 2.616 Job Success Skills/Medical 1
OA 2.656M Info. Processing Practicum: Med. Reports 3

Fall - Second Year
MO 5.550 Human Relations in the Medical Office 3
MO 5.625 Clinical Office Procedures I 3
OA 2.524 Medical Transcription I 3
OA 2.551 Office Communications 3
OA 2.670 Medical Office Procedures 3

Winter
MO 5.626 Clinical Office Procedures II 3
MO 5.640 Medical Assisting Externship I 3
MO 5.650 Basic Electrocardiogram Techniques ... 1
MO 5.655 Phlebotomy 2
OA 2.647 High Performance Office 3
OA 2.673 Computerized Medical Accounts Rec. . 3

Spring
MO 5.641 Medical Assisting Externship II 6
MTH 61 Survey of Math Fundamentals ..... (3)
OA 2.557 Adv. Business Math Applications
(5 wks) ..... (1)
SP 218 Interpersonal Communications ..... (3)
WR 121 English Composition ..... (3)

95

Applies toward general education requirements.

MEDICAL OFFICE SPECIALIST

Program Contact:
Gail Dameworth

The Medical Office Specialist is a one-year program preparing people for entry-level positions as records clerks, ward clerks or receptionists in medical offices or hospitals. The course work lays the foundation for a two-year program for those students who want to continue their education.

Skills classes are taught in self-paced laboratory classrooms. New technology is introduced both through concepts courses and through hands-on experience with modern equipment.

The Medical Office Specialist program is designed to be completed in one year. This assumes, however, that the entering student already knows how to type by touch and has been placed at or above the following levels on the Placement Test: WR 115 Intro to Writing and MTH 60 Intro to Algebra. It is advisable to take the Placement Test as early as possible. If developmental course work is required, we recommend that it be taken the summer term prior to enrolling in the regular certificate program. Pre-training might include some or all of the following courses: *OA 121 Keyboarding (2 credits), RD 1.175 or RD 1.176 Reading Improvement I or II (3 credits), EN 1.133 The Write Course (4 credits), MTH 20 Basic Mathematics (4 credits).*

Students should work with an advisor to interpret the test scores and get help in planning their program.

One-Year Certificate in Medical Office Specialist

Major Requirements 50

Fall
BA 110O Windows 95 (5 wks) 2
MO 5.630 Medical Terminology I 3
OA 2.500C Business Orientation: Medical 1
OA 2.513 Data Entry Skillbuilding (5 wks) 2
OA 2.515M Business Math with Calculators:
Medical 2
OA 2.588 Editing Skills for Info. Processing 3
OA 122 Formatting (second 5 wks) 2
OA 123A Typing: Skillbuilding (5 wks) 2

Winter
MO 5.414 Drug Classifications and Names 2
MO 5.631 Medical Terminology II 3
OA 2.527 Transcribing Machines 3
OA 2.652 Filing (5 wks) 1
OA 2.656M Info. Processing: Med. Reports 3
OA 2.671 Medical Law and Ethics 2
OA 201 WordPerfect for Business *or*
OA 202 MS Word for Business 3

Spring
MO 5.632 Medical Terminology III 3
OA 2.524 Medical Transcription I 3
OA 2.565 Coding and Insurance Procedures 3
OA 2.616 Job Success Skills: Medical 1
OA 2.670 Medical Office Procedures 3
OA 2.673 Computerized Med. Accts Receivable .. 3

50

MEDICAL TRANSCRIPTIONIST

Program Contact:
Peggy Lind

The one-year Medical Transcriptionist program prepares people for entry-level positions in transcribing medical records at hospitals and clinics. Emphasis is placed on medical terminology, spelling, English, transcription and word processing skills. Job opportunities are good with pay being above average compared to other secretarial/clerical positions. Medical transcriptionists can easily work part time if they choose to do so.

Skills are taught in self-paced office laboratory classrooms. New technology is introduced both through concepts courses and through hands-on experience with modern equipment.

The Medical Transcriptionist program is designed to be completed in one year. This assumes, however, that the entering student already knows how to type by touch and has been placed at or above the following levels on the Placement Test: WR 115 Intro to Writing and MTH 60 Intro to Algebra. It is advisable to take the college Placement Test as early as possible. If developmental course work is required, we recommend that it be taken summer term prior to enrolling in the regular certificate program. Pre-training might include some or all of the following courses: *OA 121 Keyboarding (2 credits), RD 1.175 or RD 1.176 Reading Improvement I or II (3 credits), EN 1.133 The Write Course (4 credits), MTH 20 Basic Mathematics (4 credits).*

Students should work with an advisor to interpret the test scores and get help in planning their program.

One-Year Certificate in Medical Transcriptionist

Major Requirements 51

Fall
MO 5.630 Medical Terminology I 3
OA 2.500C Business Orientation: Medical 1
OA 2.588 Editing Skills for Info. Processing 3
OA 122 Formatting (first 5 wks) 2
OA 123A Typing Skillbuilding (first 5 wks) 2
OA 123B Advanced Typing Skillbuilding
(second 5 wks) 2
OA 201 WordPerfect for Business 3
WR 1.131 Spelling (may be waived based on
competency exam) 3

Winter
MO 5.414 Drug Classifications and Names 2
MO 5.631 Medical Terminology II 3
OA 2.515C Electronic Calculator (5 wks) 1
OA 2.527 Transcribing Machines 3
OA 2.656M Info. Processing: Medical Reports 3
OA 2.671 Medical Law and Ethics 2
OA 124 Typing: Speed and Accuracy Devel. 3

Spring
BA 110O Windows 95 (5 wks) 2
MO 5.632 Medical Terminology III 3
OA 2.529 Applied Medical Transcription 5
OA 2.616 Job Success Skills: Medical 1
OA 2.652 Filing (5 wks) 1
OA 2.670 Medical Office Procedures 3

51

METALLURGY AND MATERIALS TECHNOLOGY

Program Contact:
Seaton McLennan

Additional Faculty:
Steve Soltesz

The Metallurgy and Materials Technology program offers a two-year Associate of Applied Science degree that prepares men and women for a variety of entry-level positions involving industrial materials. Students have access to state-of-the-art equipment and instrumentation, such as real time data acquisition, statistical process control hardware and software, and a full line of the latest nondestructive testing, digital imaging equipment, and injection molding equipment.

A one-year certificate in Nondestructive Testing is offered in accordance with the American

(Continued on next page)

Society of Nondestructive Testing (ASNT) TC-1A. Preparatory course work for taking QC-1 Inspection examination is included in this program.

Students may choose to emphasize their work at LBCC in occupations involving the extraction, purification, treatment, fabrication, examination and testing of materials; the evaluation of industrial processes; or process and quality control. Students completing prescribed courses may qualify for a certificate of completion according to the American Society of Nondestructive Testing standards. In addition to ASNT, a student may take the Engineering Council for Professional Development (ECPD) examination to obtain the Engineering Technician certificate.

Students wanting to enter the Metallurgy and Materials Technology program should be aware of the variety of jobs available and the requirements necessary for the type of employment for which they intend to qualify. Students may need preparatory classes in math, chemistry and English in order to complete the level of classes required for graduation.

The job market for Metallurgy and Materials Technology graduates is excellent, especially for those willing to relocate. Chances of advancement and retention within the industry are exceptional. Recent salaries range from $18,000 to $40,000 annually, with excellent benefits and educational opportunities.

Career choices include metallurgical technician, metallographer, materials testing technician, radiographer, ultrasonic testing technician, metallurgical technician, metrologist (calibration), spectroscopist (alloy analyst), dimensioning technician, heat treatment technician, penetrant testing technician, magnetic particle testing technician, and research and development.

The Metallurgy Technology program supports student participation in Vocational Industrial Clubs of America (VICA) and student competition in the United States Skills Olympics (USSO). Through student involvement in fund-raising projects, funds are made available to pay student cost of travel, lodging and entry fees in the annual state VICA skills contest. Any student who earns a first place at the state level qualifies for USSO and also will have expenses paid to participate in the national competition.

Associate of Applied Science in Metallurgy and Materials Technology

General Education Requirements 19
See graduation requirements for Associate of Applied Science degree.

Major Requirements 76

Fall - First Year
EG 4.403 Print Reading: Metals 2
GS 104 Physical Science 4
*ME 6.281 Magnetic Particle/Penetrant Testing: Level I & II 3
*ME 6.293 Intro to Metallurgy 4
WD 3.448 Welding Processes 2

Winter
*ME 3.445 Welding Metallurgy II 4
*ME 6.276 Physical Metallurgy 4
*ME 6.282 Ultrasonic/Electromagnetic Testing: Level I 3
*ME 6.298 Metallography I 3
MTH 65 Elementary Algebra ..... (4)

Spring
HE 125 Occupational Safety ..... (3)
*ME 4.120 Fund. of Specification 3
*ME 6.283 Radiographic Testing: Level I 3
*ME 6.299 Metallography II 3
WR 121 English Composition ..... (3)

Fall - Second Year
*CH 113 Technical Chemistry 4
GS 105 Physical Science 4
IN 3.442G ITS or approved CWE 2
*ME 4.122 Strength of Materials 3
*ME 4.161 Materials Testing I 3
Cultural Diversity and Global Awareness ..... (3)

Winter
BA 110O Windows 95 2
BA 110S Spreadsheets 2
*MA 4.130 Machine Processes 2
*ME 4.162 Materials Testing II 3
*ME 6.285 Ultrasonic/Electromagnetic Testing: Level II 4
Science, Technology and Society ..... (3)

Spring
MA 3.418 Geometric Controls 2
*ME 4.163 Materials Testing III 3
*ME 6.284 Radiographic Testing: Level II 4
*ME 6.294 Process Metallurgy 4
* SP 1.103 Occupational Speech ..... (3)

99

One-Year Certificate in Nondestructive Testing

Major Requirements 45

Fall
EG 4.403 Basic Blueprint Reading: Metals 2
HE 125 Occupational Safety 3
ME 6.281 Magnetic Particle/Penetrant Testing: Level I & II 3
ME 6.293 Intro to Metallurgy 4
WD 3.448 Welding Processes 2

Winter
BA 110O Windows 95 2
BA 110S Spreadsheets 2
MA 4.130 Machine Processes 2
*ME 3.445 Welding Metallurgy II 4
*ME 6.282 Ultrasonic/Electromagnetic Testing: Level I 3
WR 115W Intro to Writing: Workplace 3

Spring
MA 3.418 Geometric Controls 2
*ME 6.283 Radiographic Testing: Level I 3
MTH 65 Elementary Algebra 4
*SP 1.103 Occupational Speech 3
*WD 4.251 Fundamentals of Welding Inspection 3

45

Applies toward general education requirements. Credits not included in major requirements total.
* Courses marked with an asterisk are offered that term only.

NONDESTRUCTIVE TESTING

See Metallurgy Technology.

NURSING

Program Contact:
Jacqueline Paulson

Additional Faculty:
Vicki Beck, Virginia Brittsan, Rachel Hagfeldt, Judy Kraft, Faye Melius

The associate degree Nursing program is approved by the Oregon State Board of Nursing and fully accredited by the National League for Nursing. This two-year program is open to both men and women and is designed to prepare highly skilled nurses (RN) oriented to patient care. Clinical facilities are the hospitals, nursing homes and health agencies in Linn and Benton counties.

Following acceptance into the Nursing program (See Special Admission Programs in the "Entering the College" section of this catalog), the student must achieve a minimum "C" grade in each required course to be taken in the specified sequence. Permission to continue in the Nursing program with an incomplete in any required course will be considered on an individual basis.

Proficiency in math and chemistry is required for admission to the ADN program. Students with a deficiency will be required to complete CH 112 Chemistry for Health Occupations and MTH 65 Elementary Algebra as program prerequisites. The chemistry course must have been completed within the last five years.

The student is graded in all aspects of the program, including clinical practices. Evening clinicals may be required. The student is expected to participate on a daily basis; absence is made up through agreement with the instructor.

All nursing courses are to be completed at Linn-Benton Community College unless special permission for transfer credit is granted. Related courses may be taken prior to or concurrent with enrollment in the Nursing program.

Students unable to meet the required competency level for the program may be advised of other alternatives to meet their goals. Petitions to complete the Nursing program at a later time will be reviewed by the program coordinator and the Health Occupations director.

The associate degree Nursing curriculum leads to an Associate of Applied Science degree. Graduates are eligible to take the National Council Licensing Examination for Registered Nurse licensing (NCLEX-RN).

The Oregon State Board of Nursing reviews applicants for RN licensure upon completion of LBCC's Nursing program and is responsible for ensuring that approved applicants meet certain criteria regarding issues of substance abuse and some felony convictions. Specific questions regarding these issues should be directed to Suite 465, 800 NE Oregon St. #25, Portland, OR 97232. (503) 731-4745.

(Continued on next page)

Associate of Applied Science in Nursing

General Education Requirements 19
See graduation requirements for Associate of Applied Science degree.
MTH 65 Elementary Algebra is required. One of the following speech classes is required: SP 111, Fundamentals of Speech; SP 112, Introduction to Persuasion; or SP 218 Interpersonal Communication.

Major Requirements 88

Fall - First Year
*BI 231 Human Anatomy and Physiology 4
HDFS 201 Individual and Family Development *or*
PSY 215 Intro to Developmental Psychology 3
NUR 101 Nursing I 9
NUR 121 Drug Administration 2

Winter
*BI 232 Human Anatomy and Physiology 4
*BI 234 Microbiology 4
NUR 102 Nursing II 9
PSY 205 Psychology as a Social Science 4

Spring
*BI 233 Human Anatomy and Physiology 4
FN 225 Nutrition 4
NUR 103 Nursing III 9
NUR 122 Contemporary Nursing I 1

Fall - Second Year
NUR 201 Nursing IV 8
NUR 215 Health and Physical Assessment 3

Winter
NUR 202 Nursing V 9
NUR 222 Contemporary Nursing II 1

Spring
NUR 203 Nursing VI 10

107

*These courses must have been completed within the last five years.

NURSING ASSISTANT

Program Contact:
Missy Dutson

The Nursing Assistant program is a 125-hour course of study preparing students for positions as nursing assistants in nursing homes. Graduates often use this program as a starting point for related health careers. Through classroom lecture and clinical experience under the supervision of a professional nurse, students gain the background needed to care for the convalescent patient or long-term care patient.

Students interested in this program should contact the Health Occupations Office at 917-4510. Instructor permission is required to enroll. Students must show proof of immunizations, TB screening and pass a reading test.

Following completion of the program, the student is eligible for certification through the Oregon State Board of Nursing.

Nursing Assistant*

Major Requirements 8
NU 5.406 Nursing Assistant 8

8

*Prerequisites: Reading test; measles and hepatitis B immunization; negative TB screen.

OCCUPATIONAL SKILLS TRAINING

Program Contact:
Rich Horton

The Occupational Skills certificate program provides the opportunity for students to receive hands-on training in a specific occupational area. This program is designed for students who need classroom instruction plus hands-on, work-based training to be competitively employable. The program is open-entry/open-exit, allowing students to begin their training at any time. Individualized training plans are developed in consultation with the student, work-site trainer, LBCC faculty and program coordinator. Students in this program are required to participate in a supervised and structured work-based training in addition to classroom instruction. The program utilizes community employers to train students for new careers. Qualified students are eligible to receive federal financial aid. A sample of occupational areas in which students can receive training include: activities coordinator, emergency dispatch, chiropractic assistant, environmental technician, locksmith, pest control technician, limited electrical technician, service writer, and collection representative.

One-year Certificate in Occupational Skills Training

General Education Requirements
MTH 60 Introduction to Algebra 4
SP 1.103 Occupational Speech 3
WR 115 Introduction to Writing 3

Program Requirements
Occupational Specific Courses 9-15
Cooperative Work Experience 20-26

45-60

OFFICE SPECIALIST

Program Contact:
Joyce Moreira

Job opportunities are excellent for well-trained office employees. The Office Specialist is a one-year program providing students the opportunity to acquire skills for entry-level positions, such as general clerk, file clerk, receptionist, typist, transcriptionist and word processor. Opportunities for advancement are available with experience and proven aptitude.

The Office Specialist certificate is designed to be completed in one year. This assumes, however, that the entering student already knows how to type by touch and has been placed at or above the following levels on the Placement Test: WR 115 Intro to Writing and MTH 60 Intro to Algebra. It is advisable to take the Placement Test as early as possible. If developmental course work is required, we recommend that it be taken summer term prior to enrolling in the regular certificate program. Pre-office specialist training might include some or all of the following courses: *OA 121 Keyboarding (2 credits), RD 1.175 or RD 1.176 Reading Improvement I or II (3 credits), EN 1.133 The Write Course (4 credits), MTH 20 Basic Mathematics (4 credits).*

Students should work with an advisor to interpret the test scores and get help in planning their program.

One-Year Certificate in Office Specialist

Major Requirements 46

Fall
BA 101 Intro to Business 4
OA 2.500 Business Orientation 1
OA 122 Formatting (first 5 wks) 2
OA 2.652 Filing (5 wks) 1
OA 2.588 Editing Skills for Info. Processing 3
OA 123A Typing Skillbuilding 2
OA 201 WordPerfect for Business 3

Winter
BA 210 Software Applications 4
OA 2.513 Data Entry Skillbuilding (5 wks) 2
OA 2.515 Business Math with Calculators 2
OA 2.527 Transcribing Machines 3
OA 2.683 Computerized Records Management ... 3

Spring
OA 2.551 Office Communications 3
OA 2.579 Integrated Software Applications 3
OA 2.610 Office Procedures 3
OA 2.616 Job Success Skills 1
OA 203 Advanced Word Processing 3
Approved electives (see list below) 3

46

Approved Electives (select a minimum of 3 credits)
BA 2.530 Practical Accounting I 4
BA 2.535 Payroll Accounting 2
BA 2.684 Computerized Accounting 3
BA 110H Adv. DOS and Hard Disk Mgmt. 2
BA 110P Powerpoint 2
OA 123B Advanced Typing Skillbuilding 2
OA 202 MS Word for Business 3
OA 202A Introduction to MS Word 2

OFFICE TECHNOLOGY

See Business Technology.

(Continued on next page)

PARENT EDUCATION, WORK AND FAMILY, AND CHILD CARE PROVIDER TRAINING

The Family Resources Department offers a number of professional technical classes for people who care for and work with children: parent education, work and family, and child care provider training. The content covered in several of these classes is included in the one-year certificate and associate degree programs in Child and Family Studies. Students can begin their professional training by taking non-credit classes and continue by enrolling in certificate and degree programs. Please see the Family Resources Department in the "Community Outreach" section of this catalog.

REFRIGERATION, HEATING AND AIR CONDITIONING

Program Contact:
Dick Abernathy

The Refrigeration, Heating and Air Conditioning (RHAC) program offers many career opportunities for men and women. Students are trained to become skilled specialists who create, install and maintain healthy, comfortable environments for people in almost any structure in which they live, work and play. Special indoor climates must be created and maintained for products, computers, medicine and electronic components. Another vital service is transporting and storing food and other perishables in trucks, trains, ships and aircraft.

The RHAC program includes courses in the terminology and the fundamentals of electrical components and connections. Students learn to read, interpret and work from sketches, layouts and blueprints. Tools, materials and equipment used in the trade are available in the campus lab. Equipment operation and repair diagnosis are emphasized. The curriculum also includes sheet metal work for duct installation and repair. Safety and personal work habits are covered.

The industry is multifaceted, with many areas of expertise required. Customer relations, job scheduling, paper work, ordering parts, inventory and requisitions are included in the two-year program.

The Refrigeration, Heating and Air Conditioning Associate of Applied Science degree program is designed to be completed in two years. This assumes, however, that the entering student has sufficient math and writing skills to be able to enroll in WR 121 English Composition and MTH 60 Intro to Algebra. Students who are placed below these levels may not be able to finish in two years. In addition, it is strongly advised that beginning students be ready to enter, at a minimum, WR 115 Introduction to Writing and MTH 20 Basic Mathematics before attempting the specified program sequence. Students are expected to achieve a minimum "C" grade in each required program course.

A variety of tools and specialized instruments are required. In addition to books and supplies, students should expect to spend about $500 over the two-year period for a personal set of tools.

Job prospects in this field are good. Beginning pay ranges from $8 to $10 per hour. Qualified workers may advance to other positions, with pay ranging from $15 to $24 per hour.

The Refrigeration, Heating and Air Conditioning program supports student participation in Vocational Industrial Clubs of America (VICA) and student competition in United States Skills Olympics (USSO). Through student involvement in fund-raising projects, funds are made available to pay student cost of travel, lodging and entry fees in the annual state VICA skills contest. Any student who earns a first place at the state level qualifies for USSO and also will have expenses paid to participate in the national competition.

The Refrigeration, Heating and Air Conditioning curriculums lead to an Associate of Applied Science degree or a one-year or two-year certificate.

Associate of Applied Science in Refrigeration, Heating and Air Conditioning

General Education Requirements 19
See graduation requirements for Associate of Applied Science degree.

Major Requirements 73

Fall - First Year
HE 125 Occupational Safety ..... (3)
IN 3.442E I.T.S. RHAC 1
MTH 60 Intro to Algebra 4
*RH 3.552 Trade and Electrical Components I 3
*RH 3.580 Intro to Ref/Heat/AC 6

Winter
*RH 3.553 Trade and Electrical Components II .. 3
*RH 3.583 Principles of Refrigeration 6
*RH 3.584 Sheet Metal Basics 4
WD 4.151 Welding I 2

Spring
*RH 3.542 RHAC Graphics 2
*RH 3.585 Principles of Heating 6
*RH 3.586 Mechanical Installation Procedures 4
SP 1.103 Occupational Speech ..... (3)

Fall - Second Year
**RH 3.527 Alternate Energy Sources ..... (3)
*RH 3.588 Pneumatic Controls 4
*RH 3.589 Diagnosis, Service and Repair 6

Winter
MTH 61 Survey of Math Fundamentals ..... (3)
*RH 3.587 Operation Principles of AC and Air Movement 6
*RH 3.590 Control Applications 4
WR 121 English Composition ..... (3)

Spring
MTH 62 Occupational Trigonometry ..... (1)
*RH 3.591 Commercial and Industrial Refrig. 6
*RH 3.592 Systems Design 4
Cultural Diversity and Global Awareness ..... (3)
Technical Electives 2

92

Two-Year Certificate in Refrigeration/Heating/ Air Conditioning

Major Requirements 84

Fall - First Year
HE 125 Occupational Safety 3
IN 3.442E I.T.S. RHAC 1
MTH 60 Intro to Algebra 4
*RH 3.552 Trade and Electrical Components I 3
*RH 3.580 Intro to Ref/Heat/AC 6

Winter
*RH 3.553 Trade and Electrical Components II .. 3
*RH 3.583 Principles of Refrigeration 6
*RH 3.584 Sheet Metal Basics 4
WD 4.151 Welding I 2

Spring
*RH 3.542 RHAC Graphics 2
*RH 3.585 Principles of Heating 6
*RH 3.586 Mechanical Installation Procedures 4
SP 1.103 Occupational Speech 3

Fall - Second Year
RH 3.588 Pneumatic Controls 4
RH 3.589 Diagnosis, Service and Repair 6
WR 115W Intro to Writing: Workplace 3

Winter
*RH 3.587 Operational Principles of AC 6
*RH 3.590 Control Applications 4
RH 3.594 RHAC Skills Lab 2

Spring
*RH 3.591 Commercial and Industrial Refrig. 6
*RH 3.592 Systems Design 4
RH 3.594 RHAC Skills Lab 2

84

One-Year Certificate in Heating

Major Requirements 47

Fall
IN 3.442E I.T.S. RHAC 1
MTH 60 Intro to Algebra 4
*RH 3.552 Trade and Electrical Components I 3
*RH 3.580 Intro to Ref/Heat/AC 6
WR 115W Intro to Writing: Workplace 3

Winter
*RH 3.553 Trade and Electrical Components II .. 3
*RH 3.583 Principles of Refrigeration 6
*RH 3.584 Sheet Metal Basics 4
WD 4.151 Welding I 2

Spring
*RH 3.542 RHAC Graphics 2
*RH 3.585 Principles of Heating 6
*RH 3.586 Mechanical Installation Procedures 4
SP 1.103 Occupational Speech 3

47

* Courses marked with an asterisk are offered that term only.
** Also counts as a program course.
Applies toward general education requirements. Credits not included in major requirements total.

(Continued on next page)

RESTAURANT AND CATERING MANAGEMENT

Program Contact:
Scott Anselm

Additional Faculty:
Mark Whitehead

The Restaurant and Catering Management program is an in-depth, hands-on program especially tailored to the student who wants to own or manage a restaurant or catering operation. The curriculum is demanding in the basic cooking techniques as well as in the fundamentals of money, personnel and facilities management.

Students must be 18 years of age and have a high school diploma or General Education Development (GED) certificate. Students should possess a strong understanding of business math, good communication skills and have a desire to work directly with customers and staff. Students should be able to work under pressure and should demonstrate manual dexterity, physical stamina, concentration, good memory and have a cheerful, friendly, out-going personality. In addition to the regular college costs, students spend about $350 to purchase uniforms, knives, books, shoes and other equipment. Students should wait until after the first day of class to purchase these items.

LBCC has an outstanding food service facility with a wide variety of modern equipment. The students become skilled at working with virtually all types of standard kitchen equipment and tools. The kitchen provides service for the cafeteria, catering functions, a snack bar and a working sit-down restaurant. By working in this excellent learning environment, students learn to care for and maintain a full-service kitchen.

Associate of Applied Science in Culinary Arts with a Restaurant and Catering Management Option

General Education Requirements 19
See graduation requirements for Associate of Applied Science degree.

Major Requirements 86

Fall - First Year
CA 8.310 Culinary Arts Practicum I 7
CA 8.336 Food Service Safety and Sanitation 1
CA 8.337 Station, Tools and Culinary Techniques 3
CA 8.345 Service Techniques 1
CA 8.347 Beverage Server Training 1
*CA 8.354 Banquet and Buffet Lab E ..... (1)

Winter
CA 8.311 Culinary Arts Practicum II 8
CA 8.350 Banquet and Buffet Lab A 1
CA 8.373 Costing 1

Spring
CA 8.312 Culinary Arts Practicum III 8
CA 8.351 Banquet and Buffet Lab B 2

Fall - Second Year
CA 8.321 Adv. Cooking Management I 7
*CA 8.354 Banquet and Buffet Lab E ..... (1)
CA 8.368 Creating the Menu 2
CA 8.409 Meats 3
CA 8.419 Nutrition and Special Diets 1

Winter
CA 8.309 Purchasing for Chefs 2
CA 8.322 Adv. Cooking Management II 7
CA 8.341 Soups and Sauces 3
CA 8.352 Banquet and Buffet Lab C 1
CA 8.418 Beverage Operations 2

Spring
CA 8.353 Banquet and Buffet Lab D 2
CA 8.355 Banquets and Buffet Planning 1
CA 8.421 International Cuisine 2
**WE 1.280 CWE Management Project 6

Other Required Courses
BA 2.530 Practical Accounting I 4
BA 101 Intro to Business 4
BA 223 Principles of Marketing 3
SD 101 Supervision Fundamentals 3
SP 1.103 Occupational Speech ..... (3)

104

* Optional.
** May be taken any term following completion of first-year requirements.
Applies toward general education requirements. Credits not included in major requirements total.

WATER/ WASTEWATER TECHNOLOGY

Program Contact:
Ronald M. Sharman

Additional Faculty:
Mark Edwards, David Kidd, Kevin Krefft, Holly Ploetz

Water and Wastewater Technology offers two programs: a one-year certificate program in Water/Wastewater Plant Operations and a two-year Associate of Applied Science degree in Water/Wastewater Technology. Both programs cover all phases of water sources and treatment, water distribution, wastewater collection wastewater treatment, and industrial applications.

Classes are held in modern, well-equipped classrooms and laboratories. The Water and Wastewater Technology program offers completely equipped laboratories for chemistry and microbiology, mechanical and electrical maintenance applications, and a special water treatment classroom equipped with a fully functional water treatment plant. Computer applications are a part of many classroom activities and laboratory applications.

The two-year (seven-term) Associate of Applied Science in Water/Wastewater Technology prepares its graduates to work at the technician level in water, wastewater and industrial treatment fields. The program course work develops graduates qualified as plant operators, engineering technicians, and technical representatives for various manufacturing concerns. A firm foundation in chemistry, microbiology, computer applications, hydraulics, communication skills, maintenance skills and advanced operations is provided. Associate degree students are required to complete MTH 97 Practical Geometry.

The one-year (four-term) certificate program in Water/Wastewater Plant Operations prepares students for entry-level employment as water and wastewater treatment plant operators. A firm background in chemical and microbiological laboratory procedures, maintenance and treatment plant operations is provided. One-year certificate students are required to complete MTH 65 Elementary Algebra. The one-year certificate curriculum requires enrollment for four consecutive terms. Students completing the one-year program may choose to transfer credits to the two-year Associate of Applied Science degree program.

Students in both the one-year certificate program and the two-year degree program must complete an in-plant practicum during the summer term. Participation in the summer practicum may require relocation of the student for one term. There is no guarantee of funding for students during this period.

The Water/Wastewater Technology curriculums lead to an Associate of Applied Science degree or a one-year certificate. Entering students must be prepared to enroll in MTH 60 Introduction to Algebra and WR 115 Introduction to Writing by fall term of their first year.

Associate of Applied Science in Water/Wastewater Technology

General Education Requirements 19

Major Requirements 82

Fall - First Year
WW 6.190 Intro to Environmental Science ..... (3)3
(Meets the Science Technology and Society general education requirement)
WW 6.193 Intro to Aquatic Chem and Micro 4
WW 6.199 Intro to Hydraulics 2

Winter
HE 112 First Aid ..... (1)
WW 6.192 Wastewater Systems Operation 7
WW 6.194 Basic to Aquatic Chem and Micro 4
WR 121 English Composition ..... (3)

Spring
MTH 97 Practical Geometry ..... (4)
WW 6.181 W/WW Mechanics 3
WW 6.191 Water Systems Operation 7
WW 6.195 Interm. to Aquatic Chem and Micro . 4

Summer
WW 6.168 In-Plant Practicum 12

Fall - Second Year
PE ..... (1)
WW 6.154 Process Control I 4
WW 6.164 Water Sources 3
WW 6.166 Water Purification Systems 4
WR 227 Technical Report Writing 3

Winter
Cultural Diversity ..... (3)
EE 6.330 Industrial Electricity 3
WW 6.155 Process Control II 3
WW 6.235 Applied Hydraulics 3
WW 6.171 Industrial Water/Waste Treatment 3

(Continued on next page)

Spring
PE ..... (1)
Speech ..... (3)
WW 6.6167 Water Distrib. and Collection Lab ... 1
WW 6.165 Water Distribution and Collection 2
WW 6.197 Solids Handling 3
WW 6.198 Instrumentation 4

101

One-year Certificate in Water/ Wastewater Plant Operations

Major Requirements 57

Fall
MTH 60 Introduction to Algebra 4
WW 6.190 Intro to Environmental Science 6
WW 6.193 Intro to Aquatic Chem and Micro 4
WW 6.199 Intro to Hydraulics 2

Winter
HE 112 First Aid 1
WR 115 W Intro to Writing: Workplace 3
WW 6.192 Water Systems Operations 7
WW 6.194 Basic Aquatic Chem and Micro 4

Spring
WW 6.181 W/WW Mechanics 3
WW 6.191 Wastewater Systems Operation 7
WW 6.195 Intermediate Aquatic Chem and Micro 4

Summer
WW 6.168 In-Plant Practicum 12

57

Applies toward general education requirements.
Credits not included in major requirements total.
* Also counts as a program course.

WELDING TECHNOLOGY

Program Contact:

Additional Faculty:
Dean Dowless, David Schmitke

The Welding Department offers several options to men and women wanting to prepare for entry-level positions in welding repair, fabrication and industrial mechanics. A two-year Associate of Applied Science degree program, two-year certificate program and one-year certificate program all are offered through the Welding Department. These programs provide basic through advanced training in welding procedures and welding-related areas in print reading, fabrication and layout.

Interested students should consider the Associate of Applied Science degree or the two-year certificate. Students who want to transfer to Oregon Institute of Technology or other technical institutions offering four-year bachelor of science degrees should consult with a Welding Department advisor for a recommended schedule of classes.

The Welding Technology program supports student participation in Vocational Industrial Clubs of America (VICA) and student competition in United States Skills Olympics (USSO). Through student involvement in fund-raising projects, funds are made available to pay student cost of travel, lodging and entry fees in the annual state skills contest. Any student who earns a first place at state level also will have expenses paid to participate in the national competition.

People already employed in the welding field or a related area may upgrade their skills by enrolling in the classes offered through the Welding Department. Welding I, Welding II, Welding III and preparation for certification classes offer students limited exposure to welding processes and practices. Advanced course work to prepare for certification in pipe or plate welding is available with instructor permission. Testing is done by an independent agency.

The department recommends that students enter the program in September (fall term). Admission is possible at the beginning of winter or spring term, depending on space availability and/or the student's previous experience. Students wanting to enter the Welding Technology program should have a basic math background and high school-level reading skills. Because a variety of working conditions exist in the welding field, a person generally should be in good physical condition and be able to stand, stoop, kneel and bend. Good eyesight, especially depth perception, is necessary for a welder.

Personal qualities desirable in a welder include mechanical ability, preciseness, and creativity. As with most career fields, the ability to work as a team is a valuable asset. The program requires that students have the initiative to work on class projects independently.

The job outlook for welding is excellent both locally and regionally. Wages vary greatly between union and non-union shops. A variety of local machine shops, repair shops and industrial firms hire welders. Some students use the Welding Technology program as a basis for applying to apprenticeship programs, such as millwright, pipefitter, steamfitter, iron workers and other related trades.

Associate of Applied Science Degree in Welding Technology

General Education Requirements 19
All general education requirements are included in the curriculum.

Major Requirements 82

Fall - First Year
IN 1.197 Intro to Industrial Computers 1
MTH 61 Survey of Math Fundamentals ..... (3)
*WD 4.240 Basic Arc Welding 6
*WD 4.242 Fab. and Repair Practices I 4
*WD 4.258 Welding Prints and Projects 3

Winter
EG 4.415 Drafting I/CAD Basics 3
*WD 4.241 Intermediate Arc Welding 6
*WD 4.243 Fab. and Repair Practices II 4
*WD 4.247 Interp. Metal Fab Drawings 3
WR 121 English Composition ..... (3)

Spring
*ME 3.444 Welding Metallurgy I 4
MTH 63 Industrial Math ..... (1)
*WD 4.245 Layout Procedures for Welding 3
*WD 4.246 Advanced Arc Welding 6
*WD 4.250 Fab. and Repair Practices III 4

Fall - Second Year
MA 3.399 Precision Measurement 1
MA 3.422 Manufacturing Lab I 4
RH 3.552 Trade Electrical Components 3
*WD 4.255 Fab. and Repair Practices IV 4
9.061 Industrial Fluid Power I 3

Winter
MA 3.423 Manufacturing Lab II 4
ME 3.445 Welding Metallurgy II 4
Science, Technology and Society ..... (3)
WD 4.256 Fab. and Repair Practices V 4
9.062 Industrial Fluid Power II 3

Spring
HE 112 Emergency First Aid 1
HE 125 Occupational Safety ..... (3)
HV 3.295 Power Train Systems 3
SP 1.103 Occupational Speech ..... (3)
WD 4.257 Fab. and Repair Practices VI 4
Cultural Diversity and Global Awareness ..... (3)

101

Two-Year Certificate in Welding Technology

Major Requirements 94

Fall - First Year
IN 1.197 Intro to Industrial Computers 1
MTH 60 Intro to Algebra 4
*WD 4.240 Basic Arc Welding 6
*WD 4.242 Fab. and Repair Practices I 4
*WD 4.258 Welding Prints and Projects 3

Winter
EG 4.415 Drafting I/CAD Basics 3
*WD 4.241 Intermediate Arc Welding 6
*WD 4.243 Fab. and Repair Practices II 4
*WD 4.247 Interp. Metal Fab. Drawings 3
WR 115W Intro to Writing: Workplace 3

Spring
*ME 3.444 Welding Metallurgy I 4
*WD 4.245 Layout Procedures for Welding 3
*WD 4.246 Advanced Arc Welding 6
*WD 4.250 Fab. and Repair Practices III 4

Fall - Second Year
MA 3.399 Precision Measurement 1
MA 3.422 Manufacturing Lab I 4
RH 3.552 Trade Electrical Components 3
*WD 4.255 Fab. and Repair Practices IV 4
9.061 Industrial Fluid Power I 3

Winter
MA 3.423 Manufacturing Lab II 4
ME 3.445 Welding Metallurgy II 4
WD 4.256 Fab. and Repair Practices V 4
9.062 Industrial Fluid Power II 3

Spring
HE 112 Emergency First Aid 1
HE 125 Occupational Safety 3
HV 3.295 Power Train Systems 3
SP 1.103 Occupational Speech 3
WD 4.257 Fab. and Repair Practices VI 4

94

(Continued on next page)

One-Year Certificate in Welding Technology

Major Requirements 50

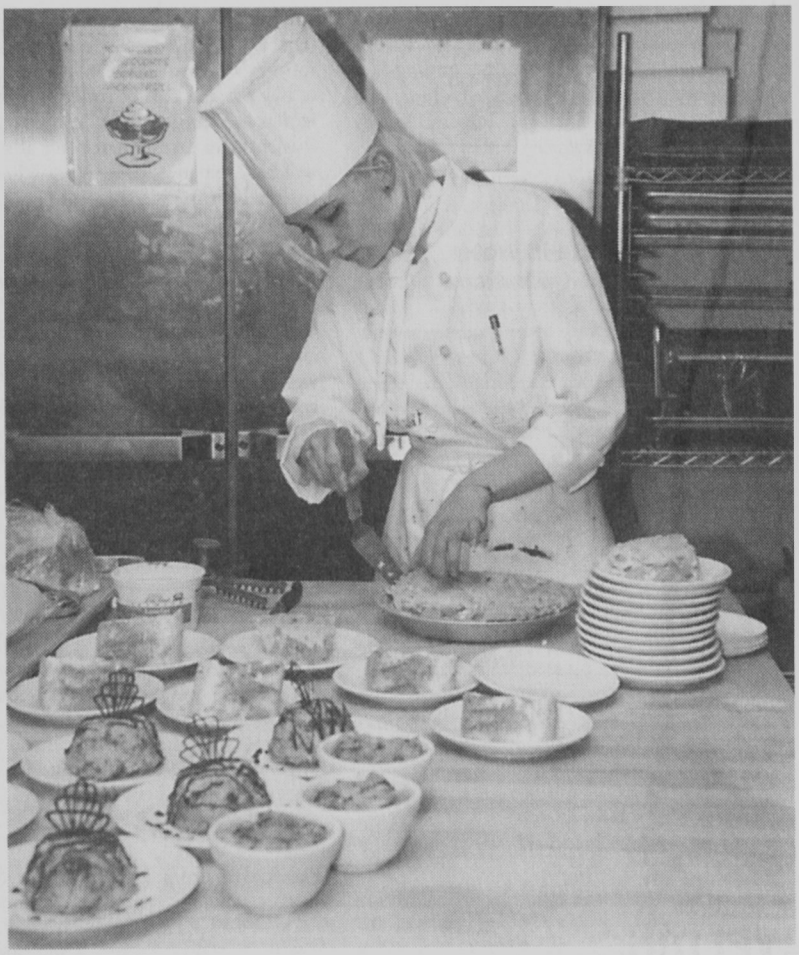
Fall
IN 1.197 Intro to Industrial Computers 1
MTH 60 Intro to Algebra 4
*WD 4.240 Basic Arc Welding 6
*WD 4.242 Fab. and Repair Practices I 4
*WD 4.258 Welding Prints and Projects 3

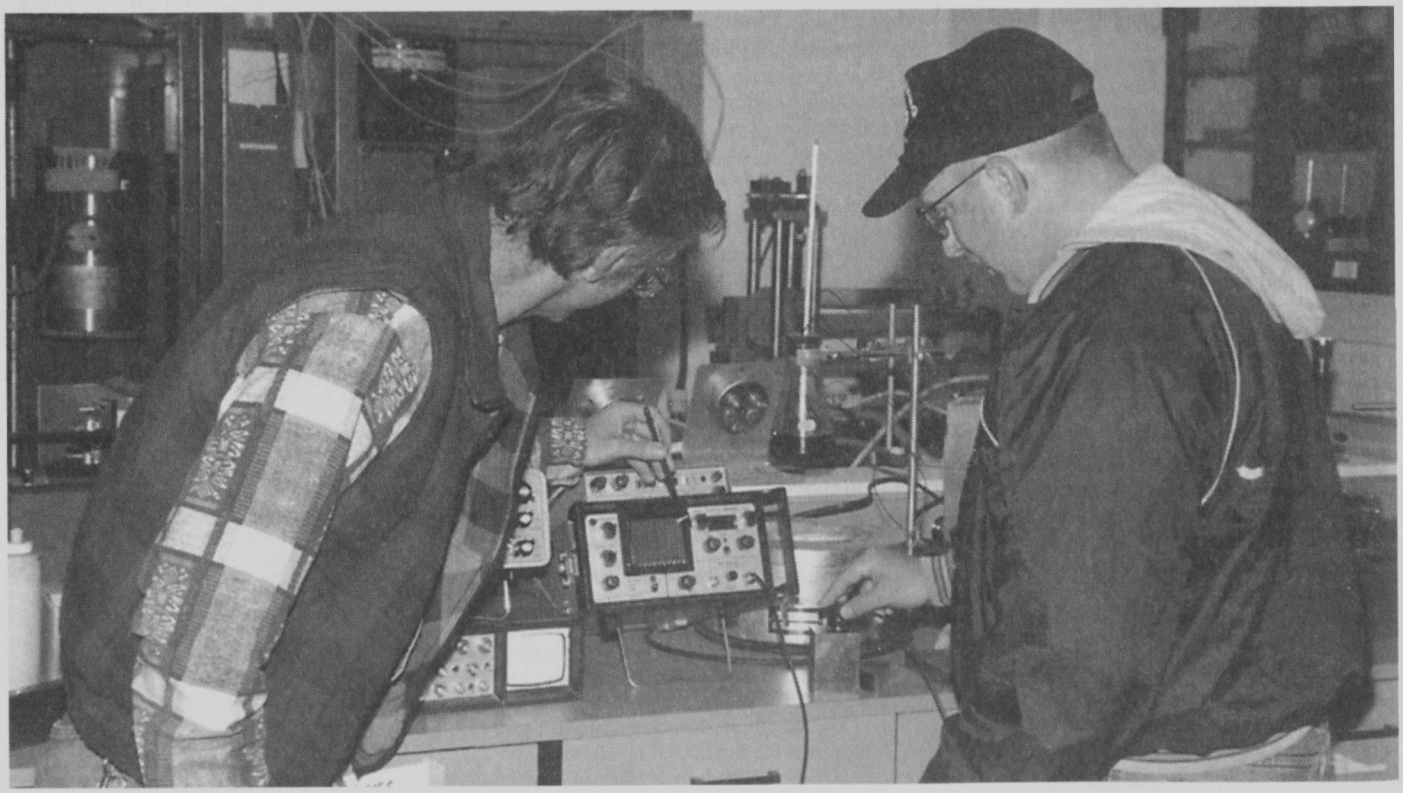
Winter
EG 4.415 Drafting I/CAD Basics 3
*WD 4.241 Intermediate Arc Welding 6
*WD 4.243 Fab. and Repair Practices II 4
*WD 4.247 Interp. Metal Fab Drawings 3
WR 115W Intro to Writing: Workplace 3

Spring
MTH 63 Industrial Math I 1
*ME 3.444 Welding Metallurgy I 4
*WD 4.245 Layout Procedures for Welding 3
*WD 4.246 Advanced Arc Welding 6
*WD 4.250 Fab. and Repair Practices III 4

50

*Courses marked with an asterisk are offered that term only.
Applies toward general education requirements.



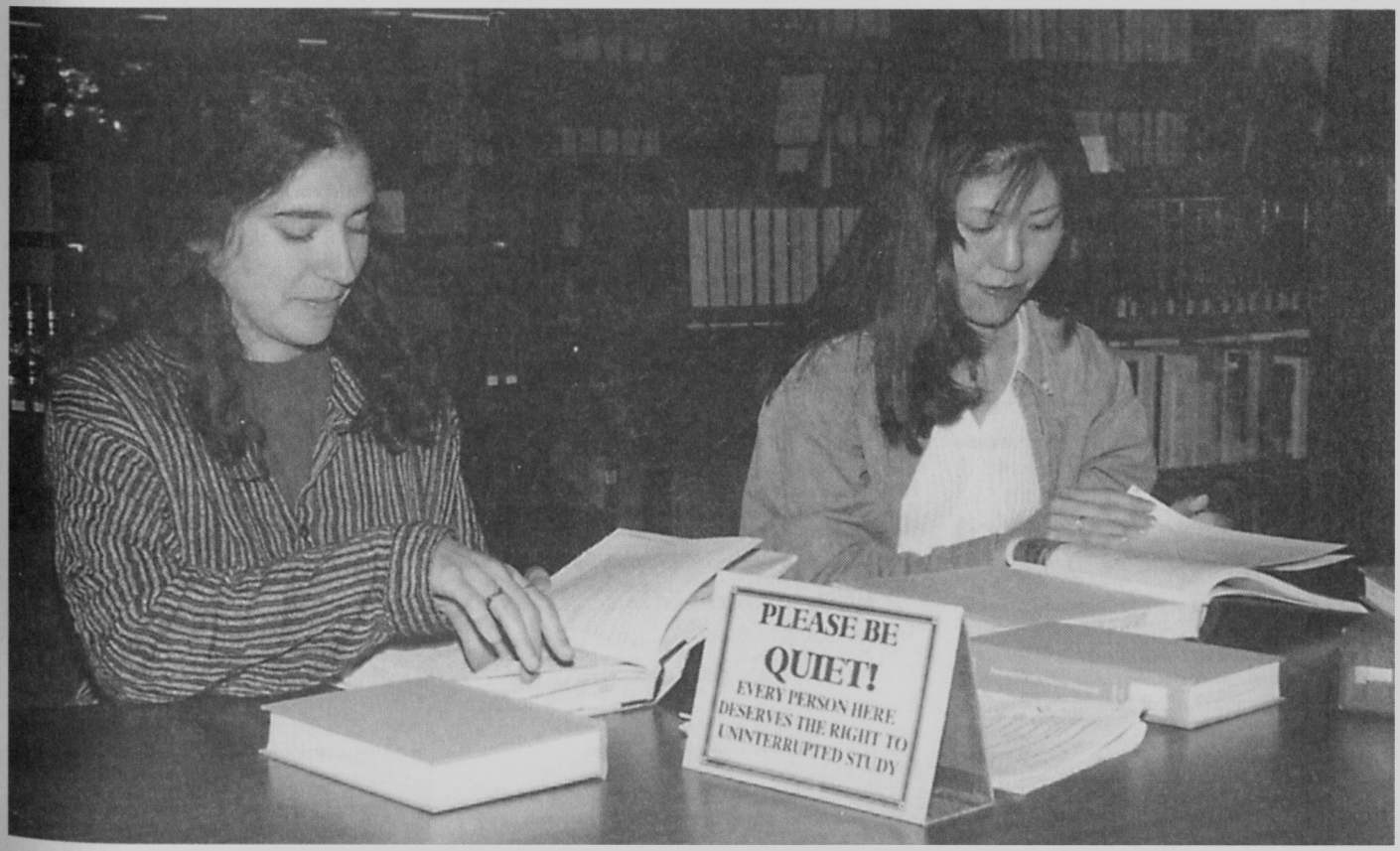


TRANSFER PROGRAMS

- Agricultural Education
- Agriculture Business Management
- Animal Science
- Automotive Technology (Special Agreement)
- Biological Sciences
- Business Administration
- Child and Family Studies
- Computer Science
- Criminal Justice
- Economics
- Education
- Engineering Transfer
- Environmental Health
- Exercise and Sport Science
- Fine Art
- Health Promotion and Education
- Heavy Equipment/Diesel Technology (Special Agreement)
- Home Economics
- Journalism and Mass Communications
- Liberal Studies
  - Anthropology
  - English
  - Fine Art
  - Geography
  - History
  - Music
  - Political Science
  - Psychology
  - Sociology
  - Social Sciences
  - Speech Communications
  - Theatre
- Mathematics

Transfer Student Alert:

All Oregon University System institutions require two years of high school second language for admission. This admission requirement can also be satisfied by two quarters of a college-level second language or demonstrated proficiency in a second language. For additional information, contact your advisor or counselor.



AGRICULTURAL EDUCATION

Program Contacts:
Rick Klampe, Jim Lucas

Curriculum completion initiates the first step of meeting lower-division requirements for those students interested in pursuing a career in teaching. Also available are lower-division transfer courses in a variety of agricultural areas that will provide practical background and experiences for anyone entering the field of education.

This program is designed to be completed in two years. This assumes, however, that the entering student has been placed at or above the following levels on the College Placement Test: WR 121 English Composition and MTH 95 Intermediate Algebra. It is advisable to take the College Placement Test as early as possible. If developmental course work is required, it may take the student longer than two years to complete the program.

Associate of Science with a major emphasis in Agricultural Education

General Education Requirements 24

See the graduation requirements for Associate of Science degree.

The math, biological and physical science and four of the perspectives credits are met by the listed major requirements.

Major Requirements 55

Fall - First Year
- AG 111 Computers in Agriculture 3
- BI 101 General Biology 4
- MTH 105 Intro to Contemporary Math 4

Winter
- ARE 221 Marketing in Agriculture 3
- BI 102 General Biology 4

Spring
- ANS 231 Livestock Evaluation 3
- BI 103 General Biology 4
- CSS 200 Principles of Crop Science 4

Fall - Second Year
- ARE 211 Management in Agriculture 4
- CH 121 College Chemistry 5

Winter
- BA 215 Survey of Accounting 4
- CH 122 College Chemistry 5
- EC 201 Intro to Microeconomics 4

Spring
- BA 230 Business Law 4

Electives 11

Approved electives include:
- AG 8.125 Soils I 3
- AG 8.126 Soils II 3
- ANS 121 Animal Science 4
- ANS 210 Feeds and Feed Processing 4
- ANS 211 Applied Animal Nutrition 3
- ANS 215 Applied Beef Production 4
- ANS 216A Applied Sheep Production 4
- ANS 216B Applied Swine Production 4
- ANS 220 Introductory Horse Science 4
- ANS 221 Equine Industries 3
- ANS 223 Equine Marketing 2
- ANS 227 Artificial Insemination 4
- ANS 278 Genetic Improvement of Livestock 4
- BI 251 Principles of Wildlife Conservation 3
- BI 252 Wildlife Resources: Birds 4
- CSS 105 Soils and Man 3
- HT 8.137 Plant Propagation 4

90

AGRICULTURE BUSINESS MANAGEMENT

Program Contacts:
Rick Klampe, Jim Lucas

The Agriculture Business Management curriculum is designed for students who want to complete their lower-division course work prior to transferring to a four-year institution. It allows for completion of general education requirements as well as the preparatory course work that precedes specialized course involvement. Agriculture Resource Economics interests also could be pursued.

This program is designed to be completed in two years. This assumes, however, that the entering student has been placed at or above the following levels on the College Placement Test: WR 121 English Composition and MTH 95 Intermediate Algebra. It is advisable to take the College Placement Test as early as possible. If developmental course work is required, it may take the student longer than two years to complete the program.

Associate of Science with a major emphasis in Agriculture Business Management

General Education Requirements 24

See graduation requirements for Associate of Science degree.

The math, biological and physical science and four of the perspectives credits are met by the listed major requirements.

Major Requirements 47- 49

Fall - First Year
- AG 111 Computers in Agriculture 3
- MTH 111 College Algebra 5
- Physical Science 4-5

Winter
- ARE 221 Marketing in Agriculture 3
- MTH 241 Math for Bus./Mgmt./Soc. Sciences . 4
- Biological/Physical Science 4-5

Fall - Second Year
- ARE 211 Management in Agriculture 4
- BA 215 Survey of Accounting 4
- BI 101, 102 or 103 General Biology 4

Winter
- EC 201 Intro to Microeconomics 4

Spring
- BA 230 Business Law 4
- EC 202 Intro to Macroeconomics 4

Electives 22

Additional courses in Animal Science, Crop Science, Fish and Wildlife to total at least 90 credits.

93-95

ANIMAL SCIENCE

Program Contacts:
Rick Klampe, Jim Lucas

All of the lower-division transfer courses that a potential transfer student in Animal Science needs are available at LBCC. These courses provide the proper background for those wanting to further their educational goals. Valuable practical instruction assists students in meeting their objectives.

The Animal Science program is designed to be completed in two years. This assumes, however, that the entering student has been placed at or above the following levels on the College Placement Test: WR 121 English Composition and MTH 95 Intermediate Algebra. It is advisable to take the College Placement Test as early as possible. If developmental course work is required, it may take the student longer than two years to complete the program.

Associate of Science with a major emphasis in Animal Science

General Education Requirements 24

See graduation requires for Associate of Science degree.

The math, biological and physical science and four of the perspectives credits are met by the listed major requirements.

Major Requirements 60

Fall - First Year
- AG 111 Computers in Agriculture 3
- ANS 121 Animal Science 4
- CH 121 College Chemistry 5
- MTH 111 College Algebra 5

Winter
- ARE 221 Marketing in Agriculture 3
- CH 122 College Chemistry 5

Spring
- ANS 231 Livestock Evaluation 3
- CH 123 College Chemistry 5
- CSS 200 Principles of Crop Science 4

Fall - Second Year
- ARE 211 Management in Agriculture 4
- BI 101 General Biology ***or***
  BI 211 Biology 4

Winter
- ANS 210 Feeds and Feed Processing 4
- BI 102 General Biology ***or***
  BI 212 Biology 4
- EC 201 Intro to Microeconomics 4

Spring
- ANS 211 Applied Animal Nutrition 3

Electives 8
- ANS 207 Careers in Animal Agriculture 1
- ANS 215 Applied Beef Production 4
- ANS 216A Applied Sheep Production 4
- ANS 216B Applied Swine Production 4
- ANS 220 Introductory Horse Science 4
- BA 215 Survey of Accounting 4
- BI 103 General Biology ***or***
  BI 213 Biology 4

92

(Continued on next page)

ANTHROPOLOGY

See Liberal Studies (Oregon Transfer Degree) or Social Sciences.

AUTOMOTIVE TECHNOLOGY

An Associate of Science with a major emphasis in Automotive Technology is available through a special agreement. See program advisor.

BIOLOGICAL SCIENCES

Program Contact:
Stephen Lebsack

Additional Faculty:
Carolyn Lebsack, Richard Liebaert, Charles Wert

In addition to offering the Associate of Science with a major emphasis in Biological Science degree, the Biology Department provides a variety of courses to meet the needs and interests of at least four groups of students: (1) Transfer students in majors other than science who take General Biology courses to meet their perspectives or science requirement for an Associate of Arts, Associate of Science or a bachelor's degree. (2) Students who require specific biology courses in order to earn a degree or certificate. For example, students in the Nursing, Dental Assisting and Animal Technology programs are required to take courses such as Human Anatomy and Physiology, Nutrition or Microbiology. (3) Science majors in fields such as forestry, fisheries and wildlife, agriculture or pre-medicine, who complete their first two years at LBCC and then transfer to a four-year institution. These students enroll in required courses such as Biology or Wildlife Conservation. (4) Students who have an avocational interest in biology and take courses such as Natural History and Nature Photography.

In biology courses, students learn to understand life processes, the diversity of life and the role and responsibility of humans in the natural environment. Most courses are laboratory- or field-oriented.

The Associate of Science degree with a major emphasis in Biological Science is a lower division transfer program designed to assist students planning to complete their baccalaureate studies in a biological science at any four-year institution. The program is primarily designed, however, for those students intending to transfer to Oregon State University. Baccalaureate degrees may be earned in any of the following areas: Biology, Microbiology, Botany, Entomology, General Science or Zoology. Students completing the degree requirements will be prepared to enroll in upper-division course work.

Associate of Science with a major emphasis in Biological Science

General Education Requirements 27

See graduation requirements for Associate of Science degree.

The mathematics, biological science and physical science requirements are met by the listed major requirements.

Major Requirements 67-70

Fall - First Year
- CH 121 College Chemistry (5) ***or***
  - CH 221 General Chemistry (4) 4-5
- MTH 111 College Algebra 5

Winter
- CH 122 College Chemistry (5) ***or***
  - CH 222 General Chemistry (4) 4-5
- MTH 112 Trigonometry 5

Spring
- CH 123 College Chemistry (5) ***or***
  - CH 223 General Chemistry (4) 4-5

Fall - Second Year
- BI 211 Biology 4
- CH 241 Organic Chemistry 4
- MTH 251 Calculus 5

Winter
- BI 212 Biology 4
- BI 214 Cell and Molecular Biology 3
- CH 242 Organic Chemistry 4
- MTH 252 Calculus 5

Spring
- BI 213 Biology 4
- BI 214 Cell and Molecular Biology 3
- CH 243 Organic Chemistry 4
- MTH 253 Calculus 5

Electives 3
- BI 231, 232, 233 Human Anat. and Physiology 4
- BI 234, 235, 236 Microbiology 4
- BI 251 Principles of Wildlife Conservation 3
- BI 252 Wildlife Resources: Birds 4
- GS 108 Oceanography 4
- PH 201, 202, 203 General Physics 5
- PH 211, 212, 213 General Physics/Calculus 5

97-100

BUSINESS ADMINISTRATION
(Oregon Transfer Degree)

Program Contact:
Ed Knudson

Additional Faculty:
Maynard Chambers, Gerry Conner, Myrna Gusdorf, Wendy Krislen, Larry Schuetz

This two-year program is recommended to prepare students for transfer into any of the major programs in Business Administration offered by any public four-year university in Oregon. Students may complete requirements for the baccalaureate degree with two additional years of work. Students planning to transfer to any other four-year institution should contact the transfer curriculum advisor before enrolling in any courses.

The Business Administration curriculum leads to an Associate of Arts degree with an emphasis in Business Administration.

Associate of Arts (Oregon Transfer) with an emphasis in Business Administration

All general education requirements are included below.

Fall - First Year
- BA 101 Introduction to Business 4
- BA 131 Business Productivity Software 3
- +BI 101 General Biology 4
- MTH 111 College Algebra 5
- WR 121 English Composition 3

Winter
- +BI 102 General Biology 4
- +ENG 104 Intro to Literature: Fiction 3
- +ENG 105 Intro to Literature: Drama 3
- MTH 241 Math for Bio./Mgmt./Soc. Sciences 4
- WR 122 English Composition 3

Spring
- BA 271 Information Technology in Business 3
- +BI l03 General Biology 4
- +ENG 106 Intro to Literature: Poetry 3
- MTH 245 Math for Bio./Mgmt./Soc. Sciences 4
- WR 227 Technical Report Writing 3

Fall - Second Year
- BA 211 Principles of Accounting: Financial 4
- BA 230 Business Law 4
- EC 201 Intro to Microeconomics 4
- +HUM 100 Introduction to Humanities 3

Winter
- BA 213 Principles of Accounting: Managerial ... 4
- BA 275 Business Quantitative Methods 4
- EC 202 Intro to Macroeconomics 4
- SP 111 Fundamentals of Speech 3

Spring
- PE 231 Lifetime Wellness 3
- +PHL 202 Elementary Ethics 3
- BA 206 Principles of Management 3
- BA 223 Principles of Marketing 3
- EC 215 Economic Development in the U.S. 4

99

+ Other classes may substitute. See advisor.

BUSINESS ADMINISTRATION

Program Contact:
Ed Knudson

Additional Faculty:
Maynard Chambers, Gerry Conner, Myrna Gusdorf, Wendy Krislen, Larry Schuetz

This two-year program is designed for students who plan on transferring to Oregon State University to complete a baccalaureate degree in business administration. It is important that students check with the business transfer curriculum advisor before enrolling in these classes.

(Continued on next page)

The Business Administration curriculum leads to an Associate of Science with an emphasis in Business Administration.

Associate of Science with an emphasis in Business Administration

All general education requirements are included below.

Fall - First Year

BA 101 Introduction to Business 4
WR 121 English Composition 3
MTH 111 Mathematics 5
BA 131 Business Productivity Software 3
+BI 101 General Biology 4

Winter

PE 231 Lifetime Wellness 3
HST 201, 202, ***or*** 203 History of the U.S. 3
MTH 241 Math for Bio./Mgmt./Soc. Sciences 4
+ENG 104 English Literature 3
+BI 102 General Biology 4

Spring

+GS 106 Physical Science ***or***
GS107 Astronomy 4
SP 111 Fundamentals of Speech 3
+WR 227 Technical Report Writing 3
MTH 245 Math for Bio./Mgmt./Soc. Sciences 4

Fall - Second Year

BA 211 Principles of Accounting: Financial 4
EC 201 Intro to Microeconomics 4
BA 230 Business Law 4
BA 223 Principles of Marketing 3

Winter

BA 275 Business Quantitative Methods 4
BA 206 Principles of Management 3
BA 213 Principles of Accounting: Managerial ... 4
EC 202 Intro to Macroeconomics 4

Spring

BA 271 Information Technology in Business 3
Minor and/or Elective 6
+EC 215 Economic Development in the U.S. ... 4
Cultural Diversity 3

96

+ Other classes may substitute. See advisor.

OSU Minors: See business transfer advisor for specific classes.

CHILD AND FAMILY STUDIES

(Oregon Transfer Degree)

Program Contact:
Beth Hogeland

Additional Faculty:
Sue Doescher, May Garland

The AA(OT) Child and Family Studies program is for students who want to teach children from birth through fourth grade or who want to work with children and their families in social service settings. Students can complete their first two years of course work at LBCC and transfer to any four-year college or university in Oregon offering programs in Early Childhood Education, Elementary Education, or Human Development/Family Sciences.

Students entering LBCC as freshmen, who plan to enroll in at least 12 credits, are asked to join the Human Resources Learning Community. This integrated block of classes gives students the opportunity to get to know others who are interested in working with young children, while completing needed general education courses. Transfer students and students who select Child and Family Studies as a major after their first term may also select the Learning Community. See the "Human Resources Learning Community" section of this catalog for details.

In their second year, students complete general education and distribution requirements, plus selectives that may also count toward completion of four-year degree requirements. MTH 211, MTH 212, and MTH 213 are required by most teacher preparation institutions, and are recommended by the others. ED 101, ED 209A, HDFS 225, and HDFS 248 include practical experience in children's classrooms that meet practicum requirements at teacher preparation institutions and that give students an opportunity to make decisions about a career in teaching. School districts have requirements for safety and health, including inoculations, that must be met before students enroll in practica. Prior to enrolling in practica, students should work with an advisor, to ensure that these requirements are met.

Associate of Arts with an emphasis in Child and Family Studies

All general education requirements are included below.

Fall - First Year

+HD 110A Career Planning: Child and
Family Studies 1
+PSY 200 Psychology as a Natural Science 4
WR 115 Introduction to Writing ***and***
SS 1.150 Techniques of Studying 4
or WR 121 English Composition ***and***
+ENG 104 Introduction to Literature: Fiction ... 6

Elective 3-6

Winter

CJ 202 Violence and Aggression 3
+HD 110B Career Planning: Child and
Family Studies 1
HDFS 201 Individual and Family Devel. 3
SOC 206 General Sociology 3
WR 121 English Composition ***or***
WR 122 English Composition 3
Elective 3

Spring

+ED 101 Observation and Guidance 3
+PSY 205 Psychology as a Social Science 4
+SP 218 Interpersonal Communication 3
WR 122 English Composition ***or***
WR 123 English Composition 3
Elective 2-3

Fall - Second Year

Arts and Letters 3
HDFS 225 Child Development 3
MTH 211 Fundamentals of Elementary .....
Mathematics I 4
Science/Mathematics/Computer Science 4

Winter

Arts and Letters 3
HDFS 248 Learning Experience with Children . 3
Health/Wellness/Physical Education 3
MTH 212 Fundamentals of Elementary
Mathematics II 4
Science/Mathematics/Computer Science 4

Spring

Arts and Letters 3
ED 209A Theory and Practicum 3
MTH 213 Fundamentals of Elementary
Mathematics III 4
Science/Mathematics/Computer Science 4

90

+These courses are part of the Human Resources Learning Community. Other courses may substitute.

CHILD AND FAMILY STUDIES

(Associate of Science)

Program Contact:
Beth Hogeland

Additional Faculty:
Sue Doescher, May Garland

The AS Child and Family Studies program is for students who plan on transferring to Oregon State University to complete a baccalaureate degree in Human Development/Family Studies. Students completing a baccalaureate degree may choose from a number of career options. They may work in the field of early childhood education, become elementary school teachers, or work in social service programs for children and their families as case managers, parent educators, and family advocates. Students interested in teaching in the public schools must complete a Master of Arts in Teaching (MAT), which is available at OSU.

General education requirements may be chosen that meet both the Associate of Science degree requirements and the academic preparation suggested for future teachers. Major requirements prepare students to work with children and families and provide practical experience planning and implementing curricular activities with young children.

Students entering LBCC as freshmen, who plan to enroll in at least 12 credits, are asked to join the Human Resources Learning Community. This integrated block of classes gives students the opportunity to get to know others who are interested in working with young children, while completing needed general education courses. Transfer students and students who select Child and Family Studies as a major after their first term may also select the Learning Community. See the Human Resources Learning Community section of this catalog for details.

In their second year, students complete general education and distribution requirements, and selectives that meet Human Development/ Family Sciences four-year degree requirements. MTH 211, MTH 212, and MTH 213 are required of students interested in early childhood and elementary education. ED 101, ED 209A, HDFS 225, and HDFS 248 include practical experience in children's classrooms that

(Continued on next page)

meet HDFS program requirements and that give students an opportunity to make decisions about a career in teaching. School districts have requirements for safety and health, including inoculations, that must be met before students enroll in practica. Students should work with an advisor, prior to enrolling in practica, to ensure that these requirements are met.

Associate of Science with an emphasis in Child and Family Studies

All general education requirements are included below.

Fall - First Year

+HD 110A Career Planning: Child and Family Studies 1
+PSY 200 Psychology as a Natural Science 4
WR 115 Introduction to Writing ***and***
SS 1.150 Techniques of Studying 4
or WR 121 English Composition ***and***
+ENG 104 Intro to Literature: Fiction 6
Elective 3-7

Winter

Cultural Diversity 3
CJ 202 Violence and Aggression 3
+HD 110B Career Planning: Child and Family Studies 1
HDFS 201 Individual and Family Development 3
SOC 206 General Sociology 3
WR 121 English Composition ***or***
WR 122 English Composition 3

Spring

+ED 101 Observation and Guidance 3
+PSY 205 Psychology as a Social Science 4
+SP 218 Interpersonal Communication 3
Western Culture 3
WR 122 English Composition ***or***
WR 123 English Composition 3

Fall - Second Year

Biological Science 4
HDFS 225 Child Development 3
MTH 211 Fundamentals of Elementary Mathematics I 4
PE 231 Lifetime Wellness 3

Winter

FN 225 Foods and Nutrition 4
HDFS 248 Learning Experience with Children . 3
MTH 212 Fundamentals of Elementary Mathematics II 4
Physical Science 4

Spring

Biological or Physical Science 4
Difference, Power and Discrimination 3
ED 209A Theory and Practicum 3
MTH 213 Fundamentals of Elementary Mathematics III 4

90

+These courses are part of the Human Resources Learning Community. Other courses may substitute.

COMPUTER SCIENCE

Program Contact:
Peggy Weems

Computer Science is the study of programming, data storage and retrieval, and computing machinery and the interaction with people. Graphics, artificial intelligence, robotics and expert systems are some of the products of computer science. This is an exciting career area that affects many aspects of our lives.

The LBCC Computer Science program provides students with the first two years of a four-year degree program. Upon successful completion of these requirements, the student receives an Associate of Science degree with a major emphasis in Computer Science. Students enrolling in this program should have a strong aptitude for mathematics and the logic of problem solving.

Computer Science students need to decide where they will complete their four-year degree so that appropriate courses can be selected at Linn-Benton. The program is designed to be completed in two years. This assumes, however, that the entering student is prepared to take CS 133U Beginning Programming: C++, MTH 251 Calculus, and WR 121 English Composition. If this is not the case, the student needs to allow extra time to complete this degree.

Associate of Science with a major emphasis in Computer Science

All general education requirements are included below.

Fall - First Year

CS 133U Beg. Programming: C++ 4
MTH 251 Calculus 5
WR 121 English Composition 3
Cultural Diversity 3
Literature and the Arts 3

Winter

BA 271 Information Technology in Business 3
CS 161 Intro to Computer Science I 4
MTH 252 Calculus 5
WR 122 English Composition 3
Western Culture 3

Spring

CS 162 Intro to Computer Science II 4
MTH 253 Calculus 4
PE 231 Lifetime Wellness 3
+WR 227 Technical Report Writing 3
Social Processes and Institutions 3

Fall - Second Year

ENGR 201 Electrical Fundamentals 4
+PH 211 General Physics/Calculus 5
+BI 101 General Biology 4
MTH 254 Calculus 4

Winter

MTH 231 Elements of Discrete Mathematics I .. 4
+PH 212 General Physics/Calculus 5
+SP 111 Fundamentals of Speech 3
Difference, Power and Discrimination 3

Spring

CS 261 Data Structures 4
ENGR 271 Digital Logic Design 4
MTH 232 Elements of Discrete Mathematics iI 4
+PH 213 General Physics/Calculus 5

102

+ Other classes may substitute. See advisor.

CRIMINAL JUSTICE
(Oregon Transfer Degree)

Program Contact:
Jackie Turle

This Criminal Justice Program prepares students for transfer to any state of Oregon college or university baccalaureate program with a criminal justice emphasis. Students entering LBCC as freshmen who plan to enroll in at least 12 credits are encouraged to join the Human Resources Learning Community. Students unable to participate in the Learning Community should consult an advisor before registering for classes.

Associate of Arts (Oregon Transfer) with an emphasis in Criminal Justice

All general education requirements are included below.

Fall - First Year

HD 110A Career Planning: Criminal Justice 1
PSY 200 Psychology as a Natural Science 4
WR 115 Intro to Writing ***and***
SS 1.150 Techniques of Studying 4
or WR 121 English Composition ***and***
ENG 104 Intro to Literature: Fiction 6
Elective 3-6

Winter

CJ 202 Violence and Aggression 3
HD 110B Career Planning: Criminal Justice 1
PSY 215 Intro to Developmental Psychology 3
SOC 206 General Sociology 3
WR 121 English Composition ***or***
WR 122 English Composition 3

Spring

HS 101 Observation and Guidance 3
PSY 205 Psychology as a Social Science 4
SP 218 Interpersonal Communication 3
WR 122 English Composition ***or***
WR 123 English Composition 3
Elective 3

ECONOMICS
(Oregon Transfer Degree)

Program Contact:
Ed Knudson

Additional Faculty:
Maynard Chambers, Gerry Conner, Myrna Gusdorf, Wendy Krislen, Larry Schuetz

This two-year program is recommended for students transferring into any of the major Economics programs offered by any four-year university in Oregon. Students may complete requirements for the baccalaureate degree with two additional years of work. Students planning to transfer to any other four-year institution should contact the transfer curriculum advisor before enrolling in any courses.

Associate of Arts (Oregon Transfer) with an emphasis in Economics

All general education requirements are included below.

Fall - First Year

BA 131 Business Productivity Software 3
+ENG 104 Intro to Literature: Fiction 3
MTH 111 College Algebra 5
+PE 231 Lifetime Wellness 3
WR 121 English Composition 3

Winter

BA 271 Information Technology in Business 3
+ENG 105 Intro to Literature: Drama 3
MTH 241 Math for Bio./Mgmt./Soc. Science .. 4
WR 122 English Composition 3
Elective 3

(Continued on next page)

Spring
*EC 115 Outline of Economics 4
+ENG 106 Intro to Literature: Poetry 3
+HUM 100 Intro to Humanities 3
MTH 245 Math for Bio./Mgmt./Soc. Science .. 4
WR 123 English Composition 3

Fall - Second Year
+BI 101 General Biology 4
EC 201 Intro to Microeconomics 4
EC 216 Intro to Labor Economics 3
+PHL 202 Elementary Ethics 3
SP 111 Fundamentals of Speech 3

Winter
+BI 102 General Biology 4
EC 202 Intro to Macroeconomics 4
EC 215 Economic Development of the U.S. 4
Electives 6

Spring
+BI 103 General Biology 4
EC 203 Applications in Econ: Discrimination .. 3
EC 220 Contemporary U.S. Econ. Issues 3
+PHL 202 Elementary Ethics 3
Elective 3

101

+ Other classes may substitute. See advisor.

* If high school economics was taken, this will be waived.

ECONOMICS

Program Contact:
Ed Knudson

Additional Faculty:
Maynard Chambers, Gerry Conner, Myrna Gusdorf, Wendy Krislen, Larry Schuetz

This two-year program is recommended to prepare students for transfer into any of the major programs in Economics offered by Oregon State University. Students may complete requirements for the baccalaureate degree with two additional years of work. Students planning to transfer to any other four-year institution should contact the transfer curriculum advisor before enrolling in any courses.

Associate of Science with an emphasis in Economics

All general education requirements are included below.

Fall - First Year
+BI 101 General Biology 4
MTH 111 College Algebra 5
WR 121 English Composition 3
*Elective 3

Winter
BA 131 Business Productivity Software 3
+BI 102 General Biology 4
MTH 241 Math for Bio./Mgmt./Soc. Science .. 4
+WR 227 Technical Report Writing 3
Cultural Diversity 3

Spring
BA 271 Information Technology in Business 3
+GS 106 Physical Science 4
MTH 245 Math for Bio./Mgmt./Soc. Science .. 4
Literature/Arts 3
Difference, Power and Discrimination 3

Fall - Second Year
EC 201 Intro to Microeconomics 4
EC 216 Intro to Labor Economics 3
SP 111 Fundamentals of Speech 3
Electives (see advisor) 6

Winter
EC 202 Intro to Macroeconomics 4
EC 215 Economic Development of the U.S. 4
PE 231 Lifetime Wellness 3
Electives (see advisor) 6

Spring
EC 203 Applications in Econ: Discrimination .. 3
EC 220 Contemporary U.S. Economic Issues ... 3
Electives (see advisor) 9

90

+ Other classes may substitute. See advisor.

EDUCATION

Program Contacts:
May Garland (for teaching grades 3–12)
Beth Hogeland (for teaching age 3–grade 4)

Students who want to become teachers can take their first two years of course work at LBCC and transfer to a four-year college to work toward their teaching credential. Students need to identify their preferred teaching level as early as possible. (Teaching levels are age 3–grade 4, grades 3–8, grades 5–10, or grades 7–12.) Teaching level decisions help students determine which degree and program they should pursue and who will be their advisor. If you plan to teach age 3–grade 4, see the Child and Family Studies program description in the "Transfer Programs" section of the catalog. If you plan to teach grades 4-12, follow the program described below.

Certification to teach in the public schools can be achieved in two ways. The first way is to complete a four-year education degree at Western Oregon University. The second is to complete either a pre-elementary education or a subject area degree at Oregon State University and then complete the Master of Arts in Teaching degree. This fifth-year master's program, which leads to certification, is also available at other Oregon higher education institutions. Students planning to attend Western Oregon are advised to pursue the AAOT degree. Students planning to attend OSU may pursue either the AAOT degree or the AS degree.

Students entering LBCC as freshmen who plan to enroll in at least 12 credits are strongly advised to join the Human Resources Learning Community. This integrated block of classes gives students the opportunity to get to know others who are interested in becoming teachers, while also completing needed general education courses. Transfer students and students who select education as a major after their first term may also be able to join the Learning Community. For details, see Human Resources Learning Community in this section of the catalog. Students unable to participate in the Learning Community should consult an advisor before registering for classes.

In their second year, students complete general education and other requirements for either the AAOT degree or the AS degree, plus electives that may count toward completion of the four-year degree. ED 101, 102, and 103 generate practicum hours that teacher preparation institutions, such as Western Oregon University, require and they also give students an opportunity to make final decisions about a teaching career, along with learning basic classroom skills. Practicum placements, arranged in conjunction with the advisor, must be identified and secured well in advance of the quarter in which they occur. All school districts have requirements for health, safety and innoculations. Check with your advisor to be ready to enroll in a practicum.

Students may also pursue the education assistant certificate concurrently with their two-year degree. Requirements for this certificate are noted under Education Assistant in the "Professional Technical" section of the catalog.

Associate of Arts (Oregon Transfer) with an emphasis in Education

Fall - First Year
+HD 110A Career Planning: Education 1
+PSY 200 Psychology as a Natural Science 4
WR 115 Intro to Writing ***and***
SS 1.150 Techniques of Studying 4
or WR 121 English Composition ***and***
+ENG 104 Intro to Literature: Fiction 6
Elective 3-7

Winter
CJ 202 Violence and Aggression 3
+HD 110B Career Planning: Education 1
+HDFS Individual and Family Development
or +PSY 215 Intro to Developmental Psychology 3
SOC 206 General Sociology 3
WR 121 English Composition ***or***
WR 122 Writing Composition 3

Spring
+ED 101 Observation and Guidance 3
+PSY 205 Psychology as a Social Science 4
+SP 218 Interpersonal Communication 3
WR 122 English Composition ***or***
WR 123 English Composition 3
Elective 2-3

Fall - Second Year
Arts and Letters 3
ED 200 Intro to Education 3
MTH 211 Fundamentals of Elementary Mathematics I (elementary teachers only) 4
Science/Math/Computer Science 4
Elective 3-6

Winter
Arts and Letters 3
ED 102/103 Practicum/Advanced Practicum . 3-6
Health/Wellness/Physical Education 3
MTH 212 Fundamentals of Elementary Mathematics II (elementary teachers only) 4
Science/Mathematics/Computer Science 4
Electives (content area courses—middle and secondary teachers) 4

Spring
Arts and Letters 3
MTH 213 Fundamentals of Elementary Mathematics III (elementary teachers only) 4
Science/Mathematics/Computer Science 4
Electives (content area courses—middle and secondary teachers) 3

+ These courses are required for the Human Resources Learning Community. Other general education courses classes may substitute.

100

(Continued on next page)

ENGINEERING TRANSFER

Program Contacts:
David Kidd, John Sweet

The Engineering Transfer program provides a balanced pre-engineering curriculum to prepare students for transfer to a four-year program at the professional level. At the same time, the program offers an Associate of Science degree with a major emphasis in Pre-Engineering. The curriculum for this degree program features a broad base of pre-engineering courses, a solid foundation in mathematics and the physical sciences and core requirements in general education. The curriculum meets the requirements for admission to the professional programs at most Oregon institutions.

Students entering the program with solid high school backgrounds in physics, chemistry and pre-calculus mathematics can expect to complete the program in two years. Students who need to take any pre-calculus mathematics after their arrival on campus should expect to spend more than two years in the program.

Associate of Science with a major emphasis in Engineering Transfer

All general education requirements are included below.

Fall - First Year
- ENGR 111 Engineering Orientation I 3
- CH 221 General Chemistry 4
- MTH 251 Calculus 5
- WR 121 English Composition 3
- +Cultural Diversity 3
- *Professional Technical Elective 1

Winter
- ENGR 112 Engineering Orientation II 4
- CH 222 General Chemistry 4
- MTH 252 Calculus 5
- SP 111 Fundamentals of Speech *or* SP 112 Intro to Persuasion 3
- +Literature and the Arts 3

Spring
- MTH 253 Calculus 4
- WR 227 Technical Report Writing 3
- PE 231 Lifetime Wellness 3
- +Biological Science 4
- +Social Processes and Institutions 3

Fall - Second Year
- ENGR 201 Electrical Fundamentals 4
- ENGR 211 Statics 4
- MTH 254 Calculus 4
- PH 211 General Physics with Calculus 5

Winter
- ENGR 212 Dynamics 4
- PH 212 General Physics with Calculus 5
- +Western Culture 3
- *Engineering Elective 3

Spring
- MTH 256 Applied Differential Equations 4
- PH 213 General Physics with Calculus 5
- +Difference, Power and Discrimination 3
- *Engineering Elective 3

102

+ See the requirements for the Associate of Science degree section for approved courses.

Electives

Students should select from the list of approved electives *(see below)* those courses that are required for their major at the institution they plan to attend. Oregon State University will accept a maximum of 108 transfer credit hours.

Electives:
- CH 223 General Chemistry 4
- CH 241 Organic Chemistry 4
- CH 242 Organic Chemistry 4
- CH 243 Organic Chemistry 4
- CS 161 Intro to Computer Science I 4
- CS 162 Intro to Computer Science II 4
- EC 201 Intro to Microeconomics 4
- EC 202 Intro to Macroeconomics 4
- ENGR 202 Electrical Fundamentals 4
- ENGR 203 Electrical Fundamentals 4
- ENGR 213 Strength of Materials 4
- ENGR 245 Engineering Graphics and Design .. 4
- ENGR 271 Digital Logic Design 4
- MTH 255 Vector Calculus 4
- MTH 265 Stats for Scientists and Engineers 4

Professional Technical Electives:
- ET 4.001 Intro to Engineering Technology: Civil ... 1
- ET 4.002 Intro to Engineering Technology: Electrical 1
- MA 3.390 Machine Tool I 2
- MA 3.422 Manufacturing Lab I 1-5
- ME 4.161 Materials Testing I 3
- ME 4.162 Materials Testing II 3
- ME 4.163 Materials Testing III 3
- WD 4.151 Welding I 2
- WW 6.164 Water Sources 3
- WW 6.167 Water Distribution and Collections Lab 1

Construction Engineering Management majors should consult an advisor for course requirements.

The following course substitutions will be made for students majoring in Construction Engineering Management:
- ENGR 245 for CH 222
- CEM 263 for ENGR 201
- BA 215 for MTH 253
- BA 230 for MTH 254
- BA 275 for MTH 256
- PH 201, 202, 203 for PH 211, 212, 213

ENGLISH/FOREIGN LANGUAGE

Program Contact:
Linda Spain

Additional Faculty:
English Faculty: Art Bervin, Beth Camp, Tom Chase, Natalie Daley, Paul Hagood, Jane White
Spanish Faculty:

ENGLISH:

Students may earn an Associate of Science degree with a major emphasis in Liberal Studies and a concentration in English: Literature or with a concentration in English: Creative Writing.

Students with an interest in creative writing and graphic arts may take a literary publications class and/or work with faculty advisors from the English and Fine and Applied Arts departments to produce LBCC's annual literary publication, *The Eloquent Umbrella.*

Students can apply classroom theory to the workplace by developing a Cooperative Work Experience (CWE) program that helps them satisfy degree requirements while gaining work experience related to their major. For example, students from technical and business writing classes have worked with local employers on writing projects.

SPANISH:

The English/Foreign Languages Department offers courses that encourage students to improve their writing; to read, analyze, evaluate and appreciate literature; and to develop fluency in a second language.

Associate of Science with a major emphasis in Liberal Studies: English Concentration

General Education Requirements 43

See graduation requirements for Associate of Science degree.

Liberal Studies Core Requirements 18

See Liberal Studies.

Concentration Requirements 30

Select one option:

❑ Literature Option ..... (30)

Choose two sequences of courses 18
- ENG 107, 108, 109 Lit of Western World
- ENG 204, 205, 206 Survey of English Lit
- ENG 253, 254, 255 Survey of American Lit

Choose three credits from
- ENG 201, 202, 203 Shakespeare 3
- Select nine credits from any literature courses 9

❑ Creative Writing Option ..... (30)

Repeat each course for 6 credits:
- WR 240 Personal Journal Writing (3) 6
- WR 241 Intro to Imag. Writing: Fiction (3) 6
- WR 242 Intro to Imag. Writing: Poetry (3) 6
- WR 247 Literary Publication 3
- Select nine credits from any literature courses 9

91

ENVIRONMENTAL HEALTH

Completion of the LBCC Water/Wastewater program awards students up to 45 transferable credits in the Environmental Health major at Oregon State University. A special agreement has been made with the Oregon State University Public Health program to allow this credit transfer for the Environmental Health option. See a Water/Wastewater advisor for further information.

(Continued on next page)

EXERCISE AND SPORT SCIENCE

Program Contact:
Randy Falk

Additional Faculty:
Brad Carman, Richard Gibbs, Greg Hawk, Louise Muscato, Linn Stordahl

The Health and Human Performance Department offers an Associate of Science Degree for students planning to transfer to a four-year program to earn a baccalaureate degree in the area of physical education or exercise and sport science. Career options include physical education, fitness program management, physical education for the disabled, pre-therapy, sports leadership, coaching, or applied exercise and sports science.

The Health and Human Performance Department provides a comprehensive program for students who want to gain knowledge about the value of preventive and corrective health practices and who want to participate in physical activities to enhance overall wellness.

Physical activity is provided through three distinct learning and participation opportunities: Students may learn lifetime recreational skills; developmental courses stress conditioning of the body and maintenance of a specific level of physical condition; and team sport courses provide a high level of conditioning and competition.

The department has indoor and outdoor facilities to support exercise, physical education activities and athletics. The Activity Center contains a fully equipped, double-court gymnasium as well as a weight training room. Complete shower facilities are available for men and women. Outside are a baseball and softball diamond, a complete track facility, tennis courts and four outdoor sand volleyball courts. The department also utilizes non-college facilities for activities such as swimming and bowling.

Intercollegiate athletics are offered in men's and women's basketball, men's baseball, women's volleyball, and men's and women's track and field.

Associate of Science with a major emphasis in Exercise and Sport Science

General Education Requirements 43

See graduation requirements for Associate of Science degree.

SP 111 Fundamentals of Speech and PE 231 Lifetime Wellness are required for the skills component.

BI 101 and BI 102 General Biology required for biology perspectives component.

CH 121 College Chemistry required for physical science perspectives component.

Program Requirements 21

- HE 250 Personal Health 3
- HE 252 First Aid 3
- PE 131 Intro to Health and Physical Education 3
- PE 194A Prof. Act.: Basketball/Volleyball 2
- PE 194C Prof. Act.: Golf/Tennis 2
- PE 194E Prof. Act.: Swimming 2
- PE 194F Prof. Act.: Track 2
- PE 194H Prof. Act.: Weight Training/Aerobic Fitness 2
- PE 194J Prof. Act.: Racquet Games 2

Required Support Course 4

- BI 103 General Biology 4

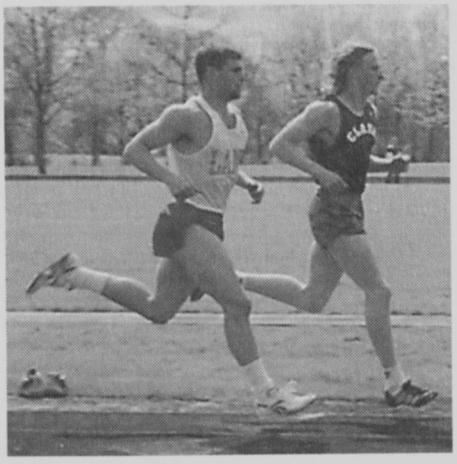
Selective Support Courses 22

Select 22 credits from the following courses:

- *BI 231, 232, 233 Human Anatomy and Phys . 12
- CH 122, 123 College Chemistry 10
- FN 225 Nutrition 4
- HDFS 200 Human Sexuality ***or*** PSY 231 Human Sexuality 3
- HE 151 Drugs in Society 3
- HE 201 A Living Look at Death 3
- HE 204 Exercise and Weight Management 3
- HE 207 Stress Management 3
- HE 220 Intro to Epidemiology/Health Data Analysis 3
- HE 253 Trends in AIDS and Sexually Transmitted Diseases 3
- HE 262 Consumer Health Issues of the '90s 3
- HE 263 Psychosocial Dimensions of Health 3
- PE 180, 185, 190 (Selective Areas of Need) 1
- PE 207 Sports Officiating 2
- PE 232 Backpacking 3
- PE 259 Care and Prevention of Athletic Injuries . 3
- PE 280 CWE Physical Education/Health 2-14
- PSY 236 Human Development: Adult 3

90

* Recommended for students intending to transfer to Western Oregon University.



FINE ART

Program Contact:
Doris Litzer

The Fine Art curriculum helps students understand visual art. As a process of that understanding, students develop skills that help them express ideas through art.

Studio classes provide experience in drawing, painting, composition and color. Lecture courses in art history and understanding art embrace the realm of human experience presented through art. Historical and cultural perspective regarding visual expression is explored.

The Fine and Applied Arts Department has well-equipped studios to support instruction in design, drawing and painting. In addition, the department has a gallery for the exhibit of both student and professional art work. Facilities are handicapped accessible.

The department offers course work leading to an Associate of Science degree with a major emphasis in Fine Art. This degree is designed for students seeking to transfer as art majors, or students may earn an Associate of Science degree with a major emphasis in Liberal Studies and a Fine Art concentration. (See Liberal Studies.)

Associate of Science with a major emphasis in Fine Art

General Education Requirements 43

See graduation requirements for Associate of Science degree.

ART 204, 205, 206 Survey of Art History required.

Major Requirements 24

- ART 115 Basic Design I: Composition 4
- ART 116 Basic Design II: Color 4
- ART 131 Drawing I 4
- ART 132 Drawing II 4
- ART 133 Drawing III 4
- ART 234 Figure Drawing 4

Selectives (Painting) 8

Select two courses:

- ART 181 Intro to Painting 4
- ART 281 Painting 4
- ART 294 Intro to Watercolor 4
- ART 295 Watercolor II 4

***Electives: Select from ART, AA, or PHO prefixes 15**

90

* Additional courses in ceramics, fine art, graphic design and photography are required. (Ceramics courses are offered through the Benton Extended Learning Center in Corvallis.) Students should check the requirements of the institution to which they plan to transfer and consider their desired area of art emphasis.

Associate of Science with a major emphasis in Liberal Studies: Fine Art Concentration

General Education Requirements 43

See graduation requirements for Associate of Science degree.

ART 204, 205, 206 Survey of Art History required.

Liberal Arts Core Requirements 18

See Liberal Studies.

Concentration Requirements 20

- ART 115, 116 Basic Design I, II 8
- ART 131, 132, 133 Drawing I, II, III 12

***Electives 9**

90

*Additional courses in fine art, photography and graphic design recommended.

GEOGRAPHY

See Liberal Studies (Oregon Transfer Degree) or Social Sciences.

(Continued on next page)

HEALTH PROMOTION AND EDUCATION

Program Contact:
Louise Muscato

Additional Faculty:
Brad Carman, Richard Gibbs, Linn Stordahl

This two-year program is for students who plan on transferring to a four-year institution to complete a degree in Public Health or Health Education. The program is designed for students seeking a non-clinical degree in public health. Professional careers include: health promotion, health education, environmental health, occupational safety, child and adolescent health, addiction studies, community health, gerontology or health care administration.

Associate of Science with a major emphasis in Health Promotion and Education

General Education Requirements 43

See graduation requirements for Associate of Science degree.

Program Requirements 31

BI 103 General Biology 4
HE 220 Intro to Epidemiology/Health Data 3
HE 250 Personal Health 3
HE 252 First Aid 3
HE 263 Psychosocial Dimensions of Health 3
PE 131 Intro to Health and Physical Education 3

Select 12 credits:
ANTH 103 Intro to Cultural Anthropology 3
BI 231,232, 233 Human Anatomy and Physiology 4
BI 234 Microbiology 4
CH 121, 122 College Chemistry 5
or CH 221, 222 General Chemistry 4
FN 225 Nutrition 4
PSY 200 Psychology as a Natural Science 4
SOC 204 General Sociology 3

Selective Support Courses 20

Select 20 credits from the following courses:
BI 231 Human Anatomy and Physiology 4
BI 232 Human Anatomy and Physiology 4
BI 233 Human Anatomy and Physiology 4
CH 122 College Chemistry 5
CH 123 College Chemistry 5
FN 225 Nutrition 4
HDFS 200 Human Sexuality ***or*** PSY 231 Human Sexuality 3
HE 151 Drugs in Society 3
HE 201 A Living Look at Death 3
HE 204 Exercise and Weight Management 3
HE 205 Diet and Nutrition in the '90s 3
HE 207 Stress Management 3
HE 253 AIDS and Sexually Transmitted Diseases 3
HE 262 Consumer Health Issues of the '90s 3
HE 270 History, Philosophy & Ethics of Health 3
HE 280 CWE Health 2-14
HE 298 Men's Health Issues 3
HE 298 Women's Health Issues 3
PSY 236 Human Development: Adult 3

94

HEAVY EQUIPMENT/ DIESEL TECHNOLOGY

An Associate of Science with a major emphasis in Heavy Equipment/Diesel Technology is available through a special agreement. See program advisor.

HISTORY

See Liberal Studies (Oregon Transfer Degree) or Social Sciences.

HOME ECONOMICS

Program Contact:
Beth Hogeland

Home economists work to improve the quality of family life through the practical application of science and technology. They learn to use skills from a wide variety of disciplines, from art to science to communications. They may choose to specialize in such diverse careers as textile design, child and family studies or food systems management. Throughout this multi-disciplinary field runs a common thread: a real concern for the family as it faces the challenges of a changing world. A large number of areas of concentration exist in the field of home economics. Degree requirements vary according to the area of concentration chosen. Four-year programs may require specific general education courses as prerequisites for upper-division course work. Students who make an early identification of the college or university to which they plan to transfer can ease the transfer process by choosing carefully their associate degree course work.

Students who plan to transfer to Oregon State University in Early Childhood Development are encouraged to complete the Associate of Science degree in Child and Family Studies.

Associate of Science with a major emphasis in Home Economics

General Education Requirements 43

See graduation requirements for Associate of Science degree.

Requirements for All Home Economics Majors 7

FN 225 Nutrition 4
HDFS 201 Individual and Family Develop 3

Selectives (dependent upon area of concentration) 40

90

JOURNALISM AND MASS COMMUNICATIONS

Program Contact:
Rich Bergeman

The Journalism and Mass Communications program emphasizes writing for the print media and serves a twofold purpose: to prepare students for transfer to a four-year college or university and to provide entry-level skills to those who want to change careers.

The journalism program maintains a co-curricular relationship with The Commuter, LBCC's award-winning student newspaper, providing first- and second-year students with hands-on training. Cooperative Work Experience (CWE) offers additional on-the-job learning opportunities on and off campus. Facilities for the program include a computer-equipped newsroom and production lab. Photography classes are supported by a series of fully equipped instructional darkrooms and electronic imaging labs. Besides the cost of books, students may expect to spend about $75 for photographic materials.

Students who intend to pursue a bachelor's degree can choose between two associate degree programs at LBCC: the Associate of Science or the Associate of Arts (Oregon Transfer).

Those planning to transfer to the University of Oregon should pursue the Associate of Arts degree in Journalism, with an emphasis in Liberal Studies, and should include within their Bachelor of Science Preparatory Option the following courses: JN 216 News Reporting and Writing and JN 201 Media and Society. See the Liberal Studies (Oregon Transfer) section for complete degree requirements.

Students planning to transfer to Oregon State University (or to any other college without an AEJMC-accredited bachelor's program in journalism) should pursue the Associate of Science in Journalism and Mass Communications at LBCC. This transfer degree includes 28 lower-division journalism credits.

In all cases, students should consult with their advisor at LBCC and make early contact with an advisor at the institution to which they plan to transfer.

Associate of Science with a major emphasis in Journalism and Mass Communications

General Education Requirements 43

See graduation requirements for Associate of Science degree. Students are encouraged to include the following courses in their general education requirements:

CJ 120 Intro to Judicial Processes
HST 203 U.S. History
PS 203 State and Local Government

(Continued on next page)

Major Requirements 31

Fall - First Year
JN 201 Media and Society 4
JN 215A Journalism Lab 1
JN 216 News Reporting and Writing 3
PHO 261 Intro to Photography 3

Winter
JN 134 Intro to Photojournalism 3
JN 215A Journalism Lab 1
JN 215B Design and Production Lab 2

Spring
JN 215A Journalism Lab 1
JN 217 Feature Writing 3

Second Year
JN 215B Design and Production Lab 4
JN 218 Editing and Page Design 3
JN 280 Cooperative Work Experience 3

Electives 17

91

LIBERAL STUDIES
(Oregon Transfer Degree)

Program Contact:
Jim Bell

Liberal Studies is an interdepartmental curriculum offering students a broad, general education that provides flexibility and a good foundation for a variety of career options. Programs in Liberal Studies prepare students for transfer to four-year colleges and universities and develop the reading, writing and critical/analytical thinking skills necessary in any career.

The Liberal Arts Associate of Arts Oregon Transfer (AAOT) is organized to provide appropriate options for students intending to earn a Bachelor of Arts or a Bachelor of Science degree from a four-year college or university.

Completion of the AAOT degree with an emphasis in Liberal Studies will satisfy all institutional lower-division general education requirements at any Oregon University System college or university.

Associate of Arts (Oregon Transfer) with an emphasis in Liberal Studies

General Education Requirements 65-73

See graduation requirements for Associate of Arts (Oregon Transfer) degree.

Program Requirements

Select one option below:

❑ Bachelor of Arts Prep. Option 24
SPN 101, 102, 103 First-Year Spanish 12
SPN 201, 202, 203 Second-Year Spanish* 12

❑ Bachelor of Science Prep. Option 21
Credits selected from art, creative writing, criminal justice, humanities, journalism, literature, music, philosophy, religion, theatre.

Focus Areas in Social Sciences

Anthropology:
Anthropology studies the origins of humans and the various ways that humans have organized themselves around the world. Students should take these courses for this focus:
ANTH 103 Intro. to Cultural Anthropology
ANTH 230 Time Travelers
ANTH 232 Native North Americans

Geography:
Geographers study the planet earth and the ways that humans have developed natural resources. They study economies, climate, ecology and natural hazards. Students should take several of these courses for this focus:
GEOG 121 Intro. to Physical Geography
GEOG 190, 202, 203, 204

History:
Historians study the cultural heritage of humans. They seek to understand present world problems and situations by looking at past ones. Students should take several of these courses for this focus:
HIST 101, 102, 103 Western Civilization
HIST 201, 202, 203 U.S. History
HIST 157, 158, 159

Political Science:
Political scientists explore the nature of human government, decision-making, conflict resolution, and the use of power. Students should take several of these courses for this focus: PS 200, 201, 220, 252, 203, 204, 205, 206

Psychology:
Psychologists are concerned with individual human behavior. Human development and sexuality are also studied by psychologists. Students should take several of these courses for this focus: PSY 202, 200, 205, 215, 216, 231, 235, 236, 237

Sociology:
Sociologists study human behavior in groups. This discipline studies how humans organize and structure their lives, especially in marriage, family, and stratification. Students should take several of these courses for this focus: SOC 204, 205, 206, 211, 222

Additional electives to total 90 credits

90

*May be applied to general education requirements.

LIBERAL STUDIES
(Associate of Science)

Program Contact:
Jim Bell

Liberal Studies is an interdepartmental curriculum offering students a broad, general education that provides flexibility and a good foundation for a variety of career options. Programs in liberal studies prepare students for transfer to four-year colleges and universities and develop the reading, writing and critical/analytical thinking skills necessary in any career.

The Liberal Studies Associate of Science degree is organized to provide appropriate options for students intending to earn a Bachelor of Arts or a Bachelor of Science degree from a four-year college or university.

The Associate of Science degree with an emphasis in liberal studies is intended especially to facilitate transfer to Oregon State University's College of Liberal Arts. Although AS degree credits transferred to OSU are accepted on a course-by-course basis, it is expected that students who complete this degree will have completed all of OSU's lower-division baccalaureate core requirements as well as additional CLA liberal arts core requirements.

The liberal studies AS degree consists of three sets of requirements: institutional general education requirements, liberal studies core requirements and program requirements.

Associate of Science with a major emphasis in Liberal Studies

General Education Requirements 43

See graduation requirements for Associate of Science degree.

Liberal Studies Core* 18

Select one class from each of the following disciplines:

Fine Art 3
ART 102, 115, 116, 131, 132, 133, 154,181, 204, 205, 206, 234, 281, 294, 295
MP 115/215, 122/222, 141/241
MUS 105, 161, 205
SP 229
TA 106, 114, 121, 122, 123, 124, 125, 161, 162, 163, 180/282, 185/285
WR 241, 242

Humanities 3
ENG 104, 105, 106, 107, 108, 109, 121, 201, 202, 203, 204, 205, 206, 207, 208, 209, 211, 253, 254, 255, 260, 261, 275
HST 101, 102, 103, 201, 202, 203
HUM 100
PHL 201, 202, 215
R 101, 102, 103, 211, 212

Non-Western Culture 3
ANTH 210, 232
ENG 207, 208, 209
GEOG 202, 203, 204
HST 157, 158, 159
R 103

Social Science 3
ANTH 103, 107, 210, 230, 232
EC 115, 201, 202, 203, 201A, 202A, 215, 216, 220
GEOG 202, 203, 204
HDFS 200, 201, 225
PS 104, 200, 201, 203, 204, 205, 220, 240, 252
PSY 101, 200, 205, 215, 231, 235, 236, 237
SOC 204, 205, 206, 222

Additional credits from two areas above 6

Program Options

Select one option:

❑ Bachelor of Arts Preparatory Option (24)
SPN 101, 102, 103 First-Year Spanish 12
SPN 201, 202, 203 Second-Year Spanish 12

❑ Bachelor of Science Preparatory Option

Select either the Major Subject Program or the Interdisciplinary Program.

Major Subject Program

Complete major subject program requirements listed under one of the following catalog headings: English, Fine Art, Music, Social Science, Theatre or Speech Communications.

Interdisciplinary Program (21)

Credits selected from anthropology, art, creative writing, criminal justice, geography, history, humanities, journalism, literature, music, philosophy, political science, psychology, religion, sociology, theatre.

Electives to total 90 credits

90

*Additional courses may have been approved since this catalog was published. Check with Counseling or the Liberal Arts and Human Performance Division office for current list.

(Continued on next page)

MATHEMATICS

Program Contact:
Ron Mason

Additional Faculty:
Mary Campbell, Judy deSzoeke, Rob Lewis, Elizabeth Lundy, Roger Maurer, Ann Mills, Sharon Rodecap, Cathy Stark, Lynn Trimpe, Bob Ulrich, Betty Westfall

The Mathematics Department offers a full complement of courses for transfer students and provides service courses for students in the college's technical and professional programs. The department also offers developmental courses for students with little mathematics background or who are returning to school. The department participates in the operation of the Learning Center, which features individualized assistance for math students. The department also operates a computer lab, which provides support for a variety of courses in math, engineering, physics, agricultural science and others.

The Mathematics Department offers a two-year Associate of Science degree with a major emphasis in mathematics designed for students who plan to transfer to a four-year institution to complete a baccalaureate degree in mathematics. This program provides those students with a solid foundation in mathematics and physics. Students entering the program with a strong high school mathematics and science background can expect to complete the program in two years. Students who must take pre-calculus mathematics courses should expect to spend more than two years in the program.

Associate of Science with a major emphasis in Mathematics

General Education Requirements 34

See graduation requirements for Associate of Science.

The mathematics and physical science requirements are met by the listed major requirements.

Major Requirements 52

- Computer Science (a programming course approved by the department) 3
- MTH 231 Elements of Discrete Math 4
- MTH 251, 252, 253, 254 Calculus 18
- MTH 255 Vector Calculus 4
- MTH 256 Applied Differential Equations 4
- MTH 265 Stats for Scientists and Engineers 4
- PH 211, 212, 213 General Physics w/Calculus 15

Electives 8-12

- BA 211, 213 Principles of Accounting 8
- BI 101, 102, 103 General Biology 12
- BI 211, 212, 213 Biology 12
- CH 121, 122, 123 College Chemistry 15
- CH 221, 222, 223 General Chemistry 12
- CS 161, 162 Computer Science 8
- EC 201 Intro to Microeconomics 4
- EC 202 Intro to Macroeconomics 4
- GS 104 Physical Science 4
- GS 107 Astronomy 4
- GS 108 Oceanography 4
- MTH 111 College Algebra 5
- MTH 112 Trigonometry 5
- MTH 116 Calculus Preparation 5
- MTH 232 Elements of Discrete Math 4
- MTH 245 Math for Biol./Mgmt./Soc.Sciences 4

94-98

MUSIC

Program Contacts:
Hal Eastburn, Gary Ruppert

The Performing Arts Department offers students a variety of academic and performance opportunities in music. Certain courses in music support general education degree requirements in the arts. Group classes are offered in voice and piano, and individual lessons are available for many instruments and voice.

Students may participate in any of several performance groups: Concert Choir; Chamber Choir; Community Chorale and instrumental performance groups in conjunction with the Music Department at Oregon State University.

The Performing Arts Department supports the Associate of Science degree with a major emphasis in Liberal Studies and a concentration in Music. (Also see Liberal Studies.)

Associate of Science with a major emphasis in Liberal Studies: Music Concentration

General Education Requirements 43

See graduation requirements for Associate of Science degree.

Liberal Arts Core Requirements 18

See Liberal Studies.

Concentration Requirements 19-22

- MUS 101 Music Fundamentals 3
- MUS 105 Intro to Rock Music 3
- MUS 131 Group Piano I 2
- MUS 134 Group Voice I 2
- MUS 161 Music Appreciation 3
- MUS 205 Intro to Jazz 3
- At least three terms of performance classes from the list below 3-6
  - Concert Choir, Community Chorale, Chamber Choir, Symphonic Band, Marching Band, Concert Band, Symphony Orchestra, Jazz Band

Electives

Additional electives to total not less than 90 credits. Select from MUS, MP or TA prefixes.

90

PHILOSOPHY

See Social Sciences.

PHYSICAL SCIENCES

Program Contact:
John Griffith

Additional Faculty:
David Benson, John Kraft, Greg Mulder

The Physical Science Department offers professional, technical and transfer courses in physics, chemistry, astronomy and general science.

POLITICAL SCIENCE

See Liberal Studies (Oregon Transfer Degree) or Social Sciences.

PSYCHOLOGY

See See Liberal Studies (Oregon Transfer Degree) or Social Sciences and Human Resources: Learning Community.

RELIGION

See Social Sciences.

SOCIAL SCIENCES

Program Contact:
James Bell

Additional Faculty:
History/Political Science: Doug Clark
Criminal Justice: Jackie Turle
Psychology: Gina Vee, Carolyn Wright
History: Michael Weiss

In general, social science is the field of human knowledge that deals with all aspects of the individual and group life of men and women. Considered separately, the social sciences include a variety of specialized ways of looking at the world: anthropologists study the evolution of human beings and their ways of life; geographers describe the planet and concern themselves with distribution of population, economic conditions, ecological systems and the interaction between humans and their environment; historians seek to understand the present by analyzing the complexities of the past; political scientists explore the nature of government and the uses of power; psychologists are concerned with individual behavior and development; philosophers probe issues of truth, goodness and beauty; religionists examine how faith has expressed itself among groups and individuals; while sociologists consider group behavior and the structure of society.

Social science is a practical field for both the short term and the long run. It provides a valuable background for people interested in social and civil services, law, education, journalism, government and business and for those pursuing undergraduate and graduate degrees in the humanities and the specialized fields of the social sciences.

(Continued on next page)

Because all aspects of human culture are related and interdependent, the LBCC social science curriculum is designed to provide students with a broad and integrated picture of the nature of human society along with some understanding of the major forces operating within it. The Social Science Department supports the Associate of Science degree with a major emphasis in Liberal Studies and a concentration in Social Science with options in Behavioral Studies, American Studies and International/Intercultural Studies. Social Science provides specialized programs in Criminal Justice, Education and Human Services. Students are advised to enroll in the Human Resources Learning Community as the first year of their program.

Behavioral Studies Option: Behavioral studies deal chiefly with the mind and personality of the individual, the relationship between men's and women's biological traits and their socially acquired characteristics, and the social interaction of individuals with one another and with groups.

American Studies Option: American studies deal with the culture, the development and the character of the United States and the Western Hemisphere, as well as contemporary social, economic and political problems and possibilities.

International/Intercultural Studies Option: International/intercultural studies deal chiefly with the study of ourselves as a part of a larger world consisting of a variety of culture and social systems that profoundly shape the nature of cooperation and conflict on the planet.

Associate of Science with a major emphasis in Liberal Studies: Social Science Concentration

General Education Requirements 43

See graduation requirements for Associate of Science degree.

Liberal Arts Core Requirements 18

See Liberal Studies.

Concentration Requirements 21

Complete 21 credits in one area listed below, including at least one nine-credit sequence:

❑ Behavioral Studies Option ..... (21)

CJ 101 Intro to Criminology 3
CJ 201 Juvenile Delinquency 3
CJ 202 Violence and Aggression 3
PHL 201 Intro to Philosophy 3
PS 200 Intro to Political Science 3
PSY 101 Psychology and Human Relations 3
PSY 200 Psychology as a Natural Science 4
PSY 205 Psychology as a Social Science 4
PSY 215 Intro to Developmental Psychology ***or***
HDFS 201 Individual and Family Devel. 3
PSY 216 Social Psychology 3
PSY 231 Human Sexuality ***or***
HDFS 200 Human Sexuality 3
PSY 235 Human Development: Child ***or***
HDFS 225 Child Development 3
PSY 236 Human Development: Adult 3
PSY 237 Human Development: Aging 3
SOC 204, 205, 206 General Sociology ..... (9)
SOC 222 Marriage Relations 3

❑ American Studies Option ..... (21)

ANTH 232 Native North Americans 3
HST 201, 202, 203 United States History ..... (9)
PS 104 Problems in American Politics 3
PS 201 American Government 3
PS 220 U.S. Foreign Policy 3
PS 252 Constitutional Law 3
SOC 206 General Sociology 3

❑ International/Intercultural Studies Option ..... (21)

ANTH 103 Intro to Cultural Anthropology 3
ANTH 210 Comparative Cultures 3
ANTH 230 Time Travelers 3
GEOG 202 Geog. of Latin America/Caribbean .... (3)
GEOG 203 Geography of Asia ..... (3)
GEOG 204 Geography of Africa/Mid East .... (3)
HST 101, 102, 103 Western Civilization ..... (9)
HST 157 History of the Middle East and Africa 3
HST 158 History of Latin America 3
HST 159 History of Asia 3
PHL 201 Intro to Philosophy 3
PHL 202 Elementary Ethics 3
PHL 215 History of Western Philosophy 3
PS 200 Intro. to Politics 3
PS 203 State & Local Government 3
PS 204 Intro. to Comparative Politics 3
PS 205 International Relations 3
PS 220 U.S. Foreign Policy 3
R 102 Religions of the Western World 3
R 103 Religions of the Eastern World 3

Selectives 8

Select six credits from the two areas not selected as the major area of concentration, a minimum of three credits from each area. Three of these credits may be taken as CWE Social Science Internship.

90

SOCIOLOGY

See Liberal Studies (Oregon Transfer Degree) or Social Sciences.

SPEECH COMMUNICATIONS

Program Contact:
Gary Ruppert

Additional Faculty:
Jane Donovan, George Lauris

The Performing Arts Department offers a broad perspective background in speech communications. Courses in speech communications support institutional general education degree requirements in communication as well as offering a broad base of opportunity for students interested in pursuing fields of study in communication, media and public relations.

The Performing Arts Department offers the Associate of Science degree with a major emphasis in Liberal Studies and a concentration in Speech Communications.

Associate of Science with a major emphasis in Liberal Studies: Speech Communication Concentration

General Education Requirements.....43

See graduation requirements for Associate of Science degree.

Liberal Studies Core Requirements.....18

See Liberal Studies.

Speech Communication Concentration Requirements.....19

Choose six credits from:
SP 111 Fundamentals of Speech (3) ***and***
SP 112 Introduction to Persuasion (3) ***or***
SP 218 Interpersonal Communication (3) 6
(Cannot use the same course that is used to fulfill the general education requirement.)
JN 201 Media and Society 4
SP 219 Small Group Communication 3
SP 237 Communication and Gender 3
TA 121 Fundamentals of Acting I ***or***
TA 125 Improvisation 3

Electives 10

90

THEATRE

Program Contacts:
Jane Donovan, George Lauris

Additional Faculty:
Bruce Peterson, Gary Ruppert

The Performing Arts Department offers students a variety of academic and performance opportunities in the area of theatre. Theatre courses, such as Introduction to Theatre, may be applied to requirements in arts and letters; courses such as Fundamentals of Acting and Improvisation are intended for students seeking to gain performance and communication skills. Credit opportunities also are available in technical theatre.

Most department performances are held in the fully equipped Takena Theatre.

The Performing Arts Department offers the Associate of Science degree with a major emphasis in Liberal Studies and a concentration in Theatre. (See Liberal Studies.)

Associate of Science with a major emphasis in Liberal Studies: Theatre Concentration

General Education Requirements 43

See graduation requirements for Associate of Science degree.

Liberal Studies Core Requirements 18

See Liberal Studies.

Theatre Concentration Requirements...15-18

Choose one of the following sets:
TA 121, 122, 125 Acting I, II and Improv. 9
or TA 161, 162, 163 Fundamentals of Technical Theatre 12

Choose six credits from:
TA 180/282 Rehearsal and Performance
and/or TA 185/285 Production Workshop ... 6

Electives 14

Select from TA, MUS, or MP prefixes.

90

(Continued on next page)

HUMAN RESOURCES LEARNING COMMUNITY

Program Contacts:

Child and Family Studies.....Beth Hogeland
(541)917-4911

Criminal Justice.....Jackie Turle
(541)917-4284

Education.....May Garland
(541)917-4699

Human Services.....Kristen Jones
(541)917-4572

Career Advising.....Christina Salter
(541)917-4780

Additional Faculty:
Art Bervin, Tom Chase, Doug Clark, Jane Donovan, Eva Payne, Jane White, Carolyn Wright

Students interested in Criminal Justice, Child and Family Studies, Education, or Human Services may want to consider the Human Resources Learning Community as a first-year college experience.

It is essential that people seeking employment in Human Resources occupations have an in-depth understanding of human development and behavior. The goal of the Human Resources Learning Community is to supply students with this knowledge as well as to provide a foundation that allows students to be successful in college and beyond.

The curriculum of the Human Resources Learning Community is an integrated curriculum. This means parts of each subject are combined to design lectures, assignments and group exercises. Combining several branches of learning allows for a curriculum designed around four goals: communication, understanding human experience, inquiry and critical thinking, and social responsibility and ethics. Through the Learning Community, students gain the ability to communicate clearly, think logically and critically, get along with different kinds of people and work both independently and in small groups.

In this year-long core of courses, the classes are small and each class is divided further into small groups for activity-based learning experiences and skill development. The curriculum is based on improving oral and written communication skills, developing computer competency and improving interpersonal skills. The core of classes is designed to help students learn how to address complex life and career issues and solve problems in a supportive learning community. Students may enter in fall, winter or spring terms.

Benefits include:

- At least 34 credits apply toward the AAOT degree.
- Regular interaction with advisors.
- Preparation in the behaviors and skills required by employers.
- Participation in a Service-Learning experience that combines a learning experience in the community with what students are learning in class.
- A network of support including peer mentors, faculty and counselors.

Students who successfully complete the first-year core experience take specific program courses in their career area during the second year, as well as the additional requirements for the AAOT.

Curriculum for the first year includes:

Fall

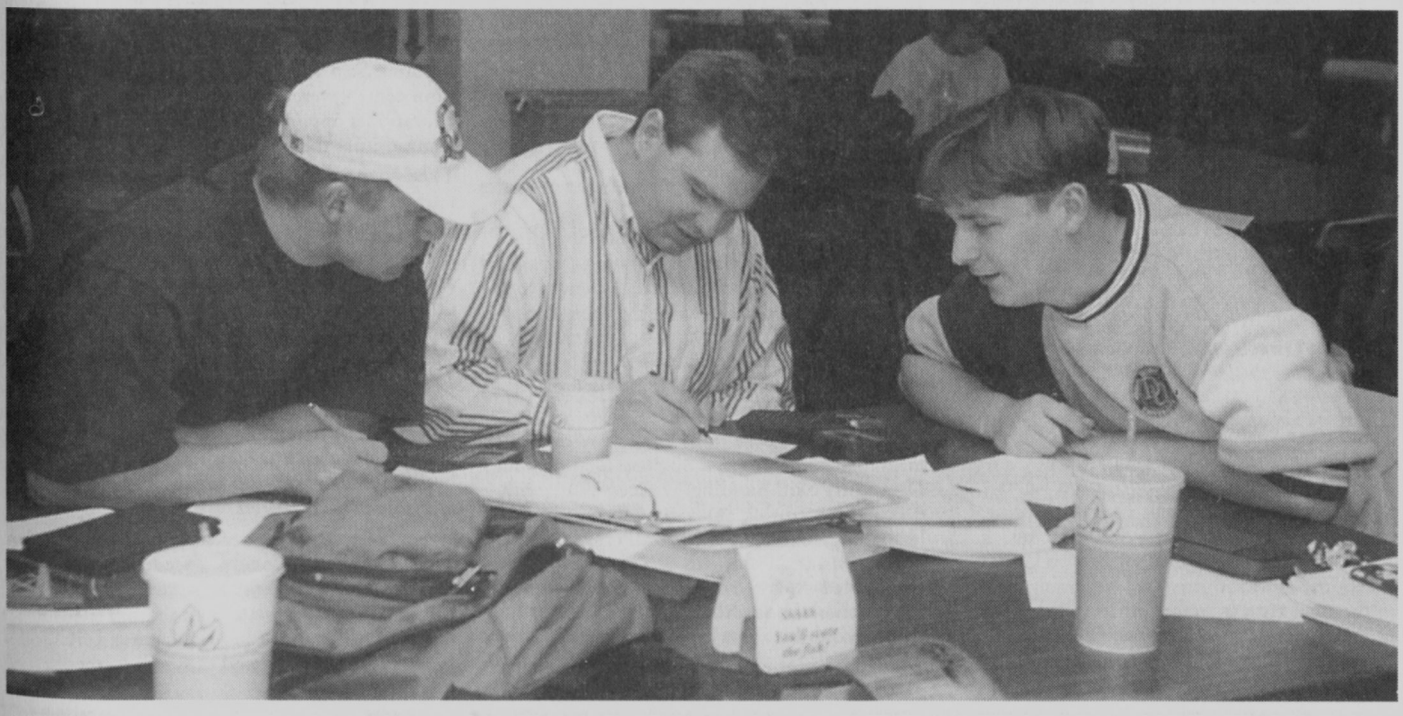
HD 110 A Career Planning 1
PSY 200 Psychology as a Natural Science 4
Writing Option:
WR 115 Intro to Writing ***and***
SS 1.150 Techniques of Studying 4
or WR 121 English Composition ***and***
ENG 104 Intro to Literature: Fiction 6
Electives 3-6

Winter

CJ 202 Violence and Aggression 3
HD 110B Career Planning 1
HDFS Individual and Family Development ***or***
PSY 215 Intro to Developmental Psychology . 3
SOC 206 General Sociology 3
WR 121 English Composition ***or***
WR 122 English Composition 3
Electives 3-6

Spring

ED 101 Observation and Guidance ***or***
HS 101 Intro to Human Service 3
PSY 205 Psychology as a Natural Science 4
SP 218 Interpersonal Communication 3
WR 122 English Composition ***or***
WR 123 English Composition 3
Electives 3-6



COMMUNITY OUTREACH

EXTENDED LEARNING CENTERS

Albany Extended Learning and Evening Services

(541)917-4840

The Extended Learning and Evening Services Office is located in Takena Hall on the Albany campus, 6500 S.W. Pacific Blvd. The office establishes workshops and courses for professional upgrading and life enrichment in subjects such as conversational language, art, music, physical fitness, computers, personal growth, consumer education and professional development. The office serves primarily the communities of Albany, North Albany, Tangent and Shedd but also is responsible for district-wide programs such as Driver's Education, Motorcycle Safety and the Retired and Senior Volunteer Program (RSVP). Community educational activities are often cosponsored with various community agencies, such as the Albany Senior Center, Albany Parks and Recreation, and Albany General Hospital. The classes are held at sites throughout the Albany area.

The Extended Learning and Evening Services Office coordinates services to evening students and instructors and the After Four Program. Off-campus degree programs on the LBCC campus, such as Linfield College's bachelor degree programs, Portland State University's statewide Master of Business Administration (MBA) program, and Oregon State University's Division of Continuing Education programs, are operated out of the Extended Learning and Evening Services Office.

During the regular academic year, office hours are 8 a.m. to 10 p.m., Monday through Thursday, and 8 a.m. to 5 p.m. on Friday.

Benton Center

Director, Extended Learning and Benton Center:
Dorie Nelson

Assistant Director, Benton Center:
Lucy Noone

(541)757-8944

The Benton Center is located at 630 NW 7th, Corvallis, in the former Washington Elementary School, and is open from 8 a.m. - 9:30 p.m. Monday through Thursday during the school week and 8 a.m. - 4:30 p.m. on Friday. The center serves all of Benton County except the North Albany area, providing classes in the rural areas as well as in Corvallis. Many of the programs are made possible through the cooperation of school districts, organizations and agencies in the area.

The center provides lower division transfer courses, professional technical courses and adult self-improvement courses. Popular life-long learning subject areas include art, writing, physical fitness, conversational languages, outdoor education, ceramics and parent education. Courses are offered during the day and in the evening.

Student services available in the center include the Computerized Placement Test and registration. A bookstore sells books for classes offered through the center. An academic/career counselor is available to residents of the area at no charge. Appointments may be made by calling (541)757-8944.

Self-Study, Open-Entry Labs

The center has many self-study, open-entry labs that allow students to start a program when they are ready and to have a more flexible schedule. Read the quarterly Schedule of Classes for registration and attendance restrictions.

Accounting Lab

The Accounting Lab provides a place to upgrade accounting skills or learn practical accounting. Students may begin at any time and work at an individualized pace. The Practical Accounting course includes setting up journals and ledgers, preparing and understanding financial statements, and preparing payroll and payroll taxes. Students who complete all 12 credits should be equipped to handle full-cycle bookkeeping.

Adult Basic Skills Development

Programs offered at the Benton Center include Adult Basic Skills Development, General Education Development and English to Speakers of Other Languages. For additional information, see "Adult Basic Skills Development Programs" in the "Services for Students" section of this catalog.

Business Technology Lab

Faculty:
Joyce Moreira

The Business Technology Lab offers a place to upgrade or to learn new office skills. Students work at an individualized pace with a manual of instructions and help from qualified instructors. An instructor and assistant are available during all open hours. The lab is open at convenient times for students. For hours look in the quarterly schedule of classes under Benton Center, Business Technology section.

Students may choose from a variety of classes including Keyboarding, Computer Skill Building, Data Entry Skill Building, Business Math with Calculators, Editing Skills for Information Processing, Windows 95, WordPerfect with Windows, and Word with Windows. Students also choose when they wish to come based on the number of hours their chosen course requires and the hours the lab is open.

The lab is designed to offer students a friendly and supportive environment in which to learn business technology skills.

Computer Lab

The Benton Center Computer Lab provides lecture classes, open labs and self-study classes. The lab has IBM-compatible computers, a wide variety of software and a friendly and helpful staff. The computers and software are available to all currently registered LBCC credit students at no cost during the open lab hours. Community members not enrolled in credit classes may purchase time to work on their own projects.

Math Lab

Faculty:
Ann Mills

The Benton Center Math Lab enables students to take a mathematics class in a self-paced, self-study individualized setting. Lab classes are open entry and variable credit with a two-term limit for completion. The classes offered in this format are MTH 20 through MTH 112. There are always instructors available to answer questions and show students how to use the supplementary instructional resources. The lab also is a resource for students registered in lecture math classes. It is designed to provide a non-threatening and supportive place to get help with mathematics.

East Linn – LBCC

Lebanon Center (541)451-1014
Sweet Home Center (541)367-6901

East Linn-LBCC encompasses centers in Lebanon at 550 Main Street and Sweet Home at 1314 Long Street. They serve the communities of Lebanon, Sweet Home, Brownsville, Cascadia, Crabtree, Foster, Halsey, Lacomb, Scio and rural Linn County. The East Linn centers were established to provide educational opportunities to members of the communities they serve.

The Lebanon and Sweet Home facilities house four and five classrooms respectively, plus several other sites are used throughout the area.

A broad range of courses to meet the interest and learning needs of the community are offered each term. Computer, math and business technology labs, as well as adult basic skills development, college transfer, job skills and professional upgrading courses, are routinely offered. A wide variety of credit and non-credit courses in art, agriculture, business, science, language arts, physical education and health, family living and self-improvement are available at both centers.

Other college services available in Lebanon and Sweet Home include career, academic and financial aid counseling; registration for part-time students; placement testing; test proctoring; distance education classes; LBCC Library book pick up and drop off; textbook

sales for classes offered through the East Linn centers; assistance to all LBCC students; and general information about LBCC and other outreach center programs.

In addition, the services of a counselor from the Linn County Veterans Affairs Office is available through the East Linn centers, and the Lebanon Center houses the Linn County Business Development Center, a TBDC Business Counselor and a representative from SCORE. The JOBS program for East Linn County is located at 200 Harrison in Lebanon.

Self-Study, Open-Entry Labs

The centers provide self-study, open-entry labs that allow students to start programs during the term and the flexibility to schedule around a changing work shift.

Accounting Lab (Sweet Home)

In the Sweet Home Center's Accounting Lab, students can take the Practical Accounting series. These three (4-credit) accounting classes are self-study, variable credit and open entry, enabling students to start at any time during the term.

Adult Basic Skills Development

Programs offered at the centers include Adult Basic Skills Development and General Education Development. English to Speakers of Other Languages is offered at the Sweet Home Center only. For additional information see "Adult Basic Skills Development Programs" in the "Services for Students" section of this catalog.

Business Technology Lab

Faculty:
Carla Mundt

The Business Technology Lab offers a place to upgrade or learn new office skills. Students work at an individualized pace with a manual of instructions and help from instructors. The lab is designed to offer students a friendly and supportive environment in which to learn business technology skills.

The hours of attendance required in the lab varies among classes based on the number of credits and duration of a class.

When registering, students must report to the Business Technology Lab to select their attendance times so equipment may be reserved. In addition to reserved hours, equipment may be used at other lab times on a seat-available basis.

IMPORTANT: *Preregistered students who do not attend during the first week of classes, including second half of the term classes, may be subject to administrative withdrawal if space is needed for students on the Wait List.*

Classes are available four mornings and four evenings per week in Lebanon and two afternoons per week in Sweet Home. Courses available during these times are Keyboarding, Skill Building, Windows, WordPerfect with Windows, MS Word with Windows, Electronic Calculator, Formatting, Editing Skills and Filing. Classes available in Lebanon only are: Business Math, Editing Skills, Transcription, WordPerfect for Business and MS Word for Business. These courses apply toward the certificates and degrees offered by LBCC's Business Technology Department.

Credits must be earned and lab hours used within the term they are purchased. Refunds are not given for unused lab hours.

Computer Lab

Lecture classes, self-study classes and open labs are offered at various times throughout the week (see Schedule of Classes for specific times) and on Saturday mornings in Lebanon. Self-study courses enable students to learn individually at their own pace on IBM-compatible machines. Software selections include word processing, spreadsheets and data base programs. Open lab hours are available at no cost to all registered LBCC students and for a fee to other community members on a space-available basis.

Math Lab

Faculty:
Mary Campbell

The East Linn Math Lab is designed for students to take math courses in a self-paced, self-study format. Classes may be entered at any time during the term. Students work from textbooks and supplemental materials, asking for assistance from the instructor as needed. Courses from Basic Mathematics through Trigonometry are offered. Courses are offered in a variable-credit format. Any credits not earned within the term must be repurchased and completed the following term. The Math Lab is open four afternoons and four evenings per week in Lebanon and two evenings per week in Sweet Home.

FAMILY RESOURCES DEPARTMENT

Parent Education

Program Contact:
Linda Donald

Additional Faculty:
Christie Connard, Joy Keiser, Barb Lawson, Mary Miyakawa, Vicki North, Liz Pearce-Smith, Patty Schute
(541)917-4897

Parent Education classes are offered to those parents interested in learning more about child development, guidance and discipline, and planning educational activities for their children.

Parent/child classes, in which parents work with college faculty to provide quality educational experiences for themselves and their children, are offered in communities throughout the district.

Community Access to Family Support and Education is a department project that engages communities in family support; provides community parent education; trains and supports parent educators; and provides phone consultations and newsletters to help families access parent education, family support programs and children's recreational programs.

Some department programs link parent education with adult education. These programs enable adults to obtain a GED or professional skills while learning how to help their children develop skills to ensure success in school.

For more information about parent education programs, call the Family Resources Department, (541)917-4897, or Family Connections, (541)917-4899.

Work and Family

Program Contact:
Pam Dunn

Family Connections

Family Connections provides comprehensive information on available child care, parent education, recreational activities and other forms of family support in Linn and Benton counties. This service provides education, training and consultation to families and child care providers, employers and employees. Community residents can access this service through a district telephone line, 917-4899.

Services include:

- child care referrals
- education and information about child care
- education and information about parent education and family support programs
- information about recreational activities
- consultation and support services for child care providers and families
- consultation to employers/employees
- parent advice line

Parent Educator and Child Care Provider Training

Parent Educator Training

Program Contact:
Linda Donald

Parent educators receive training and practical assistance for the parent classes they teach in communities throughout Linn and Benton counties. This support is made possible by the Department's Community Access to Family Support and Education Project. This project also coordinates the class and program offerings in the district. Information about classes and programs is available through Family Connections (formerly Child Care Resource and Referral), (541)917-4899.

Child Care Provider Training

Program Contact:
Sue Doescher

A variety of courses and short-term training for child care providers is offered through Family Connections (formerly Child Care Resource and Referral). Designed for practicing providers, these courses are taught in the evenings and on weekends. Providers can begin their professional training with these courses. Providers may elect to continue their training by enrolling in the certificate and degree programs in Child and Family Studies. For more information, call Family Connections, (541)917-4899.

FIRE SCIENCE

A variety of Fire Science classes are available to paid and volunteer firefighters based on needs and demand.

HEALTH OCCUPATIONS/ SERVICES EDUCATION CENTER (HOSEC)

Program Contacts:
Missy Dutson, Evon Bergstrom

The mission of HOSEC is to provide education for the health care community to meet the challenges of today and tomorrow. The education center seeks to respond to change by:

- delivering quality short-term training
- providing conferences and seminars
- building partnerships with the health care community
- providing leadership in technology information
- articulating with the local high schools in education reform

HOSEC offers the following services:

- curriculum development in health services
- instructional resources (faculty, media, clerical)
- marketing and registration services

For more information on any of the offerings or services provided by the center, please call (541)917-4510.

LIFE AND EMPLOYMENT DEVELOPMENT DEPARTMENT

Director:

(541)917-4870

The Life and Employment Development Department oversees two different training and workforce programs: Job Opportunities and Basic Skills (JOBS) and Turning Point. Each program offers participants a unique opportunity to explore options available to them as they make life and career transitions.

The staff of the Life and Employment Development Department work closely with other college departments and community organizations to provide educational, professional, technical and counseling services as part of their comprehensive job training and educational programs.

JOBS Program

Faculty:
Susan Cowles, Carol Erickson, Nickie Frisch, Marie Laper, Ann Malosh, Sherry Rosen,Terry Schukart, Wendy Thorson, Beth Wibbens

The goal of the JOBS program is to enable individuals to make the transition from public assistance to self-sufficiency. Students, referred by Adult and Family Services and working with college faculty, develop individual programs that help prepare them for full-time, unsubsidized employment. Instructional areas include life and career planning; adult basic education; short-term, intensive professional/ technical training; work site training; and job search instruction.

Turning Point Program

Faculty:
Joanne Apter

Turning Point is a program for single parents, displaced homemakers, dislocated workers, spouses of dislocated workers and others who are experiencing a major life transition.

Participants learn to build self-confidence by improving communication and assertive abilities. Time and money management; positive parenting; living alone; wellness; and goal setting, decision-making and problem-solving techniques are topics considered under the life skills segment of the program. Career exploration is tailored to meet the needs of the participants who want to seek further education/training or to re-enter the job market. Child care and transportation are available to those in need of these services during the course. Call Jill Weissbeck, (541)917-4881, for more information.

For more information on any of the programs offered through the Life and Employment Development Department, call (541)917-4870.

OREGON ADVANCED TECHNOLOGY CONSORTIUM

The Oregon Advanced Technology Consortium's mission is to improve Oregon's competitiveness by assisting manufacturers with the adoption and implementation of new technologies. Businesses require new and existing technologies—particularly readily available, off-the-shelf manufacturing technologies - to modernize their industries and enhance their ability to compete in the global market. New programs are needed to help manufacturers modernize their industrial infrastructure, increase the quality of their manufactured products, create shorter product cycle times, adopt advanced automation technologies and equipment, and raise the skill level of their workforce.

The OATC, a consortium of 14 Oregon community colleges, serves primarily small- and medium-sized manufacturers seeking access to advanced technology services and training. OATC services include technology demonstrations, prototyping, short production runs, engineering support, CAD/CAM services and support, and advanced technical training. The OATC is sponsored by the state of Oregon, 14 Oregon community colleges, and local and national manufacturing businesses.

Consortium members include:

Blue Mountain Community College
Central Oregon Community College
Chemeketa Community College
Clackamas Community College
Clatsop Community College
Columbia Gorge Community College
Klamath Falls Community College
Lane Community College
Linn-Benton Community College
Mt. Hood Community College
Portland Community College
Rogue Community College
Southwestern Oregon Community College
Umpqua Community College

For more information about Consortium activities at LBCC, please contact Craig Hosterman, (541)917-4766.

RETIRED AND SENIOR VOLUNTEER PROGRAM

Director:

Benton County: (541)753-9197
FAX 757-9537

Linn County: (541)917-4476
FAX: (541) 917-4445

R.S.V.P. (Retired and Senior Volunteer Program) is part of the Extension Services Division. This program for people 55 years and older provides services to non-profit agencies and support services to the volunteers. Over 1100 seniors participate in the program in Linn and Benton counties through over 200 non-profit groups and agencies. RSVP provides volunteers with placement, counseling, training and recognition. RSVP's mission is to:

- Empower seniors and retirees to share their knowledge and skills through volunteer service.
- Support groups and agencies requiring volunteer staffing.
- Create partnerships to address unmet community needs.

At Linn-Benton Community College, RSVP volunteers help prepare bulk mailings; assist with sponsored by Student Programs activities, such as the Children's Christmas Party and the blood drive; serve as student greeters; and assist in the Bookstore during the beginning of each term. RSVP also provides technical assistance to departments using volunteers.

TRAINING AND BUSINESS DEVELOPMENT CENTER

Business Development Center

Faculty:
John Pascone, Dennis Sargent, Martin Schulz
(541)917-4923

This center offers assistance to local business owners. Assistance is designed to help businesses start up, improve management skills and expand.

Available services include providing access to information regarding all aspects of business, such as start-up information, business plan preparation and preparing for financing. The center also provides confidential business counseling and can help the business owner find a variety of resources in the community. Workshops are offered each term on a variety of business management topics.

The center provides intensive help to a select group of businesses through the Business Management programs. The program takes the form of monthly meetings with instructors who work with participants on problems and help business owners maximize their capabilities to prosper and/or expand.

The center also makes available a variety of reference materials. The Business Development Center is cosponsored by the SBA (Small Business Administration), Oregon Economic Development Department and Albany-Millersburg Economic Development Corporation.

Contracted Training

Faculty:
Joseph Bailey, Greg Hopkins, Dagmar Johnson, Susan Knapp, Karin Magnuson, Carol Schaafsma, Sharyn Smith
(541)917-4923

Contracted Training responds to the unique training needs of business and industry. Demands are increasing to upgrade the workforce in many areas, and the college is providing training when and where business and industry needs it. Examples of the types of training that can be provided are computer applications, supervisory training, problem solving, interpersonal communication, total quality management and a wide variety of technical training topics.

Professional Development

The Training and Business Development Center offers quality, affordable professional development options for individuals and businesses. Many programs are available, including computer seminars, safety training and supervisory workshops.

Short-Term Training

A variety of courses are offered to help people learn new skills or upgrade current skills. Courses to train employees for new industries moving into the area also are developed, including training areas such as secondary wood products, forklift, clerical, food service and electronics.

For more information on any of the programs offered through the Training and Business Development Center, call (541)917-4923.

COURSE DESCRIPTIONS

PROFESSIONAL TECHNICAL COURSES

All courses that apply to LBCC degrees and certificates have alphabetical prefixes (for example, AU for Automotive Technology, EE for Engineering Systems Technology, RH for Refrigeration, Heating and Air Conditioning). Professional Technical courses are numbered 1.000 through 8.999.

Professional Technical courses generally do not transfer to four-year colleges and universities. Courses with decimal point (0.---) numbers do not apply toward LBCC degree and certificate programs.

TRANSFER COURSES

All courses that apply to LBCC degrees have alphabetical prefixes, i.e. BI for Biology, WR for Writing. Classes with 100 and 200 numbers are usually transferable to four-year institutions. Classes with a decimal point in the number (such as OA 2.530) ***are not transfer courses.***

Courses with numbers below 100 ***are not transfer courses.***

Courses with 100 numbers are considered freshman-level courses.

Courses with 200 numbers are considered sophomore-level courses.

Courses marked with the symbols below may be applied toward fulfilling the general education requirements for the Associate of General Studies degree. These courses apply to that degree only. For lists of classes that fulfill general education requirements for other degrees offered at LBCC, see the "Graduation Requirements" section of this catalog.

- ➤ Humanities/Art
- ● Math/Science
- ■ Social Sciences

AA.....Art (Graphic Design)

AA 198 INDEPENDENT STUDIES

(2-6 class hrs/wk 1-3 cr) F/W/Sp
Individual instruction in advanced problems relevant to the student's interests and needs. Prerequisite: Instructor approval.

AA 221 GRAPHIC DESIGN I

(6 class hrs/wk 4 cr) F
Introduction to graphic design. Examines visual communication through the application of the elements and principals of art. Studies static vs. dynamic, visual centering, design systems, metamorphosis and continuums. Instills critical analysis and good design judgment. Prerequisites: ART 115 Basic Design: Composition; ART 116 Basic Design: Color; GA 3.150 Introduction to Printing and Graphic Arts; GA 3.152 Art and Copy Preparation; AA 224 Typographical Design I; PHO 261 Introduction to Photography; GA 3.157 Digital Image Manipulation I; GA 3.158 Digital Prepress I.

AA 222 GRAPHIC DESIGN II

(6 class hrs/wk 4 cr) W
Studies corporate mark design, the development of symbols, logos, design programs and identity systems. Examines the design's adaptability, application, practicality and integrity. Environmental issues are discussed. Prerequisite: AA 221 Graphic Design I.

AA 223 GRAPHIC DESIGN III

(6 class hrs/wk 4 cr) Sp
Studies publication design. Includes examination of formula vs. format, direct mail, poster, magazine and book design. Environmental implications are discussed. Prerequisite: AA 222 Graphic Design II.

AA 224 TYPOGRAPHICAL DESIGN I

(6 class hrs/wk 4 cr) W/Sp
Introduction to letterforms. Develops a fundamental awareness of type and typographic design. Studies the evolution, art and vocabulary of typography; handbuilt letterforms; and designing with type. Emphasizes typography as a working tool.

AA 225 PACKAGING AND THREE-DIMENSIONAL DESIGN

(6 class hrs/wk 4 cr) W
Introduction to design, display and merchandising of three-dimensional marketing solutions. Stresses suitability of concept, design and color as applied to various products. Materials and methods of printing, cutting, folding and assembly are explored for tactile and visual effect. Environmental issues are discussed. Prerequisites: GA 3.152 Art and Copy Preparation; AA 224 Typographical Design I; AA 237 Illustration I; GA 3.157 Digital Image Manipulation I; GA 3.158 Digital Prepress I.

AA 226 TYPOGRAPHICAL DESIGN II

(6 class hrs/wk 4 cr) F
Continues the study, use and design of letterforms. Emphasizes creating original type variations and form manipulation. Prerequisites: GA 3.152 Art and Copy Preparation; AA 224 Typographical Design I; GA 3.157 Digital Image Manipulation I.

AA 228 PORTFOLIO PREPARATION: PROFESSIONAL PRACTICES

(6 class hrs/wk 3 cr) Sp
Emphasizes re-evaluation of previously produced projects; organization and production of the business card, resume and portfolio. Current job opportunities; methods in merchandising job talents; action before, during and after the interview; business practices and ethics are covered. Intended for second-year graphic design students. Prerequisites: AA 222 Graphic Design II; AA 238 Illustration II. Corequisite: AA 223 Graphic Design III.

AA 237 ILLUSTRATION I

(6 class hrs/wk 4 cr) F
Explores and develops skills in the use of various tools, materials and techniques. Increases student awareness of illustrative possibilities and processes. Pen and ink, graphite and ink wash are included. Prerequisites: ART 133 Drawing III; ART 115 Basic Design I: Composition; ART 116 Basic Design II: Color.

AA 238 ILLUSTRATION II

(6 class hrs/wk 4 cr) W
Explores rendering with markers. Moves from an exercise, process and technique orientation to product rendering and ad development. Prerequisite: AA 237 Illustration I.

AA 239 ILLUSTRATION III

(6 class hrs/wk 4 cr) Sp
Explores further possibilities in illustration using soft pastel and colored pencil. Stresses conceptual development of illustration dealing with written material. Prerequisite: AA 238 Illustration II.

AA 261 STUDIO PHOTOGRAPHY

(4 class hrs/wk 3 cr)
Introduction to applied studio photography, including light, equipment, portraiture, still-life, copying, special effects, exposure and filtration. Lab work included. Prerequisite: PHO 261 Introduction to Photography or instructor approval.

AA 262 PHOTOGRAPHY: ART AND TECHNIQUE

(4 class hrs/wk 3 cr) W
Bridges the gap between traditional photography and the newer techniques of electronic imaging. Students explore hand-constructed imagery based on the photograph. The methods, techniques and creative process employed have direct relationship to contemporary images produced on the computer. This class is intended for the non-photographer as well as the photographer seeking to expand his or her skills.

AA 280 CWE GRAPHICS

(6-42 class hrs/wk 2-14 cr) F/W/Sp/Su
An instructional program designed to give students practical experience in supervised employment related to graphics. Students identify job performance objectives, work a specified number of hours during the term, and attend a related CWE seminar. Note: Credits are based on identified objectives and number of hours worked. Prerequisite: Successful completion of GA 3.158 Electronic Prepress I, GA 3.157 Electronic Image Manipulation I, and CWE coordinator approval.

AG.....Agriculture

AG 111 COMPUTERS IN AGRICULTURE

(4 class hrs/wk 3 cr) F/W/Sp
Agricultural examples and problems are utilized as a basis for the material in this course. Provides hands-on experience in the areas of word processing, data base and spreadsheets. Prerequisite: Instructor approval.

AG 280A CWE AGRICULTURE

(6-42 class hrs/wk 2-14 cr) Sp/Su
An instructional program designed to give students practical experience in supervised employment related to agriculture. Students identify job performance objectives, work a specified number of hours during the term, and attend a related CWE seminar. Note: Credits are based on identified objectives and number of hours worked. Prerequisite: CWE coordinator approval.

AG 280B CWE ANIMAL TECHNOLOGY

(6-42 class hrs/wk 2-14 cr)
An instructional program designed to give students practical experience in supervised employment related to animal technology. Students identify job performance objectives, work a specified number of hours during the term, and attend a related CWE seminar. Note: Credits are based on identified objectives and number of hours worked. Prerequisite: CWE coordinator approval.

AG 280C CWE HORTICULTURE

(6-42 class hrs/wk 2-14 cr)
An instructional program designed to give students practical experience in supervised employment related to horticulture. Students identify job performance objectives, work a specified number of hours during the term, and attend a related CWE seminar. Note: Credits are based on identified objectives and number of hours worked. Prerequisite: CWE coordinator approval.

AG 8.125 SOILS I

(4 class hrs/wk 3 cr) F
Provides necessary soil science background for work with fertilizers, irrigation, drainage and other management practices. Physical, chemical and biological properties of the soil are discussed in relation to plant growth.

AG 8.126 SOILS II

(4 class hrs/wk 3 cr) W
Covers second phase of soils instruction, dealing with plant nutrition and the proper use of fertilizer and other soil amendments. Diagnosing plant problems, soil testing, fertilizer recommendations, methods of application, storage and handling, personal and public safety are emphasized.

AG 8.130 AGRICULTURAL CHEMICALS

(5 class hrs/wk 4 cr) W
Covers background information in use and chemistry of herbicides, insecticides, fungicides and nematocides. Types of materials, safety in handling, land storage and method of application are emphasized. Students develop ability to interpret and explain to customers the directions and precautions to be observed with agriculture chemicals. Attention also is given to keeping current with new product development.

AG 8.131 PEST MANAGEMENT

(4 class hrs/wk 3 cr) F
Includes the classification, anatomy, growth, life history, recognition and control principles of selected weeds, diseases and insect pests. Introduces integrated pest management (IPM) and plant health care (PHC) programs. Environmental protection and public safety are considered.

AG 8.138 IRRIGATION SYSTEMS

(4 class hrs/wk 3 cr) W
Introduces principles and practices of irrigation, including soil, water and plant relations; water sources; quality; methods of distribution; and measurement. System design and selection also are emphasized, including surface and subsurface drainage systems. Includes water conservation, public safety and legal issues.

AG 8.165 PLANT SCIENCE

(5 class hrs/wk 4 cr)
Studies structure and function of flowering plants, with emphasis on crop and ornamental plants. Includes environmental effects on growth and other physiological processes, elementary genetics and recognition of major plant groups.

AH.....Allied Health/HOSEC

AH 5.409 CAREER COUNSELING FOR PRE-NURSING

(10 class hrs/wk 1 cr) F/W/Sp
Provides pre-nursing applicants with an assessment of own personal characteristics as they examine the career of nursing. Guidance in choosing a nursing career. Note: Two-week class.

AH 5.420 HEALTH OCCUPATIONS OVERVIEW A: INTRODUCTION TO HEALTH CARE SYSTEMS

(2 class hrs/wk 2 cr)
Surveys essential aspects of health occupations. Emphasizes health care delivery system's societal issues, health consumer decisions, health promotion and wellness, technology, communication, and worker rights and responsibilities in health care.

AH 5.421 HEALTH OCCUPATIONS OVERVIEW B: WORKING IN HEALTH CARE

(2 class hrs/wk 2 cr)
Continuation of Health Occupations Overview A: Introduction to Health Care Systems. Emphasizes legal and ethical concepts, death and dying, medical asepsis/universal precautions, patient and personal safety, and job-seeking skills.

AH 5.735E EMT INDEPENDENT STUDIES

(3-9 class hrs/wk 1-5 cr) F/W/Sp
Provides continuing education hours or EMT refresher training hours required by the state Health Division to complete the state testing process. Open to individuals who hold current state certification or who have completed an approved state Health Division EMT course within the last year. Prerequisite: Instructor approval required.

ANS.....Animal Science

ANS 121 INTRODUCTION TO ANIMAL SCIENCE

(5 class hrs/wk 4 cr) F, Sp
Introduces the livestock industry, including the importance of the various types of livestock enterprises, terminology, marketing, basic production practices and management techniques.

ANS 207 CAREERS IN ANIMAL AGRICULTURE

(1 class hr/wk 1 cr) Sp
Explores career opportunities in animal science. Includes guest lecturers from various fields of animal agriculture as well as an emphasis on resume writing and job interviewing.

ANS 210 FEEDS AND FEED PROCESSING

(5 class hrs/wk 4 cr) W
Covers animal nutrition, including protein, vitamins, minerals, fat, carbohydrates, feed additives and the utilization of nutrients by livestock. Studies methods of determining feed values, types of feed, feed characteristics, nutritional requirements and composition, and methods of feeding.

ANS 211 APPLIED ANIMAL NUTRITION

(4 class hrs/wk 3 cr) Sp
Introduces formulating and analyzing rations for livestock, balancing nutritional needs and choice of ingredients in relation to cost and suitability. Includes economics of livestock feeding and performance indicators. Prerequisite: ANS 210 Feeds and Feed Processing.

ANS 215 APPLIED BEEF PRODUCTION

(5 class hrs/wk 4 cr) F
Covers basics of modern beef production and management, including cattle breeds, mating systems and reproduction, nutrition, marketing, production testing, diseases and parasites, and other management practices. Particular emphasis is on developing beef husbandry skills.

ANS 216A APPLIED SHEEP PRODUCTION

(5 class hrs/wk 4 cr) W
Fundamentals of modern sheep production, including sheep breeds, nutrition, reproduction, diseases and parasites, wool evaluations, marketing and modern management practices. Note: Course offered alternate years only. *Offered Winter 2000.*

ANS 216B APPLIED SWINE PRODUCTION

(5 class hrs/wk 4 cr) W
Introduces modern swine production, including swine breeds, marketing, breeding, feeding, production testing, diseases and parasites, and production problems. Note: Course offered alternate years only. *Offered Winter 1999.*

ANS 220 INTRODUCTORY HORSE SCIENCE

(5 class hrs/wk 4 cr) F
Basic course in commercial horse production and management. Covers breeds, breeding systems, nutrition, reproduction and diseases. Also develops basic skills in handling, foot care, feeding, selection and health management.

ANS 221 EQUINE INDUSTRIES

(5 class hrs/wk 3 cr) Sp
Provides students practical skills in three specific areas of horse science: foot and leg care, fitting and showing, and horse conformation judging. Anatomy of the foot and leg are studied, and basic foot trimming skills are taught. Recognizing common unsoundnesses and blemishes also is covered. In addition, students learn proper techniques for preparing horses for show competition in halter, English and Western showing. Evaluation of horse conformation and halter judging are taught.

ANS 222 YOUNG HORSE TRAINING

(6 class hrs/wk 2 cr) F
Provides hands-on training. The student is assigned a young horse to train for the term. Students may use their own horse or a horse will be provided. The training consists of halter breaking, leading, sacking, longeing, trailer loading and handling the feet. Saddling bitting, ground driving and early stages of riding are taught. In addition, grooming, safety and use of equipment is taught.

ANS 223 EQUINE MARKETING

(2 class hrs/wk 2 cr) W
Introduces the practical concepts of equine marketing. Emphasizes assessing the market, targeting potential buyers, and preparing and presenting the product. Business law, as it relates to equine marketing, is discussed. Through practicing interviewing skills and writing a résumé, students learn to "market themselves."

ANS 231 LIVESTOCK EVALUATION

(5 class hrs/wk 3 cr) Sp
Introduces criteria and principles in the physical evaluation of beef, sheep and swine. Emphasizes correctness of body type, relation of type to production, market standards, soundness and body parts. Extensive time is spent on applying techniques in evaluating live animals.

ANS 227 ARTIFICIAL INSEMINATION

(5 class hrs/wk 4 cr) Sp
Includes instruction on reproductive organs, hormones, diagnosis of heat, semen collection, insemination techniques, semen evaluation, pregnancy testing, freezing and dilution methods. Hands-on experience is stressed. Note: Recommended for second-year students.

ANS 278 GENETIC IMPROVEMENT OF LIVESTOCK

(5 class hrs/wk 4 cr) W
Introduces basic, practical concepts of improving livestock through a variety of genetic programs, including genetic possibilities, utilizing heritability for production gains, inbreeding coefficient, systems of breeding and improvement programs.

ANTH.....Anthropology

■ ANTH 103 INTRODUCTION TO CULTURAL ANTHROPOLOGY

(3 class hrs/wk 3 cr)
Introduces students to the cross-cultural perspectives necessary to examine the diversity of human cultures. Topics include cross-cultural perspectives of marriage and kinship; religious, economic, political and social systems; and language.

■ ANTH 107 ANTHROPOLOGY TODAY

(3 class hrs/wk 3 cr)
Surveys contemporary issues in anthropology as presented in popular media. Popular books, films and television offerings serve as the framework of the course. (telecourse offering)

ANTH 198 RESEARCH TOPICS

(1 class hr/wk 1 cr)
Offers topics of study in anthropology with individual research and/or field study. Prerequisite: WR 121 English Composition.

■ ANTH 210 COMPARATIVE CULTURES

(3 class hr/wk 3 cr)
Introduction to world cultures (past and present). Reviews culture heritage, values and perspectives of Western and NonWestern societies. Investigates the scientific Revolution/Industry/Technology of Europe and impacts on the developing world. Recommended prerequisite: ANTH 103 Introduction to Cultural Anthropology.

■ ANTH 230 TIME TRAVELERS

(3 class hr/wk 3 cr)
A survey of the origin of modern people in an anthropology context, key discoveries and current research discussed. Past 3 million years of human history discussed, up to and including the beginning of the Greek/Roman era.

■ ANTH 232 NATIVE NORTH AMERICANS

(3 class hrs/wk 3 cr)
Studies the earliest inhabitants of North America, including discussion of archaeological evidence of these first Americans, customs before white contact, westernization and contemporary issues.

ANTH 280 CWE ANTHROPOLOGY/ ARCHAEOLOGY

(6-42 class hrs/wk 2-14 cr)
An instructional program designed to give students practical experience in supervised employment related to anthropology/archaeology. Students identify job performance objectives, work a specified number of hours during the term, and attend a related CWE seminar. Note: Credits are based on identified objectives and number of hours worked. Prerequisite: CWE coordinator approval.

ARE.....Agriculture and Resource Economics

ARE 211 MANAGEMENT IN AGRICULTURE

(4 class hrs/wk 4 cr) F
Covers agriculture as a business; the decision-making process; tools of decision making; acquiring, organizing and managing land, labor and capital resources; and reasons for success and failure. Students learn teamwork, cooperation and leadership skills through classroom simulation, group activities and assignments.

ARE 221 MARKETING IN AGRICULTURE

(3 class hrs/wk 3 cr) W
Covers all aspects of sales and marketing of agricultural products, including crops, commercial and purebred livestock, and ornamental plants. The commodities futures market, telemarketing and other specialized outlets also are included.

ART.....Art (Fine)

➤ ART 102 UNDERSTANDING ART

(3 class hrs/wk 3 cr) F/W/Sp
Surveys the principal concerns of art and artists through the study of visual art forms and aesthetics. Western Art is emphasized.

➤ ART 115 BASIC DESIGN I: COMPOSITION

(6 class hrs/wk 4 cr) F/W
Introduces values of black and white and concepts relating to shape, design structure, proportion and unity.

➤ ART 116 BASIC DESIGN II: COLOR

(6 class hrs/wk 4 cr) W/Sp
Studies concepts relating to color, its properties, combination, relatedness, proportions and interaction. Prerequisite: ART 115 Basic Design I: Composition or instructor approval.

➤ ART 131 DRAWING I

(6 class hrs/wk 4 cr) F/W/Sp
A basic-level course in drawing. Emphasizes the theories of drawing simple forms.

➤ ART 132 DRAWING II

(6 class hrs/wk 4 cr) W
Emphasizes composition and drawing complex forms. Prerequisite: ART 131 Drawing I or instructor approval.

➤ ART 133 DRAWING III

(6 class hrs/wk 4 cr) Sp
Emphasizes drawing natural forms, composition and form invention. Prerequisite: ART 132 Drawing II or instructor approval.

➤ ART 154 BEGINNING CERAMICS

(6 class hrs/wk 3 cr) F/W/Sp
Introduces clay as an expressive material. Covers composition of clay bodies and basic forming processes: slab, pinch, coil, press mold and potter's wheel. Emphasis is on form and surface treatment; some firing and glazing included. Note: Offered at the LBCC Benton Center, Corvallis.

➤ ART 181 INTRODUCTION TO PAINTING

(6 class hrs/wk 4 cr) F/Sp
Explores visual expression on a two-dimensional surface. Uses oil or acrylic paints for spatial development of color, shape and surface.

ART 198 INDEPENDENT STUDIES

(3-6 class hrs/wk 1-4 cr) F/W/Sp
A special studies class tailored to meet more advanced skill needs in discipline. Prerequisite: Previous studio experience; instructor approval.

➤ ART 204, 205, 206 SURVEY OF ART HISTORY

(3 class hrs/wk 3 cr) F/W/Sp
Studies the history of Western visual art and its significance and relationship to mankind. (Recommended, but not required, that courses be taken in sequence.) ART 204 Ancient Art (visual art from prehistory up to the Middle Ages); ART 205 Art of the Middle Ages, Renaissance and Baroque; ART 206 Eighteenth, Nineteenth and Twentieth Century Art.

➤ ART 234 FIGURE DRAWING

(6 class hrs/wk 4 cr) Sp
Introduces drawing the nude figure. Emphasizes anatomy, form, unity and development. Prerequisite: ART 131 Drawing I or instructor approval.

➤ ART 254 CERAMICS II

(6 class hrs/wk 3 cr) F/W/Sp
Provides instruction in clay construction for the experienced student, with advanced throwing and handbuilding, glazing and firing techniques. Note: Offered at the LBCC Benton Center, Corvallis. Prerequisite: ART 154 Beginning Ceramics or instructor approval.

ART 280 CWE FINE ARTS

(6-42 class hrs/wk 2-14 cr) F/W/Sp/Su
An instructional program designed to give students practical experience in supervised employment related to fine arts. Students identify job performance objectives, work a specified number of hours during the term, and attend a related CWE seminar. Note: Credits are based on identified objectives and number of hours worked. Prerequisite: CWE coordinator approval.

➤ ART 281 PAINTING

(6 class hrs/wk 4 cr) F/Sp
Continues the study of visual expression on 2-D surfaces of selected subjects using oil or acrylic medium. Prerequisite: ART 181 Introduction to Painting.

➤ ART 294 INTRODUCTION TO WATERCOLOR

(6 class hrs/wk 4 cr) W
An introductory class in the materials and techniques of watercolor painting. Covers a variety of topics, both representational and abstract. Prerequisite: ART 131 Drawing I or consent of instructor.

➤ ART 295 WATERCOLOR II

(6 class hrs/wk 4 cr) W
Further exploration of the watercolor medium and its application to subject, form and composition. Prerequisites: ART 131 Drawing I or ART 294 Introduction to Watercolor.

AS.....Aerospace Studies

AS 111, 112, 113 AEROSPACE STUDIES I

(1 class hr/wk 1 cr) F/W/Sp
Covers doctrine, mission and organization of the U.S.A.; U.S. strategic offensive and defensive forces, their mission, function, and employment of weapons; civil defense; aerospace defense; missile defense; U.S. general purpose and aerospace support forces; mission, resources, and operation of tactical air forces, with special attention to limited war; review of Army, Navy and Marine Corps general purpose forces.

AS 211, 212, 213 AEROSPACE STUDIES II

(2 class hr/wk 2 cr) Sp
Covers the development of air power; changes in the nature of military conflict; development of air power into an element of national security; development of concepts and doctrine governing employment of air power; technology affecting growth and development of air power; changing mission of the defense establishment, with emphasis on the U.S. Air Force; air power as employed in military, non-military and strategic operations.

AT.....Animal Technology

AT 147 LIVESTOCK SELECTION TECHNIQUES

(6 class hrs/wk 4 cr) F
Concentrates on techniques, selection and comparative judging of beef, sheep and swine and intensive work on developing oral reasons and terminology. Course designed for first-year students interested in competitive livestock judging. Members of this class are selected for the first step in competitive judging, including travel to collegiate contests.

AT 149 COMPETITIVE LIVESTOCK JUDGING

(4 class hrs/wk 4 cr) W
Provides an in-depth application of principles necessary for the successful comprehensive analysis of beef, sheep and swine. Prerequisite: Instructor approval.

AT 155 EQUINE DISEASES AND PARASITES

(3 class hrs/wk 3 cr) W
This course covers the nature of equine diseases and parasites including common infectious and non-infectious diseases, diagnosis, treatment and prevention. Modern drugs and medications, immunology and basic microbiology are also included. Also covers how the body fights disease and common unsoundnesses of the foot and leg.

AT 156 LIVESTOCK DISEASES AND PARASITES

(4 class hrs/wk 3 cr) Sp
This course covers the nature of livestock diseases caused by infectious and non-infectious organisms. Nutritional, metabolic and chemical-related diseases are studied as well as internal and external parasites. Emphasis is on diagnosis, control, treatment and prevention of economically important diseases and conditions.

AT 163, 164 SCHOOLING THE HORSE I, II

(7 class hrs/wk 3 cr) W/Sp
Provides hands-on horse training experience. The student learns the fundamentals of horse training, including longeing, driving, bitting, riding, reining and backing. Equipment, safety and horse "psychology" also are taught. Prerequisite: Instructor approval.

AT 248 ADVANCED LIVESTOCK SELECTION

(6 class hrs/wk 4 cr) F
Advanced course in developing judging skills and techniques. Emphasizes oral reasons, market and breed type and characteristics. Members of this class are selected to participate in the top level of intercollegiate competitive livestock judging contests. Prerequisite: AT 147 Livestock Selection Techniques.

AT 263, 264 SCHOOLING THE HORSE III, IV

(7 class hrs/wk 3 cr) W/Sp
Advanced training techniques for horses are emphasized. Introduces reining, dressage and jumping. Prerequisites: AT 163, AT 164 Schooling the Horse I, II.

AT 277 HORSE BREEDING MANAGEMENT

(5 class hrs/wk 3 cr) W
Familiarizes students with all aspects of reproductive management of the horse. Reproductive physiology, estrus cycles, breeding management, mare and foal care, stallion handling and recordkeeping are covered. Labs expose students to breeding management practices on commercial horse ranches in the local community.

AU.....Automotive Technology

AU 3.295 POWER TRAIN SYSTEMS

(20 class hrs/wk 1-10 cr) F/W
Studies the complete power train system, with emphasis on the theory, application and servicing of clutch systems, manual transmissions, transfer cases, drive lines, universal joints and differential assemblies. Prerequisites: Placement Test scores for Reading Level I and MTH 20 Basic Mathematics or equivalent.

AU 3.296 STEERING, SUSPENSION AND BRAKING SYSTEMS

(20 class hrs/wk 1-10 cr) F/Sp
Covers fundamental principles of automotive suspension systems, with emphasis on frames, steering systems, alignment and wheel balancing. In addition, a comprehensive study of disc and drum braking systems and their components is included. Prerequisites: Placement Test scores for Reading Level I and MTH 20 Basic Mathematics or equivalent.

AU 3.297 ELECTRICAL AND FUEL SYSTEMS

(20 class hrs/wk 1-10 cr) W/Sp
Introduces principles and terminology of fuel and carburetion systems and testing, servicing and repairing of electrical systems. Students work with techniques and overhaul procedures for carburetors, fuel injected gasoline engines, fuel pumps, fuel tanks, fuel gauges, fuel lines, fittings, charging systems, starting systems and other electrical components. Prerequisites: Placement Test scores for Reading Level I and MTH 20 Basic Mathematics or equivalent.

AU 3.298 AUTO TUNE-UP AND DIAGNOSIS

(20 class hrs/wk 1-10 cr) F
Problem-solving course designed to develop knowledge and skills in auto tune-up. Emphasizes selection and use of equipment, including electrical test equipment, scan tools, the oscilloscope, emission test equipment and the dynamometer, to find malfunctions and make necessary repairs for optimum engine performance. Prerequisite: Automotive Technology major with sophomore standing or instructor approval required.

AU 3.299 AUTOMOTIVE ENGINES

(20 class hrs/wk 1-10 cr) W
Surveys operating principles, maintenance, repair and overhaul of the internal combustion engine. Includes study of the various engine types, their component parts and related accessories. In conjunction with training in correct engine machining skills, an engine is rebuilt, returned to manufacturer's specifications and tested for performance. To include ten hours of driveability. Prerequisite: Automotive Technology major with sophomore standing or instructor approval required.

AU 3.300 AUTOMATIC TRANSMISSIONS

(20 class hrs/wk 1-10 cr) Sp
Covers operating principles, testing and repair procedures of the automatic transmission. Directed toward developing ability to accurately analyze the performance factors or diagnose the malfunctions of these systems through the use of live units. To include ten hours of Driveability. Prerequisite: Automotive Technology major with sophomore standing or instructor approval required.

AU 3.301 AUTOMOTIVE SERVICE AND REPAIR PRACTICES

(20 class hrs/wk 1-10 cr) F/W/Sp
Provides advanced instruction and practice in diagnosing and servicing automotive problems; summarizes all the learning units in the auto technology two-year program. Emphasizes attitudes and philosophy of automotive employees who frequently must meet and deal with supervisory personnel and with the public. Experiences are provided to simulate the work of an auto technician. Prerequisite: Automotive Technology major or instructor approval required.

AU 3.303 MOBILE AIR CONDITIONING AND COMFORT SYSTEMS I

(5 class hrs/wk 3 cr) W
Theoretic principles of mobile heating and air conditioning systems with emphasis on design, function, adjustment, service and testing of components. Prerequisite: Automotive major student or department permission.

AU 3.304 MOBILE AIR CONDITIONING AND COMFORT SYSTEMS II

(5 class hrs/wk 3 cr) Sp
Presents theory and service practice in maintenance and repair of automotive comfort systems. Covers inspection, testing, repair and/or replacement of control units and computer control systems. Includes computer control systems. Prerequisite: Automotive major student or department permission.

AU 3.307 MECHANICAL PROCESSES I

(3 class hrs/wk 2 cr) F
Required for Automotive and Heavy Equipment Mechanics/Diesel majors. Covers competencies and skills required for the first year. Covers safety, hand tools, power tools, precision measurement, metric measurement, fasteners, torque and service manual usage.

AU 3.308 MECHANICAL PROCESSES II

(3 class hrs/wk 2 cr) W
Required for Automotive and Heavy Equipment Mechanics/Diesel majors. Covers pulling, pushing and lifting devices; tubing, hoses and fittings; bearings and lubrication; and gaskets, seals and sealants.

AU 3.309 MECHANICAL PROCESSES III

(3 class hrs/wk 2 cr)
Required for Automotive and Heavy Equipment Mechanics/Diesel majors. Shop math, heavy material handling, hazardous material handling, electrical principles and meter usage.

BA.....Business

BA 101 INTRODUCTION TO BUSINESS

(4 class hrs/wk 4 cr) F/W/Sp/Su
A survey course introducing the functional and interdependent areas of business management, marketing, accounting and finance, and management information systems. Topics include: business trends, operation and management of a business, ethical challenges, change, global perspectives and the dynamic roles of management and staff. The class incorporates aspects of team interaction and continuous process improvement. Students will also have the opportunity to explore the Internet and information technology relating to business operations.

BA 110D DATABASE

(5 class hrs/wk 2 cr) F/W/Sp/Su
This course introduces the student to database software and how it is utilized in business and personal applications to organize information, produce reports, prepare data entry forms, and to store data in a retrievable format using the sort and filters available in the software. Prerequisite: OA 121 Keyboarding recommended.

BA 110H ADVANCED DOS AND HARD DISK MANAGEMENT

(4 class hrs/wk 2 cr) F/Sp
Covers the use and management of the hard disk and application of advanced MS-DOS commands for business or personal use. Covers setting up a hard disk directory, optimizing computer performance and provides information on essential utilities for hard disk management. Note: Five-week class. Prerequisite: BA 110O Windows 95 or equivalent knowledge.

BA 1100 WINDOWS 95

(5 class hrs/wk 2 cr) F/W/Sp/Su
Provides an introduction to the Windows 95 operating system. Covers basic concepts for using menus, dialog boxes and help system; working with applications and documents; and managing files and folders. Discusses ways to customize the Windows environment and describes a few "built in" accessories and other special topics. Prerequisite: OA 121 Keyboarding strongly recommended.

BA 110P POWERPOINT

(5 class hrs/wk 2 cr) W/Sp
Designed for students and professionals who wish to effectively make and give electronic slide show presentations through the PowerPoint software program. Emphasis on designing effective presentation slides using the tools available through this program. Students prepare and present two major slide shows in this course.. Prerequisite: BA 110O Windows 95 or equivalent knowledge of Windows 95.

BA 110S SPREADSHEETS

(5 class hrs/wk 2 cr) F/W/Sp/Su
Introduces the student to spreadsheet software and how it is utilized in business and personal applications to make financial decisions, calculate statistical data and apply "what if" scenarios to specific information. Note: Five-week class. Prerequisites: OA 121 Keyboarding and OA 2.515 Business Math with Calculators recommended.

BA 131 BUSINESS PRODUCTIVITY SOFTWARE

(4 class hrs/wk 3 cr) F/W/Sp/Su
Use of application software programs, primarily word processing and spreadsheet modeling, as communication tools. Prerequisite: OA 121 Keyboarding recommended or ability to type 20 wpm.

BA 160 PURCHASING

(3 class hrs/wk 3 cr)
Describes the fundamentals of purchasing, including the purchasing function; purchasing policies, procedures and manuals; public relations and purchasing ethics; supply quality and sources; and store keeping and personnel.

BA 203 INTERNATIONAL BUSINESS

(3 class hrs/wk 3 cr) F
An in-depth review of the basic principles of international business, including the history, economics, environment, organization's monetary and exchange systems, marketing and the socioeconomic activities that exist in a rapidly developing world economy. Prerequisite: EC 115 Outline of Economics.

BA 206 PRINCIPLES OF MANAGEMENT

(3 class hrs/wk 3 cr) F/W/Sp/Su
Provides the foundation for later courses in administration, management philosophies and management science.

BA 207 LABOR / MANAGEMENT RELATIONS

(3 class hrs/wk 3 cr) F/Sp
Covers the relationship between worker and employer that arises with the exchange of effort for reward. A study of the role that unions play in this relationship, the rights of management and labor, negotiation techniques and methods of settling labor disputes, including use of mediation and arbitration.

BA 210 SOFTWARE APPLICATIONS

(6 class hrs/wk 4 cr) W, Sp
Presents the basics of Windows 95 and the components of MS Office Professional 97, including Word, Excel, Access and Powerpoint in an integrated approach. Prerequisite: OA 121 Keyboarding or equivalent skill.

BA 210S ADVANCED SPREADSHEETS

(5 class hrs/wk 2 cr) W/Sp
This course provides the student with advanced techniques and features of spreadsheet software for business applications and financial analysis. The applications used are those expected in the business environment, including but not limited to an operating budget, decision tables, and decision support problems. New concepts to be introduced are break-even analysis, financial projections, statistical analysis and data tables, as well as use of pivot tables to summarize data. Note: Five-week class. Prerequisite: BA 110S Spreadsheets.

BA 211 PRINCIPLES OF ACCOUNTING: FINANCIAL

(4 class hrs/wk 4 cr) F/W/Su
Presents financial accounting concepts and the use of accounting information in decision making. Includes an overview of the accounting cycle.

BA 213 PRINCIPLES OF ACCOUNTING: MANAGERIAL

(4 class hrs/wk 4 cr) W/Sp/Su
Demonstrates use of accounting information to meet organization goals. Methods of extracting accounting information for decision making, management of resources, planning, and product and service costing are covered. Prerequisite: BA 211 Principles of Accounting: Financial.

BA 215 SURVEY OF ACCOUNTING

(4 class hrs/wk 4 cr) F/W/Sp
Introduces financial accounting techniques, measuring and recording transactions, preparing financial statements, managerial decision making, and planning and control devices, such as budgeting, cost accounting, capital budgeting and break-even analysis. Prerequisite: MTH 65 Elementary Algebra.

BA 217 FINANCIAL ACCOUNTING FOR ACCOUNTING MAJORS

(2 class hrs/wk 2 cr) Sp
Presents a complete review of the accounting cycle, use of debits and credits in recording transactions and preparing financial statements. Intended to prepare Accounting majors pursuing a baccalaureate degree for the Intermediate Accounting sequence. May also be useful to others who desire a review course in accounting procedures. Prerequisite: BA 211 Principles of Accounting: Financial.

BA 222 FINANCIAL MANAGEMENT

(3 class hrs/wk 3 cr) Sp
Covers topics dealing with financing a business, emphasizing the tax environment, analysis of financial statements, working capital management, short- and long-term financial planning, budgeting and control. Prerequisite: BA 2.531 Practical Accounting II or BA 211 Principles of Accounting: Financial.

BA 223 PRINCIPLES OF MARKETING

(3 class hrs/wk 3 cr) F/W/Sp/Su
Provides a general survey of the nature, significance and scope of marketing. Emphasizes customers (marketing analysis and strategy); business marketing decisions in promotion, distribution and pricing; and control of marketing programs.

BA 224 HUMAN RESOURCE MANAGEMENT

(3 class hrs/wk 3 cr) F/Sp
Explores the basics of human resource management within a culturally diverse workplace. Covers origins of cultural difference and how discrimination issues impact the workplace. Also covers current H.R. issues such as workplace violence and drug abuse, equitable processes for selection and hiring, performance appraisal, compensation, staff planning, and job analysis.

BA 229 FINANCIAL PLANNING

(3 class hrs/wk 3 cr)
Designed to aid the student to better understand his/her financial goals—an introduction to investments, budgets, real estate ownership, financial institutions, consumer's credit, insurance, stockmarket, mutual funds, and will and estate planning, with appropriate computer software applications.

BA 230 BUSINESS LAW

(4 class hrs/wk 4 cr) F/W/Sp/Su
Introduces the framework of the law as it affects a business, how the law operates, how it is enforced and how it is used in business. Includes the origins of law, the relations of business to society and the law, evolution of business within the framework of the law, and the historical development and present-day applications of the law of contracts.

BA 238 PRINCIPLES OF SALESMANSHIP

(3 class hrs/wk 3 cr)
An introductory course on the principles of selling. Provides aspiring sales people and those involved in sales with the tools and insights needed to compete in the age of long-term, consultative-style selling.

BA 239 ADVERTISING

(3 class hrs/wk 3 cr) Sp
Explains the role of advertising in the distributive process. Emphasizes various media; copy, illustration and layout; retail advertising and promotion; advertising budget; and an advertising program.

BA 250 SMALL-BUSINESS MANAGEMENT

(3 class hrs/wk 3 cr)
Covers the skills needed to own a small business, the opportunities of small business in the U.S. and the rewards of owning a small business.

BA 271 INFORMATION TECHNOLOGY IN BUSINESS

(4 class hrs/wk 3 cr) F/W/Sp/Su
Uses information technology as a personal productivity tool within a business environment. Covers the integration of various software packages, such as word processors, data base management systems, spreadsheets, presentation graphics and on-line services. Prerequisite: BA 131 Business Productivity Software.

BA 275 BUSINESS QUANTITATIVE METHODS

(4 class hrs/wk 4 cr) F/W/Sp/Su
Presents statistical analysis and quantitative tools for applied problem solving and making sound business decisions. Special attention given to assembling statistical description, sampling, inference, regression, hypothesis testing, forecasting and decision theory. Prerequisite: MTH 245 Math for Biological/Management/ Social Science.

BA 280B CWE BUSINESS MANAGEMENT

(6-42 class hrs/wk 2 - 14 cr) F/W/Sp/Su
An instructional program designed to give students practical experience in supervised employment related to business management. Students identify job performance objectives, work a specified number of hours during the term and attend a related CWE seminar. Note: Credits are based on identified objectives and number of hours worked. Prerequisite: CWE coordinator approval.

BA 285 BUSINESS RELATIONS IN A GLOBAL ECONOMY

(3 class hrs/wk 3 cr) F/W/Sp/Su
Examines culture and cultural diversity and their impact on organizations. Issues such as motivation, communication, value development, prejudice and discrimination are examined. Focuses on understanding one's own culture and gaining an appreciation for and understanding of other cultures.

BA 2.127 GOVERNMENTAL ACCOUNTING

(3 class hrs/wk 3 cr) F
Covers accounting theory and procedures for governmental and not-for-profit entities, including budgetary and expenditure control. Prerequisite: BA 2.531 Practical Accounting II or BA 211 Principles of Accounting: Financial.

BA 2.132 BASIC BUSINESS STATISTICS WITH QUALITY MANAGEMENT

(3 class hrs/wk 3 cr) W
Introduces the methods of total quality management used in business and government. Topics include quantitative statistical methods, process control and current quality management processes. Prerequisite: MTH 65 Elementary Algebra.

BA 2.518 COMMERCIAL LAW

(3 class hrs/wk 3 cr) F/W
Introduces the study of law and business, legal reasoning and the evolutionary process of law, the legal environment of business and principles of contract law. Emphasizes the study of business agreements, their information, operation, performance and discharge.

BA 2.530 PRACTICAL ACCOUNTING I

(4 class hrs/wk 4 cr) F/W/Sp/Su
Covers the fundamental principles of double-entry accounting, general journals and ledgers, business forms, simple financial statements and the completion of the accounting cycle. Emphasizes cash receipts and payments, payroll accounting, purchases and sales.

BA 2.531 PRACTICAL ACCOUNTING II

(4 class hrs/wk 4 cr) W/Sp
Continues BA 2.530 Practical Accounting I, with an explanation of the accounting cycle to include special journals, ledgers and business forms, including the voucher system. Emphasizes accounting for a partnership. Prerequisite: BA 2.530 Practical Accounting I.

BA 2.532 PRACTICAL ACCOUNTING III

(4 class hrs/wk 4 cr) Sp/Su
A third course in the Practical Accounting sequence, includes entries requiring analysis and interpretation, unearned and accrued items, depreciation of assets, manufacturing accounting and other managerial accounting procedures. Emphasizes accounting for a corporation. Prerequisite: BA 2.531 Practical Accounting II.

BA 2.534 COST ACCOUNTING

(3 class hrs/wk 3 cr) W
Relates theory to practical problems in analysis and control of material, labor and overhead costs in manufacturing. Emphasizes the job cost system. Prerequisite: BA 2.531 Practical Accounting II or BA 211 Principles of Accounting: Financial.

BA 2.535 PAYROLL ACCOUNTING

(4 class hrs/wk 2 cr) W/Sp/Su
Designed to reinforce and supplement payroll skills in both manual formats and computerized formats.

BA 2.569 FIRST COURSE IN COMPUTERS

(2 class hrs/wk 2 cr) F/W/Sp
Introduces students to the computer.

BA 2.595 PROFESSIONAL ACCOUNTING I

(3 class hrs/wk 3 cr) F
Provides an advanced study of accounting theory and practice for measurement of income and valuation of assets in financial statement presentation. Reviews accounting concepts and alternative approaches to various problems. Prerequisite: BA 2.532 Practical Accounting III or BA 213 Principles of Accounting: Managerial or instructor approval.

BA 2.596 PROFESSIONAL ACCOUNTING II

(3 class hrs/wk 3 cr) W
Continues the Professional Accounting sequence. Covers advanced concepts and procedures of valuation for various types of assets and liabilities, including special problems related to investments, plant, property and equipment, consolidations and corporate accounting. Prerequisite: BA 2.595 Professional Accounting: Financial.

BA 2.597 PROFESSIONAL ACCOUNTING III

(3 class hrs/wk 3 cr) Sp
Continues the Professional Accounting sequence. Emphasizes fund flow analysis, financial ratios, preparing statements from incomplete data, correcting errors in prior year statements and price level changes. Job search skills are emphasized. Prerequisite: BA 2.596 Professional Accounting II.

BA 2.684 COMPUTERIZED ACCOUNTING

(4 class hrs/wk 3 cr) F/Sp/Su
Provides hands-on computer experience in accounting applications, including general ledger, accounts receivable, accounts payable, payroll and financial statements. Emphasizes payroll accounting. Prerequisite: BA 2.530 Practical Accounting I or BA 211 Principles of Accounting: Financial.

BI.....Biology

● BI 101, 102, 103 GENERAL BIOLOGY

(5 class hrs/wk 4 cr) F/W/Sp/Su
Lab science courses designed for non-majors. May be taken in any order. BI 101, cells, physical and chemical properties of life, inheritance and evolution. BI 102, structure, function and behavior of plants and animals. BI 103, diversity of living things and interrelationships among living things and their environments. Different sections of each course emphasize different themes; students may choose the theme that interests them most: BI 101: History of Life, Principles of Biology, and Reproductive Strategies. BI 102: Plants and Animals, Nutrition and Health, Human Body and Principles of Biology. BI 103: Environmental Issues, Marine Biology, Oregon Ecology and Principles of Biology.

● BI 164 NATURE PHOTOGRAPHY I

(4 class hrs/wk 3 cr)
Covers camera functions and how they affect the photographic image, things of significance in nature and perceiving images for scientific documentation or artistic expression. Students are given specific assignments in the field in order to reinforce classroom concepts and theories. Note: A 35mm SLR camera is required. Flash unit, tripod and close-up ability recommended.

● BI 211, 212, 213 BIOLOGY

(5 class hrs/wk 4 cr) F/W/Sp
Introductory course intended for science majors: Biochemistry, Botany, Zoology, Forestry, Microbiology, Fisheries and Wildlife, Agriculture, Pre-medical, Pre-dental, Pre-veterinary, Pre-pharmacy, Biology. BI 211: Survey of major groups of organisms. BI 212: Cell structure and metabolism; structure and function of plants and animals. BI 213: Genetics, evolution, ecology and behavior. Corequisite: CH 121, 122, 123 College Chemistry or CH 221, 222, 223 General Chemistry.

● BI 214 CELL AND MOLECULAR BIOLOGY

(3 class hrs/wk 3 cr) W
Basic concepts of prokaryotic and eukaryotic cell biology, with an emphasis upon cell structure and function at the molecular level. Prerequisite: BI 212. Corequisite: BI 213.

● BI 231, 232, 233 HUMAN ANATOMY AND PHYSIOLOGY

(6 class hrs/wk 4 cr) F/W/Sp/Su
An introduction to the structure and function of the human body. This course is of particular benefit to students in the health professions and physical education, but is valuable to others interested in the anatomy and physiology of the body. BI 231: structure and function of the cell, basic biochemistry, tissues, integumentary system, skeletal system, and muscular and blood systems; BI 232: respiratory system, urinary system, fluid and electrolyte balance, cardiovascular and digestive systems; BI 233: lymphatic and immune systems, metabolism, endocrine system, nervous system, senses and reproductive system. Note: Must be taken in order. Prerequisites: MTH 65 Elementary Algebra; CH 121, CH 221 General Chemistry or CH 112 Chemistry for Health Occupations or equivalent or concurrent enrollment in any of these chemistry courses.

● BI 234 MICROBIOLOGY

(6 class hrs/wk 4 cr) F/W/Sp/Su
Introductory course; first in a series of three microbiology courses with laboratory. Covers all forms of microbial life, with emphasis on bacteria. Emphasizes application of microbiology to every day living. Medical, industrial, food and water microbiology, and sanitation are reviewed.

● BI 235 ELEMENTARY MEDICAL MICROBIOLOGY

(6 class hrs/wk 4 cr) W
Second in a series of three microbiology courses with laboratory. Surveys pathogenic bacteria and other pathogenic microorganisms. Covers characteristics of organisms, diseases they cause, their significance to human health and methods of control. The lab accompanying this course demonstrates morphology and growth characteristics of common pathogens and introduces diagnostic techniques.

● BI 236 MOLECULAR BIOTECHNOLOGY

(6 class hrs/wk 4 cr) Sp
Third in a series of three microbiology courses with laboratory. Laboratory course covering diagnostic immunology techniques such as precipitation reactions, agglutination reactions, complement fixation, immunofluorescence and enzyme-linked immunosorbent assay; the use of DNA probes with application to blot assays; amino acid sequencing; and the strategies and processes used in gene cloning, such as cloning vectors, screening, restriction enzymes and genomic libraries. Laboratory exercises allow students to practice techniques described in lecture.

● BI 251 PRINCIPLES OF WILDLIFE CONSERVATION

(3 class hrs/wk 3 cr) W
Introduces the interrelationships between the physical environment and wild animal populations. Examines the history of wildlife conservation and natural resource use, man's relationship to his natural environment, dynamics of animal populations, principles and practices of fisheries and wildlife management, and the role of wildlife biologists.

● BI 252 WILDLIFE RESOURCES: BIRDS

(5 class hrs/wk 4 cr) Sp
Introduces the biology of birds, with specific emphasis on the ecological and physiological adaptations of birds, flight, migration, bird behavior and identification, and natural history of the common birds of Oregon.

BI 280 CWE BIOLOGY

(6-42 class hrs/wk 2-14 cr) F/W/Sp/Su
An instructional program designed to give students practical experience in supervised employment related to biology. Students identify job performance objectives, work a specified number of hours during the term, and attend a related CWE seminar. Note: Credits are based on identified objectives and number of hours worked. Prerequisite: CWE coordinator approval.

BI 4.220 SURVEY OF THE HUMAN BODY

(4 class hrs/wk 3 cr) F/W
An overview of general principles of human anatomy and physiology. Prerequisite: Admission to the Dental Assistant Program or the Medical Assistant Program. Fall registration limited to students enrolled in the Dental Assistant Program and Winter registration limited to students enrolled in the Medical Assistant Program.

BI 4.221 BASIC DENTAL SCIENCES

(3 class hrs/wk 3 cr) W
An examination of the anatomy and physiology of the head and neck (in particular the oral cavity), embryonic development of the mouth and teeth, microbiology, and the fundamentals of pathology, nutrition and pharmacology. Prerequisite: Successful completion of BI 4220, Survey of the Human Body.

CA.....Culinary Arts

CA 8.309 PURCHASING FOR CHEFS

(2 class hrs/wk 2 cr) W
Through lecture, role-playing, research and written assignments, students learn the function of writing specifications and dealing with purveyors, as well as standard storeroom prodecures.

CA 8.310, 8.311, 8.312 CULINARY ARTS PRACTICUM I, II, III

(24 class hrs/wk 7-8 cr) F/W/Sp
The Practicum classes I, II, and III provide a comprehensive hands-on sequence designed to develop, through practice, the basic skills and attitudes necessary for a successful career in Food Service. Stations include Baking, Pantry, Garde Manger, Soups and Sauces, Entree Cookery, Vegetable Cookery, Healthy and Natural Foods, and Dining Room. High professional standards and attitudes are stressed. These practicums are designed for the serious career-oriented individual. Prerequisite or Corequisite: CA 8.337 Stations and Tools; CA 8.336 Food Service Safety and Sanitation.

CA 8.321, 8.322, 8.323 ADVANCED COOKING MANAGEMENT I, II, III

(20 class hrs/wk 7 cr) F/W/Sp
From the fundamental skills attained in Practicum I, II & III, students refine and advance their culinary skill to include a la carte, front line cookery, advanced baking and pastry, advanced garde manger and dining room management skills. Students are directly involved in running a "working restaurant," giving them a realistic experience while honing work habits and awareness of production demands. Prerequisite: C or higher grade in CA 8.310, 8.311, and CA 8.312.

CA 8.336 FOOD SERVICE SAFETY AND SANITATION

(10 class hrs/wk 1 cr) F
Helps students gain an awareness of the hazards of poor sanitation and safety practices and how to properly address those issues. Students through lecture, assigned reading and case study learn the essentials of food handling, proper personal hygine, equipment handling and facilities management as they relate to the food service industry.

CA 8.337 STATIONS, TOOLS AND CULINARY TECHNIQUES

(20 class hrs/wk 3 cr) F
A program orientation course providing students a thorough first exposure to the history of food service; identification and use of common ingredients; to professional work habits and attitudes; and to a basic understanding of equipment, knife handling techniques and culinary terms and methods. Note: Two-week class.

CA 8.341 SOUPS AND SAUCES

(10 class hrs/wk 3 cr) W
Provides study and practice in the art of classical and modern sauce and soup making from varied national and ethnic cuisines.

CA 8.345 SERVICE TECHNIQUES

(10 class hrs/wk 1 cr) F
Teaches the skills of dining room service by a combination of lecture, demonstrations and role playing. In addition, students learn the fundamentals of building customer relations.

CA 8.347 BEVERAGE SERVER TRAINING

(1 class hour/wk 1 cr)
Provides the student with an understanding of alcohol as a drug and its effects on the body, behavior, and in particular on the driving skills of those who consume alcohol. The class also helps equip students with skills and strategies for dealing with the day-to-day challenges of serving alcohol in a commercial establishment.

CA 8.350, 8.351, 8.352, 8.353 BANQUETS AND BUFFET LAB A, B, C, D

(3 class hrs/wk 1-2 cr) F/W/Sp
Provides students the opportunity to participate in actual banquet and buffet functions, from small caterings to very large banquets. Set up, production load, banquet and catering plans, service techniques, organizational skills, costs and breakdown systems are presented.

CA 8.354 BANQUETS AND BUFFET LAB E

(3 class hrs/wk 1 cr) F
Enables students (especially those interested in catering) to acquire banquet experience in addition to the required A, B, C and D classes.

CA 8.355 BANQUET AND BUFFET PLANNING

(2 class hrs/wk 1 cr) Sp
To be taken in conjunction with CA 8.353 Banquet and Buffet Lab D. Students participate in the planning and execution of spring term banquets, food show and other special events.

CA 8.368 CREATING THE MENU

(2.5 class hrs/wk 2 cr) F
Covers history of the menu, styles of menus, consideration of nutrition, work load, flow of goods and sales.

CA 8.373 COSTING

(2.5 class hrs/wk 1 cr) W
Teaches theory and practice of determining food cost for restaurant and institutional cooking.

CA 8.409 MEATS

(6 class hrs/wk 3 cr) F
Addresses fabricating primal and sub-primal cuts of beef, pork and lamb for profitable use in restaurants. Includes knife techniques, portion cutting, and safe and sanitary meat handling and storage. Proper cooking procedures and techniques also are presented. Handling and tasting of meat products is an integral and required part of this class.

CA 8.414 GARDE MANGER

(6 class hrs/wk 3 cr) Sp
Covers history of food presentation and charcuterie, as well as parts of cold kitchen, aspic work, appetizers and hors d'oeuvres. Utilization is covered by lecture, demonstration and practical application Note: Two-week class.

CA 8.418 BEVERAGE OPERATIONS AND SERVICES

(4 class hrs/wk 1 cr) F
Covers the art and science of beverage production, classifications, standards of identity, taste and characteristics, service and merchandising, costing and controls, standard glassware, sanitation, and federal and state ordinances.

CA 8.419 NUTRITION AND SPECIAL DIETS

(2 class hrs/wk 2 cr) F
Focuses on practical use of food and menus to assure a proper balance of both macro-nutrients (carbohydrates, fats, and proteins) and micronutrients. Vitamins and minerals discussed. Fiber needs and prevention of diet-related illness are covered.

CA 8.421 INTERNATIONAL CUISINE

(4 class hrs/wk 2 cr) Sp
Through lecture, projects, research and demonstration, students learn about the styles and flavoring components of a variety of national and regional cuisines.

CEM.....Civil Engineering

CEM 263 PLANE SURVEYING

(4 class hrs/wk 3 cr) F
Basic course in surveying techniques. Includes distance measuring, leveling, cross sectioning, traversing, topographic surveying, use of basic surveying instruments and office procedures. Practical application of procedures and instruments is provided through appropriate field problems. Prerequisite: MTH 111 College Algebra.

CE.....Civil Engineering Technology

CE 6.488 ADVANCED SURVEYING AND CIVIL DESIGN

(6 class hrs/wk 4 cr) F
A project class focusing on subdividing a parcel of land and designing public utilities (roads, water, sewer and drainage) for the subdivision. Will also include introductions to survey law and groundwater. Prerequisite: MTH 112 Trigonometry, CEM 263 Plane Surveying, EG 4.455 Civil Drafting. Corequisite: EG 4.465 Civil Drafting II.

CG.....College Skills

CG 111 COLLEGE LEARNING AND STUDY SKILLS

(3 class hrs/wk 3 cr) F/W/Sp
Assists students in developing the academic strategies necessary for being successful in a community college or four-year college. Skills taught emphasize learning from lectures and textbooks, applying memory strategies, developing library skills, preparing for and taking tests, and managing student responsibilities. Prerequisite: Appropriate reading competence as indicated by College Placement Test.

CH.....Chemistry

● CH 111 INTRODUCTORY CHEMISTRY

(5 class hrs/wk 4 cr) W
Introduces basic chemistry and laboratory skills. Designed for students with no previous chemistry background. Prerequisite: Students must have a working knowledge of elementary algebra.

● CH 112 CHEMISTRY FOR HEALTH OCCUPATIONS

(6 class hrs/wk 5 cr) F/W/Sp/Su
Introductory topics in inorganic, organic and biological chemistry specifically selected to prepare students entering Nursing, Emergency Medical Technician and related Health Occupations programs. Prerequisite: High school algebra, or equivalent, or MTH 60 Introduction to Algebra.

● CH 121, 122, 123 COLLEGE CHEMISTRY

(7 class hrs/wk 5 cr) F/W/Sp
Three-term survey of the principles of inorganic, physical, organic, nuclear and biological chemistry for students in science-related fields, including health occupations, agriculture, animal science, fisheries and wildlife, life sciences, education, general science and earth sciences. Note: Must be taken in sequence. Prerequisites to CH 121:
MTH 65 Elementary Algebra or equivalent; high school physical science or equivalent. Prerequisites to CH 122: MTH 95 Intermediate Algebra and CH 121 College Chemistry. Prerequisite to CH 123: CH 122 College Chemistry.

● CH 221, 222, 223 GENERAL CHEMISTRY

(6 class hrs/wk 4 cr) F/W/Sp
A three-term sequence for science, engineering and health pre-professional students. Must be taken in order. Topics include atomic structure, chemical bonding, chemical equilibrium, rate of reaction, acids and bases, oxidation and reduction, nuclear chemistry and organic chemical compounds. Prerequisite to CH 221: high school chemistry or CH 112 Chemistry for Health Occupations. Corequisite to CH 221: MTH 111 College Algebra.

● CH 241, 242, 243 ORGANIC CHEMISTRY

(6 class hrs/wk 4 cr) F/W/Sp
A three-term sequence for science and health pre-professional students (such as pharmacy, medicine and veterinary). Must be taken in order. Topics include structural theory, nomenclature, stereochemistry, reactions and synthesis of organic chemical compounds. Reaction mechanisms are emphasized. Prerequisite: One year of General or College Chemistry.

CH 280 CWE CHEMISTRY

(6-42 class hrs/wk 2-14 cr) F/W/Sp/Su
An instructional program to give students practical experience through supervised employment related to chemistry. Students identify job performance objectives, work a specified number of hours during the term, and attend a related CWE seminar. Note: Credits are based on identified objectives and number of hours worked. Prerequisite: CWE coordinator approval.

CJ.....Criminal Justice

■ CJ 100 SURVEY OF CRIMINAL JUSTICE SYSTEMS

(3 class hrs/wk 3 cr) F/Sp
Surveys the nature of crime and criminal responsibility, the criminal justice process, and the careers available in the criminal justice system.

■ CJ 101 INTRODUCTION TO CRIMINOLOGY

(3 class hrs/wk 3 cr) W/Su
Introduces major types of criminal behavior, role careers of offenders, factors that contribute to the production of criminality or delinquency, changes of the law in crime control and treatment processes.

■ CJ 110 INTRODUCTION TO LAW ENFORCEMENT

(3 class hrs/wk 3 cr) F/Sp
Explores theories, philosophies and concepts related to role expectations of line enforcement officers. Emphasizes patrol, traffic and public service responsibilities and their relationship to the administration of justice systems.

■ CJ 120 INTRODUCTION TO THE JUDICIAL PROCESS

(3 class hrs/wk 3 cr) W
Surveys the process of justice from arrest to returning the offender to society; the jurisdiction of city, county, state and federal police agencies; and the constitutional rights of individuals in America.

■ CJ 130 INTRODUCTION TO CORRECTIONS

(3 class hrs/wk 3 cr) F/W/Sp
Examines the total correctional process from law enforcement through administration of justice, probation, prisons and correctional institutions, and parole. History and philosophy oriented.

CJ 132 INTRODUCTION TO PAROLE AND PROBATION

(3 class hrs/wk 3 cr) W
Introduces the use of parole and probation as a means of controlling development. Covers contemporary functioning of parole and probation agencies.

CJ 198 RESEARCH TOPICS

(1 class hr/wk 1 cr) F/W/Sp
Examines in-depth a selected criminal justice topic. Develops skills in independent research. Corequisite: WR 123 English Composition: Research Paper.

■ CJ 201 JUVENILE DELINQUENCY

(3 class hrs/wk 3 cr) F/Sp
Defines and surveys the development and patterns of delinquent behavior, institutional control and treatment, and legal methods of dealing with delinquency.

■ CJ 202 SOCIAL PROBLEMS: VIOLENCE AND AGGRESSION

(3 class hrs/wk 3 cr) F/Sp/Su
Explores and analyzes violence and aggression from biological, psychological and sociological perspectives. Includes topics such as: homicide, suicide, rape, assault, mob violence, terrorism, violence within the family and related phenomenon, which are presented from a human relations perspective.

CJ 203 CRISIS INTERVENTION SEMINAR

(1 class hrs/wk 1 cr)
An overview of the techniques and approaches to crisis intervention for entry level criminal justice professions. Covers initial intervention, defusing and assessment, resolution and/or referral, with emphasis on safety. Includes personal effectiveness, recognition of threat levels, voluntary compliance, verbal and non-verbal communication, active listening and mediation.

CJ 210 INTRODUCTION TO CRIMINAL INVESTIGATION

(3 class hrs/wk 3 cr) W
Introduces the fundamentals of criminal investigation theory and history, from the crime scene to the courtroom. Emphasizes techniques appropriate to specific crimes.

■ CJ 220 INTRODUCTION TO SUBSTANTIVE LAW

(3 class hrs/wk 3 cr) F/Sp
Surveys the historical development and philosophy of law and constitutional provisions; the definition and classification of crimes and their application to the system of administration of justice; and the legal research, case law and concepts of law as a social force.

CJ 222 PROCEDURAL LAW

(3 class hrs/wk 3 cr) W
Reviews the development of English common law and U.S. case law; the constitutional and statutory provisions relating to arrest, search and seizure; and the rights and responsibilities of citizens and criminal justice personnel agencies.

CJ 230 INTRODUCTION TO JUVENILE CORRECTIONS

(3 class hrs/wk 3 cr)
An introductory perspective of the historical and contemporary aspects of the juvenile offender, including examination of juvenile court philosophy and current treatment programs.

CJ 232 INTRODUCTION TO CORRECTIONAL CASEWORK

(3 class hrs/wk 3 cr)
Studies approaches to behavior modification through interviewing and counseling. Includes techniques in counseling and interviewing for entry-level practitioners in Corrections. Traces development of positive relationships between the client and Corrections personnel.

CJ 233 COMMUNITY-BASED CORRECTIONS

(3 class hrs/wk 3 cr) Sp
Explores philosophy and programs of juvenile and adult probation supervision, after-case parole, half-way homes, work-and educational-release furlough, as well as executive clemency and interstate compact practices. Examines the dilemma of surveillance — custody/control factors vs. supervision/treatment.

CJ 280A CWE CORRECTIONS

(6-42 class hrs/wk 2-14 cr) F/W/Sp/Su
An instructional program designed to give students practical experience in supervised employment related to corrections. Students identify job performance objectives, work a specified number of hours during the term, and attend a related CWE seminar. Note: Credits are based on identified objectives and number of hours worked. Prerequisite: CWE coordinator approval.

CJ 280B CWE LAW ENFORCEMENT

(6-42 class hrs/wk 2-14 cr) F/W/Sp/Su
An instructional program designed to give students practical experience in supervised employment related to law enforcement. Students identify job performance objectives, work a specified number of hours during the term and attend a related CWE seminar. Note: Credits are based on identified objectives and number of hours worked. Prerequisite: CWE coordinator approval.

CR.....Collision Repair

CR 3.511 AUTO COLLISION BASICS

(20 class hrs/wk 12 cr) F
Infroduces minor collision damage repair, refinishing materials, refinishing equipment and vehicle surface preparation. Also included is understanding automobile construction, basic collision tools and environmental hazards and safety procedures.

CR 3.512 AUTO COLLISION PROCEDURES

(20 class hrs/wk 12 cr) W
Review environmental hazards and safety procedures. Students will learn basic auto collision estimating, bolt-on panel replacement and adjustment, auto glass replacement, and identify interior trim. Also teaches plastic repair, refinishing procedures and color matching. Students will work together as teams on project vehicles, review work orders and communicate with customers. Prerequisite: CR 3.511 Collision Repair or instructor approval.

CR 3.513 SHOP PROCEDURES

(20 class hrs/wk 12 cr) Sp
Review environmental hazards and safety procedures. Covers paint problems and final detailing. Introduces frame and unibody measuring and repair, including frame equipment, vehicle anchoring, pulling and pushing. Also covered is power tools, welded panel replacement and restoring corrosion protection. Prepare for job search, interviews and review resume. Continue team learning, working with estimates, work orders and customer relations. Prerequisite: CR 3.512 Collision Procedures or instructor approval.

CR 3.514 AUTO BODY ELECTRICAL RECONSTRUCTION

(20 class hrs/wk 2 cr) Sp
Twenty-hour course for Collision Repair majors to supplement instruction in trouble shooting theory and reconstructive repair skills as applied to automotive direct current electrical systems. Note: Five-week class.

CS.....Computer Science

CS 133B INTRODUCTION TO BASIC

(4 class hrs/wk 3 cr)
Introduces algorithms and basic programming concepts in high-level computer language—BASIC.

CS 133U BEGINNING PROGRAMMING C++

(5 class hrs/wk 4 cr) F/W/Sp
An introduction to problem analysis and programming to solve computation problems is provided. The course is an introduction to C++ for those with previous programming experience. Prerequisite: CS 133V and MTH 95 or equivalent knowledge.

CS 133V BEGINNING PROGRAMMING: VISUAL BASIC

(5 class hrs/wk 4 cr) F/W/Sp
Provides an introduction to problem analysis and programming to solve computation problems for those with little or no previous programming experience. The language used is Visual BASIC. Prerequisite: BA 131 Business Productivity Software or equivalent computer experience; MTH 60 or higher.

CS 145 HARDWARE/SOFTWARE SELECTION AND SUPPORT

(3 class hrs/wk 3 cr) Sp
Systematically presents evaluation criteria for selection of microcomputer hardware, software, service and support, including assessment of needs, compatibility of hardware and software, and reliability of dealership support.

CS 161 INTRODUCTION TO COMPUTER SCIENCE I

(5 class hrs/wk 4 cr) F/W/Sp
Presents an overview of fundamental concepts of computer science. Includes problem-solving concepts, verification and validation, representation of numbers, machine representation of data, sources of error and algorithm development. The Java programming language is used. Prerequisites: CS 133U Beginning Programming C++ and MTH 95 Intermediate Algebra or equivalent.

CS 162 INTRODUCTION TO COMPUTER SCIENCE II

(5 class hrs/wk 4 cr) W/Sp
Covers software engineering principles, basic data structures and abstract data types (arrays, strings, stacks, queues, trees). Introduces analysis of algorithms, sorting and searching. The Java programming language is used. Prerequisite: CS 161 Introduction to Computer Science I.

CS 199 SPECIAL STUDIES: CONSULTING

(4 class hrs/wk 2 cr) W
Provides an opportunity to gain experience consulting with end-users in a setting such as a campus computer lab. Consulting experiences include troubleshooting and problem-solving skills similar to those used in many business and software environments. Designed for Computer User Support majors in their second year of course work. Prerequisite: Instructor approval.

CS 225 END-USER COMPUTING SUPPORT

(4 class hrs/wk 4 cr) W
Prepares the student for training and supporting end-users in a variety of organizational settings. Topics include the end-user support function in an organization, techniques for developing and delivering training modules and techniques for providing ongoing technical support to end-users. Emphasizes solving problems with users (debugging, troubleshooting and interaction with users). Prerequisite: CS 244 Systems Analysis and Design.

CS 226 ADVANCED COMPUTER USER SUPPORT

(4 class hrs/wk 4 cr) Sp
A continuation of CS 225 End-user Computing Support. Focuses on coordination and management of end-user computing facilities, help desks, etc. The scope of projects is larger than the CS 225 projects. Prerequisite: CS 225 End-user Computing Support.

CS 227A SYSTEMS SUPPORT: APPLICATIONS

(2 class hrs/wk 2 cr) F
A workbench course which provides experience with common computer applications software problems. Emphasizes troubleshooting and problem solving, and builds skills in computer user support. Prerequisite: CS 145 Hardware/Software Selection and Support. Corequisite: CS 244 Systems Analysis and Design.

CS 227H SYSTEMS SUPPORT: HARDWARE

(2 class hrs/wk 2 cr) W
A workbench course which provides experience with common computer hardware problems. Emphasizes troubleshooting and problem solving, and builds skills in hardware support. Prerequisite: CS 227A Systems Support: Applications.

CS 227N SYSTEMS SUPPORT: NETWORK AND OPERATING SYSTEMS

(2 class hrs/wk 2 cr) Sp
A workbench course which provides experience with common network and operating environment problems. Emphasizes troubleshooting and problem solving and, builds skills in data communications, network and operating systems support. Prerequisites: CS 279 Network Management (Novell) and CS 227H Systems Support: Hardware.

CS 233V ADVANCED PROGRAMMING: VISUAL BASIC

(5 class hrs/wk 4 cr) Sp
Presents advanced ideas of numerical computation, object-oriented programming and problem analysis using the Visual BASIC language. Prerequisite: CS 133V Beginning Programming: Visual BASIC.

CS 244 SYSTEMS ANALYSIS AND DESIGN

(5 class hrs/wk 4 cr) F
A practice-oriented course with examples, applications and proven techniques that demonstrate systems analysis and design. Actual organization and business settings are used to show how systems concepts can apply to many different types of enterprises. Prerequisite: CS 145 Hardware/Software Selection and Support or instructor approval.

CS 261 DATA STRUCTURES

(5 class hrs/wk 4 cr) Sp
Includes the topics of complexity analysis, approximation methods, trees, graphs, file processing, binary search trees, hashing and storage management. Prerequisite: CS 162 Introduction to Computer Science II.

CS 275 DATA BASE SYSTEMS: SQL AND ORACLE

(5 class hrs/wk 4 cr) W
Introduces the design, purpose and maintenance of a data base system. Topics covered are the entity-relationship model, relational systems, data definition, data manipulation, query language (SQL) and the Oracle and Paradox data base management environments. Prerequisite: CS 161 Introduction to Computer Science I and BA 110H Advanced DOS and Hard Disk Management.

CS 279 NETWORK MANAGEMENT (NOVELL)

(3 class hrs/wk 3 cr) F
Through the use of lectures, reading and access with supervisor privileges to a Local Area Network system running Novell's operating system, students learn to maintain a network. Covers printers, users and the installation of software packages. Prerequisite: BA 110H Advanced DOS and Hard Disk Management or instructor approval.

CS 280 CWE DATA PROCESSING

(6-42 class hrs/wk 2-14 cr) F/W/Sp/Su
An instructional program designed to give students practical experience in supervised employment related to data processing. Students identify job performance objectives, work a specified number of hours during the term, and attend a related CWE seminar. Note: Credits are based on identified objectives and number of hours worked. Prerequisite: CWE coordinator approval.

CS 2.589 READING AND CONFERENCE: DATA PROCESSING

(1-20 class hrs/wk 1-10 cr)
Individualized course covering subject areas of particular interest to the student or areas where additional work is needed. Note: Number of credits is determined by amount of time spent.

CSS.....Crop Science

CSS 105 SOILS AND MAN

(3 class hrs/wk 3 cr) Sp
Soil resources in relation to environmental planning and sound ecological principles of land use. Includes examples and case studies involving soil problems and limitations in land use, pollution control and ecological aspects of production. One field trip. Student teams make presentation regarding land-use issues based on soil survey data.

CSS 200 PRINCIPLES OF CROP SCIENCE

(5 class hrs/wk 4 cr) Sp
Course includes the fundamental principles, concepts and illustrative facts concerning seedbed preparation, planting, fertilizing, irrigation, harvesting, storage, processing and marketing of cultivated crops. It also includes pest management, crop rotations, quality control and crop improvement. The lecture is designed to provide the student with background knowledge of common agricultural crops. The lab experience gives students practical applications in plant structure and growth; crop, weed, insect and disease identification; and the various cultural practices.

CSS 210 FORAGE CROPS

(4 class hrs/wk 3 cr) Sp
Emphasizes practices that produce maximum economic returns for land devoted to hay, pasture or range. Includes establishment and management, fertilization, pest control, rotations, irrigations and renovation. Note: This is a professional/technical course that may not be accepted by four-year institutions.

D.....Dance

D 185, 186, 187 BEGINNING BALLET

(1 class hr/wk 1 cr) F/W/Sp
Introduces the basic concepts of body alignment, terminology and movement sequences. Corequisite: D 192 Dance Lab.

D 192 DANCE LAB

(2 class hrs/wk 1 cr)
Lab for D 185, 186, 187 Beginning Ballet. Note: May be repeated for up to six credits.

D 285, 286, 287 INTERMEDIATE BALLET

(1 class hr/wk 1 cr) F/W/Sp
Continues the work on basic concepts of body alignment, terminology and movement sequences. Corequisite: D 292 Dance Lab.

D 292 DANCE LAB

(2 class hrs/wk 1 cr)
Lab for D 285, 286, 287 Intermediate Ballet. Note: May be repeated for up to six credits.

DA.....Dental Assistant

DA 5.453 DENTAL PATHOLOGY/ PHARMACOLOGY

(2 class hrs/wk 2 cr) Sp
The study of oral pathology will cover the recognition of gross symptoms of oral disease, the treatment procedure and the prevention of oral disease to include the drugs and medications most commonly associated with treatment. An in-depth study of pathological diseases, normal and injured tissues, developmental anomalies, dental caries, abscesses and cysts will be discussed. Prerequisites: Successful Completion of: DA5.500 Dental Anatomy/Histology, BI4.220 Survey of the Human Body, BI4.221 Basic Dental Sciences.

DA 5.461 DENTAL RADIOLOGY I

(4 class hrs/wk 3 cr) F
An introduction to the principles and hazards of radiation, exposing and processing films, visual identification of anatomical landmarks, operation of X-ray equipment, including safety factors for patient and operator. Prerequisite: Admission to the Dental Assistant Program.

DA 5.462 DENTAL RADIOLOGY II

(4 class hrs/wk 3 cr) W
A continuation of DA 5.461. An in-depth study of X-ray and patient considerations, increased skills including exposures of X-rays on mannequins and patients. Students will participate in exposing, processing and mounting dental radiographs. Other radiographic methods will include extraoral, panoramic, endodontic, pedodontic, occlusal and disto-oblique techniques. Prerequisites: Successful completion of DA5.461 Dental Radiology I.

DA 5.463 DENTAL RADIOLOGY III

(4 class hrs/wk 3 cr) Sp
Advanced X-ray clinical application of dental radiographic procedures and skills proficiency for periapical and bitewing X-rays. Students will expose radiographs on patients in the radiology labs. Emphasis is placed on identification of errors and corrective techniques. Prerequisite: Successful completion of: DA5.462 Dental Radiology II.

DA 5.484 DENTAL MATERIALS I

(4 class hrs/wk 3 cr) F
An introduction to laboratory applications in the handling and manipulating of dental materials is designed to improve proficiency and efficiency at chairside procedures, emphasis on principles of physical and chemical properties of gypsum, impressions materials, waxes, custom trays and basic principles and asepsis of laboratory procedures, including fixed prosthetic materials and gold products. Precautions and safe handling of dental laboratory materials will be presented through use of Material Safety Data Sheets (MSDS). Prerequisite: Admission to the Dental Assistant Program.

DA 5.485 DENTAL MATERIALS II

(4 class hrs/wk 3 cr) W
An introduction to the diverse materials used in the dental office. The physical and chemical properties of bases, adhesives, cements, anticariogenic agents, and restorative materials in reference to manipulation and usage. Precautions and safe handling of dental materials will be presented through the use of Material Safety Data Sheets (MSDS). Prerequisites: Successful Completion of: DA5.500 Dental Anatomy/ Histology, DA5.494 Clinical Practice I, DA5.484 Dental Materials I.

DA 5.488 EXPANDED DUTIES I

(3 class hrs/wk 2 cr) W
A study of procedures beyond the scope of general chairside assisting. The Oregon Dental Practice Act allows for instruction in placement and removal of matrix retainers and rubber dam, taking alginate impressions and bite registrations for study model articulation. Prerequisite: Successful completion of: DA5.494 Clinical Practice I, DA5.500 Dental Anatomy/Histology.

DA 5.489 EXPANDED DUTIES II

(3 class hrs/wk 2 cr) Sp
A continuation of DA 5.488. This course will complete the remaining expanded functions that are approved by the Oregon Dental Practice Act. An in-depth study with major emphasis on student practical application and fabrication of temporary crowns, coronal polishing, amalgam polishing and cement removal, coronal polishing, amalgam polishing and cement removal to include correct hand and motion techniques, selection of armamentarium, recognition of polishable amalgam restorations and safety precautions for patient comfort are emphasized. Prerequisite: Successful completion of DA 5.488 Expanded Duties I.

DA 5.491 DENTAL OFFICE RECORDS

(2 class hrs/wk 2 cr) Sp
Basic office principles as related to their application in a dental office. Patient reception, communication, and telephone techniques, appointment scheduling, office record maintenance, financial arrangements and coordination. Purchasing and supply control, management of office equipment, scheduling of meetings/ conferences and preparing written communications. Billing insurance companies, collection procedures and computerized billing systems are covered in depth. Prerequisite: Third- term status.

DA 5.492 DENTAL OFFICE EMERGENCIES

(2 class hrs/wk 2 cr) Sp
Provides familiarization with various emergency situations that may occur in a dental office and the primary first aid choice. The signs and symptoms of a medical emergency, the equipment, treatments, and drugs are discussed. Emphasis is placed on the responsibility of the dental health team to be prepared for an emergency. CPR re-certification will be included within the course if needed. Prerequisite: Third-term status.

DA 5.494 CLINICAL PRACTICE I

(4 class hrs/wk 3 cr) F
An introduction to clinical dental assisting. Emphasis is placed on dental health team members, historical developments, introductory terminology, office communications, ethics and jurisprudence, and patient management. Treatment room preparation, health history data collection, dental equipment identification, sterilization, asepsis, preset trays, operator positioning, instrument transfer, oral charting, and general office routine are covered in detail. Dental specialties will be introduced to include all aspects of dental care available to the public. Prerequisite: Admission to the Dental Assistant Program.

DA 5.495 CLINICAL PRACTICE II

(6 class hrs/wk 4 cr) W
A continuation of DA 5.494. Principles of operative dentistry and fixed prosthetics are covered in detail, the order of procedure, hand and rotary instrumentation, anesthesia, handpieces, isolation and control of the operative field and post operative instructions are acutely emphasized. Prerequisite: Successful completion of: DA 5.494 Clinical Practice I.

DA 5.496 CLINICAL PRACTICE III

(4 class hrs/wk 3 cr) Sp
A continuation of DA 5.495. A clinical practice program that accentuates role plays, increased instrumentation and improvement of skills proficiency on mannequins is stressed. Instrument transfer and refinement of practical skills is emphasized. An in-depth study of all the dental specialties will be incorporated. Prerequisite: Successful completion of: DA 5.495 Clinical Practice II.

DA 5.497 DENTAL HEALTH EDUCATION

(1 class hr/wk 1 cr) W
Development of concepts and principles of plaque related diseases, fluoride therapy, brushing and flossing techniques, patient education, including oral hygiene, preventative dentistry, and motivational techniques. Student community projects stress the principles of communication and preventative dentistry. Prerequisites: Successful completion of: DA5.494 Clinical Practice I and DA5.500 Dental Anatomy/ Histology.

DA 5.498 DENTAL HEALTH/ NUTRITION

(1 class hr/wk 1 cr) Sp
Nutritional information applied to good oral health, including the food pyramid, nutrients, food diaries, and nutritional deficiencies as they relate to dental conditions. Basic principles of prevention of oral disease through patient and public education are stressed. Prerequisite: Successful completion of DA 5.497 Dental Health Education.

DA 5.500 ORAL ANATOMY AND HISTOLOGY

(2 class hrs/wk 2 cr) F
An in-depth study of dental terminology as it relates to normal anatomy, physiology and histology of the teeth and associated structures, their embryological development and histological characteristics, the function of oral structures, and a generalized study of the head and neck. The universal numbering system for individual teeth is used in extensive detail, surfaces and comparison of similarities and differences of all teeth. Prerequisite: Admission to the Dental Assistant Program.

DA 5.501 PRINCIPLES OF DENTAL INFECTION CONTROL

(1 class hr/wk 1 cr) F
Principles of dental infection control. Basic requirements for OSHA's Bloodborne Pathogens Standard, Hazard Communication Standard and general safety standards in a dental environment. Students will be eligible to take the infection control examination (ICE) administered by DANB upon successful completion of this course. Prerequisite: Admission to the Dental Assistant Program.

DA 5.510 OFFICE PRACTICUM

(32 class hrs/wk 8 cr) Su
The dental assisting student is provided with work experience that places practical application of all clinical skills in community dental offices. A total of 256 hours in two separate general dentistry offices. Emphasis is placed on the individual's ability to work in a dental health team setting with minimal direction. Prerequisite: Completion of all required Dental Assistant Program courses with a high level of competency, as set by the Dental Assistant Department.

DA 5.515 OFFICE PRACTICUM SEMINAR

(2.5 class hrs/wk 2 cr) Su
A series of weekly seminars in which students share work related experiences with the instructor and peers. Information regarding employment, skills improvement, job applications, resume formats and interviewing techniques are covered as well as preliminary reviewing and testing for the national certification examination. Prerequisite: Fourth term status.

EC.....Economics

■ EC 115 OUTLINE OF ECONOMICS

(4 class hrs/wk 4 cr) F/W/Sp
Emphasizes major economic activities such as supply and demand, fiscal policies of the United States, Federal Reserve functions, unemployment and international trade.

■ EC201 INTRODUCTION TO MICROECONOMICS

(4 class hrs/wk 4 cr) F/W/Su
Introduces microeconomic principles, including the study of price theory, economic scarcity, consumer behavior, production costs, the theory of the firm, market structure and income distribution. Other selected topics may include market failure, international economics and public finance.

■ EC 202 INTRODUCTION TO MACROECONOMICS

(4 class hrs/wk 4 cr) W/Sp/Su
Introduces macroeconomic principles including the study of the theories of output determination, consumption, investment, inflation, unemployment, and fiscal and monetary policy. Other selected topics may include the study of the international balance of payments, growth and development, and urban and regional problems.

■ EC 203 APPLICATIONS IN ECONOMICS: DISCRIMINATION

(3 class hrs/wk 3 cr) Sp
Applies economic principles to selected issues affecting the U.S. economy including poverty, pollution, governmental policy and urbanization.

■ EC 215 ECONOMIC DEVELOPMENT IN THE U.S.

(4 class hrs/wk 4 cr) F/Sp
Provides historical study of U.S. economic institutions, including industry, agriculture, commerce, transportation, labor, finance and the economic program of the United States.

■ EC 216 INTRODUCTION TO LABOR ECONOMICS

(3 class hrs/wk 3 cr) F/Sp
Presents first, detailed look at the theory and policy of manpower economics, role of trade unions, the causes of unemployment, the problems of maintaining full employment, negotiation techniques, and methods of settling labor disputes, including grievance procedures, conciliation and arbitration.

■ EC 220 CONTEMPORARY U.S. ECONOMIC ISSUES: DISCRIMINATION

(3 class hrs/wk 3 cr) Sp
Focuses on discrimination in the U.S. and its impact in our market economy. Primary focus is inequities for women and minorities in the labor market.

ED.....Education

ED 101 OBSERVATION AND GUIDANCE

(5 class hrs/wk 3 cr) F/W/Sp
An active participation class focusing on methods of observing and interacting with children in a classroom setting. Students work with children individually and in small groups. Section numbers indicate the school setting: preschool, elementary or secondary.

ED 102 PRACTICUM

(5 class hrs/wk 3 cr) F/W/Sp
Experience is gained by working with children in a supervised educational setting. Students increase their knowledge of child development and learning environments, begin planning and implementing curricula, and develop skills in guidance and discipline. Section numbers indicate the school setting: preschool, elementary or secondary. The preschool practicum includes planned interactions with parents and may take place in a parent-child cooperative. Prerequisite: ED 101 Observation and Guidance.

ED 103 ADVANCED PRACTICUM

(14 class hrs/wk 6 cr) F/W/Sp
Field experience in a classroom setting that closely parallels duties regularly assigned to instructional assistants on a school team. Allows students to apply in-depth knowledge, methods and skills gained from education courses. The preschool practicum includes one to two full-day work experiences each week. The course may be completed in one term for 6 credits (ED 103) or in two terms for 3 credits each (ED 103A and 103B). Prerequisite: ED 102 Practicum.

ED 123 TUTOR AND INSTRUCTIONAL PRACTICES

(2 class hrs/wk 1 cr) F/W/Sp
Introduces student tutors to effective tutoring strategies. Uses a variety of instructional methodologies to inform student tutors about how students learn, how to conduct a 50-minute tutor session and how to work with a diverse student population. Prerequisite: Employment by LBCC tutorial program or permission of the instructor.

ED 152 CREATIVE ACTIVITIES/ DRAMATIC PLAY

(3 class hrs/wk 3 cr) F
Focuses on understanding and implementing a developmental approach to creative activities for the young child. Involves hands-on experience with a wide variety of activities and mediums. Includes methods of presentation and evaluation. Emphasizes art, music and movement, and dramatic play.

ED 179 LITERATURE, SCIENCE, AND MATH

(3 class hrs/wk 3 cr) Sp
Focuses on understanding and creating quality curricula in literature, science and math. Includes experiences with planning, implementing, and evaluating materials and activities. Prerequisite: HDFS 248 Learning Experiences for Children.

ED 200 INTRO TO EDUCATION

(3 class hours/wk 3 credits)
Provides an overview of public education to serve as an introduction for students considering careers in education.

ED 207 BEGINNING LEADERSHIP

(3 class hrs/wk 3 cr) F
Overview of leadership theory, styles and skills. Provides skill-building exercises, professional networking techniques, group process and team-work methods, basic communication techniques, prioritizing, goal setting and other basic information necessary for those anticipating leadership roles.

ED 208 COMMUNITY COLLEGE TUTORING

(1-5 class hrs/wk 1-3 cr) F/W/Sp/Su
Extends the learning of student tutors and others who provide academic support services to LBCC students. Course requirements may include direct instruction, practicum experience and a student-initiated project.

ED 209A THEORY AND PRACTICUM

(5 class hrs/wk 3 cr) W/Sp
Experience is gained by working with preschool-aged children in a supervised laboratory setting. Students increase their knowledge of child development, curriculum planning, learning environments, and guidance and discipline. Skill development also includes observing children and planning developmentally appropriate activities. Prerequisites: HDFS 225 or PSY 235 Child Development; HDFS 248 Learning Experiences for Children.

ED 251 DISABLING CONDITIONS

(3 class hours/wk 3 cr)
In this course, students will learn about the etiology, characteristics and impact of a variety of disabling conditions.

ED 252 BEHAVIOR MANAGEMENT

(3 class hours/wk 3 cr)
This course teaches students to strengthen desired behaviors and to decrease or eliminate undesirable behaviors.

ED 280C CWE: ELEMENTARY/ SECONDARY EDUCATION

(4-28 class hrs/wk 2-14 cr)
Structured field experience in an educational setting. Working with a master teacher, students learn current educational strategies and techniques. Students identify job performance objectives, work a specified number of hours during the term and attend a related CWE seminar. Credits are based on identified objectives and number of hours worked. This is a supervised work experience that must be approved by the CWE coordinator prior to enrolling in the class.

ED 282 WORKING WITH CHILDREN WITH SPECIAL NEEDS

(3 class hrs/wk 3 cr) F
Overview of special education legislation and family, school and community roles in educating and supporting individuals with disabilities.

EE.....Engineering Systems Technology

EE 6.320 DC CIRCUIT ANALYSIS

(8 class hrs/wk 5 cr) F
Introduces electricity and electronics, including basic concepts and theories relating to DC electricity. Introduction to lab skills, safety and equipment. Prerequisites: MTH 111 College Algebra. Lab fee required.

EE 6.321 AC CIRCUIT ANALYSIS

(8 class hrs/wk 5 cr) W
Provides knowledge and use of network analysis techniques relating to AC electricity. Basic skills in oscilloscope, function generator and power supply use also acquired. Prerequisites: EE 6.320 DC Circuit Analysis and MTH 112 College Trigonometry. Lab fee required.

EE 6.322 SEMICONDUCTOR DEVICES

(8 class hrs/wk 5 cr) Sp
Covers theory and application of electronic devices, such as semiconductor diodes and BJT/ FET transistors. BJT and FET biasing techniques and AC circuit analysis using hybrid parameter equivalents also are studied. Prerequisite: EE 6.321 AC Circuit Analysis. Lab fee required.

EE 6.327 MECHANICAL SKILLS AND CONCEPTS

(4 class hrs/wk 3 cr) F
This course covers the basic mechanical skills required in the electro-mechanical industry. Topics include hand tools, threaded fasteners, electronic soldering, packing, lubrication, gaskets, precision instruments, gears, belts, chains, couplings and seals. Lab fee required.

EE 6.328 PNEUMATICS AND FLUID POWER

(4 class hrs/wk 3 cr) W
Instruction will be given in the theory, operation and application of pneumatic control systems. The hands-on lab exercises will cover design, installation and troubleshooting of pneumatic control systems. Lab fee required.

EE 6.329 PROGRAMMABLE LOGIC CONTROLLERS

(4 class hrs/wk 3 cr) Sp
This course will introduce or review: ladder logic, PLC control, and pneumatic control. The goal is to provide hands-on skills and experience in integrating all three major industrial logic types. Lab fee required.

EE 6.330 INDUSTRIAL ELECTRICITY

(4 class hrs/wk 3 cr)
Introduces basic DC electrical theory, safety and meter use. Introduction to single-phase and three-phase concepts and measurements. Prepares the student for basic electrical troubleshooting required in other industrial trades. Prerequisite: MTH 65 Elementary Algebra.

EE 6.333 ANALOG CIRCUITS

(8 class hrs/wk 5 cr) F
Introduces circuit theory and practical application of discrete components and integrated circuits with and without feedback. Lab fee required. Prerequisite: EE 6.322 Semiconductor Devices.

EE 6.334 OPERATIONAL AMPLIFIERS

(8 class hrs/wk 5 cr) W
An introduction, investigation, and application of operational amplifiers. SCRs and UJTs are also studied. This course and EE 6.335 Integrated Systems provide an industrial measurement/control background for the electronics maintenance technician. Prerequisite: EE 6.333 Analog Circuits. Lab fee required.

EE 6.335 INTEGRATED SYSTEMS

(8 class hrs/wk 5 cr) Sp
To investigate and analyze complete electronic systems including power supplies and an AM/FM radio circuit. Prerequisite: EE 6.334 Operational Amplifiers. Lab fee required.

EE 6.336 TECHNICAL ELECTRICITY I

(4 class hrs/wk 3 cr) F/W/Sp
Introduces basic DC electrical theory, safety and meter use. Designed to prepare the student for basic electrical troubleshooting required in other industrial trades and EET program. Prerequisite: MTH 65 Elementary Algebra.

EE 6.337 TECHNICAL COMPUTER PRACTICES

(4 class hrs/wk 3 cr) F
Introduces the theory and application of basic programming concepts in solving technical problems. The C++ language is used to demonstrate programming concepts such as program structure, input and output, data types, functions, number formats and control statements. Lab fee required.

EE 6.338 INDUSTRIAL MOTOR CONTROLS

(4 class hrs/wk 3 cr) W
An in-depth study of the theory and operation of motor, transformers, and industrial motor controls. An emphasis will be placed on understanding how electronic circuits are used to control systems in modern industrial applications. Lab fee required.

EE 6.339 INDUSTRIAL PROCESS CONTROLS

(4 class hrs/wk 3 cr) Sp
An in-depth study of the theory and operation of control systems, including transducers and feedback. The emphasis will be placed on process and motion control systems, including pressure, temperature, level and flow control. Lab fee required.

EE 6.346 COMBINATION LOGIC CIRCUITS

(8 class hrs/wk 5 cr) F
Develops an understanding of number systems and digital codes through logic gates and combinational logic circuits. Investigates the use of Boolean Algebra and Karnaugh maps in simplifying logic circuits. Prerequisite: EE 6.322 Semiconductor Devices. Lab fee required.

EE 6.347 SEQUENTIAL LOGIC CIRCUITS

(8 class hrs/wk 5 cr) W
Covers flip-flops and sequential logic and their application to counters, shift registers, arithmetic circuits and, finally, to computing systems. Teaches how to use the logic analyzer and its usefulness in analyzing sequential circuits. Prerequisite: EE 6.346 Combination Logic Circuits. Lab fee required.

EE 6.348 BASIC MICROPROCESSORS

(8 class hrs/wk 5 cr) Sp
Introductory class on microprocessors and microcontrollers and their associated subsystems and software. Covers 68HC11 single chip microprocessor, support systems, peripherals and mass storage devices. Prerequisite: EE 6.347 Sequential Logic Circuits. Lab fee required.

EG.....Engineering Graphics

EG 4.403 BASIC BLUEPRINT READING: METALS

(3 class hrs/wk 2 cr) F
Teaches the fundamentals of reading and interpreting blueprints for the metals processing trades.

EG 4.407 INTRODUCTION TO CAD

(6 class hrs/wk 4 cr) F/W/Sp
A course for drafters, technicians and engineers in the application and functions of computer-aided drafting. Emphasizes hands-on operation of CAD systems. Prerequisite: Four college credits in drafting or instructor approval.

EG 4.411 DRAFTING I: CAD BASICS

(6 class hrs/wk 4 cr) F
Presents fundamentals of technical drawing. Emphasizes line language, geometric construction, sketching and layout procedures. Includes multiview drawings, pictorials and section views. Fundamental drafting skills as well as introductory CAD skills are taught.

EG 4.415 DRAFTING I/CAD BASICS

(4 class hrs/wk 3 cr) F
Fundamentals of technical drawing. Emphasizing line language, geometric construction, sketching and layout procedure. Includes multiview drawings, pictorials and section views. This course teaches fundamental drafting skills, as well as introductory CAD skills.

EG 4.421 DRAFTING II: APPLIED CAD

(6 class hrs/wk 4 cr) W
Covers methods of technical drawing utilizing ANSI standards to produce two-dimensional technical drawings. Introduces you to more advanced techniques in drafting using AutoCAD's drawing and editing commands. Prerequisite: EG 4.411 Drafting I: CAD Basics.

EG 4.423 ARCHITECTURAL DESIGN I

(6 class hrs/wk 4 cr) W
Introduces basic architectural drafting techniques and methods. Covers the principles of architectural design, layout and industry conventions. Includes architectural symbols and construction methods used in residential and light commercial buildings. Prerequisite: EG 4.411 Drafting I: CAD Basics.

EG 4.431 DRAFTING III: 3D CAD

(6 class hrs/wk 4 cr) Sp
Develops the skills necessary to create mechanical drawings. Includes principles of tool design, geometric dimensioning and tolerancing, surface finish specifications and CAD/CAM requirements. Prerequisite: EG 4.421 Drafting II: Applied CAD.

EG 4.433 PRODUCTION METHODS

(6 class hrs/wk 4 cr) Sp
Introduces technical drawing principles relating to processes used in the manufacturing and construction industries. Material specifications, production techniques and tooling for the materials processing, fabrication and forming industries are studied. Prerequisite: EG 4.403 Basic Print Reading or EG 4.411 Drafting I: CAD Basics.

EG 4.441 ADVANCED DRAFTING II: SURFACES

(6 class hrs/wk 4 cr) W
Graphic solutions to engineering and design problems are explored in this class. Covers descriptive geometry, 3D projections, surface generation and other computer modeling techniques. Prerequisite: EG 4.451 Advanced Drafting I: Solids.

EG 4.443 SCHEMATICS

(6 class hrs/wk 4 cr) F
Covers methods for drawing electrical, mechanical and plumbing schematic diagrams and pictorial layouts. Includes logic diagrams, electronic component symbols, printed circuit boards and schematics. Power distribution, piping, plumbing and HVAC drawing standards and practices also are studied. Prerequisite: EG 4.421 Drafting II: Applied CAD.

EG 4.445 SURVEYING/CIVIL DRAFTING

(6 class hrs/wk 4 cr) Sp/F
A basic course in surveying and civil drafting techniques. Includes drafting survey maps, plats, plan and profile drawings, and topo maps, as well as distance measuring, leveling, cross sectioning, traversing, topographic surveying, use of survey instruments, and office procedures. Prerequisites: MTH 97 Practical Geometry; Applied CAD; and a working knowledge of right angle trigonometry.

EG 4.451 ADVANCED DRAFTING I: SOLIDS

(6 class hrs/wk 4 cr) F
Covers mechanical design considerations for producing technical drawings for manufactured parts. Students learn boolean operations and their use in the creation of composite solid models. CIM data exchange files and formats also are explored. Prerequisite: EG 4.431 Advanced Drafting III: 3D CAD.

EG 4.453 CUSTOMIZING CAD SYSTEMS

(6 class hrs/wk 4 cr) W
Emphasizes customization of CAD systems for productivity. Autolisp, menu customization, icon and toolbar editing as well as macros are covered. Teaches students the skills needed to customize a CAD program for productivity, regardless of the technical discipline. Prerequisite: EG 4.451 Advanced Drafting I: Solids.

EG 4.455 STRUCTURAL DRAFTING

(3 class hrs/wk 2 cr) W
Introduces structural drafting. Emphasizes framing plans, connections, fabrication details, foundation drawings, and other drawings required for structural steel, precast concrete, and poured-in-place concrete drawings. Prerequisite: EG 4.411 CAD Basics.

EG 4.456 CIVIL DRAFTING LAB

(2 class hrs/wk 1 cr) Sp
A lab course covering basic civil drafting techniques. Designed for students concurrently enrolled in CEM 263 Plane Surveying who wish to include a civil drafting component in the surveying course. Includes drafting survey maps, plats, plan and profile, and topo maps. Prerequisites: MTH 97 Practical Geometry; EG 4.421 Applied CAD; and a working knowledge of right angle trigonometry.

EG 4.461 ADVANCED DRAFTING III: RENDERING

(6 class hrs/wk 4 cr) Sp
Explores use of the computer as a technical illustrating tool. Uses CAD shading, rendering and animation tools to produce realistic images used in presentations, conceptual design and technical illustration. Prerequisite: EG 4.451 Advanced Drafting II: Solids.

EG 4.463 ARCHITECTURAL DESIGN II

(6 class hrs/wk 4 cr) Sp
Presents the elements, principles and aesthetics of architectural design. Covers planning and creation of working drawings. Emphasizes construction plans, including energy efficiency, handicapped accessibility and ergonomic considerations. Prerequisite: EG 4.423 Architectural Design I.

EG4.465 CIVIL DRAFTING II

(6 class hrs/wk, 3 cr) W
An advanced course in civil drafting. Covers survey drafting, legal descriptions, contour and topographic maps, road and utility design and plat layout. Prerequisites: E.G. 4.411 CAD Basics, E.G. 4.455 Civil Drafting I, CEM 263 Plane Surveying.

EG 4.467 TECHNICAL PROJECT (2-6 class hur/wk 1-3 cr)

Advanced study in an area of student interest Choose from Civil, Mechanical, Architectural, Technical Illustration or Computer Simulation Projects will require research, and self study A weekly meeting with the instructor, a written report and an oral presentation are required.

EM.....Emergency Medical Technician

EM 5.801 INTRODUCTION TO EMERGENCY MEDICAL SERVICES

(3 class hrs/wk 3 cr)
Covers role and responsibilities of the emergency medical technician, scope of practice, moral issues, public vs. private ambulance services, emergency medical systems, medical/legal issues, multiple casualty incidents, hazardous materials awareness and stress management.

EM 5.810 EMT BASIC PART A

(10 class hrs/wk 3 cr) F/W
Designed to be presented within a five-week portion of one term. This first part of the 15-week course develops, through theory and practice, the procedural responsibilities delegated to the EMT Basic. The course incorporates discussion, demonstration, and practical application of the following: roles and responsibilities, personal safety, patient assessment, oxygen administration, artificial ventilation, use of airway adjuncts, and current field protocols. Offered twice a year. Five-week course.

EM 5.811 EMT BASIC PART B

(12 class hrs/wk 3 cr) W
Designed to be presented within a five-week portion of one term. This second part of the 15-week course develops, through theory and practice, the procedural responsibilities delegated to the EMT Basic. The course incorporates discussion, demonstration, and practical application of the following: pharmacology, cardiovascular emergencies, diabetic emergencies, altered mental status, allergic reactions, anaphylaxis, environmental emergencies, obstetrical and gynecologic emergencies, and vascular emergencies. Offered twice a year. Five-week course. Prerequisite: Successful completion of EM 5.810 EMT Basic Part A.

EM 5.812 EMT BASIC PART C

(12 class hrs/wk 4 cr) W/Sp
Designed to be presented within a five-week portion of one term. This third part of the 15-week course develops, through theory and practice, the procedural responsibilities delegated to the EMT Basic. The course incorporates discussion, demonstration, and practical application of the following: recognition and treatment of shock, MAST trousers, recognition and treatment of fractures, recognition and treatment of various emergency medical illnesses, use of the automatic and semiautomatic defibrillators and current field protocols. Successful completion of the EMT Basic Parts A, B and C courses will allow a student eligibility to sit for state certifying examinations. Offered twice a year. Five-week course. Prerequisite: Successful completion of EM 5.811 EMT Basic Part B.

EM 5.815 EMT INTERMEDIATE PART A

(10 class hrs/wk 3 cr)
EMT Intermediate Part A course is the first five weeks of a 15-week course. It is designed to permit rural communities to benefit from the advanced emergency medical care procedures that would otherwise not be available to them. This course covers theory and practice of procedural responsibilities delegated to the EMT Intermediate as set forth by the Oregon Health Division. The course incorporates discussion, demonstration and practical application of the following: EMT Basic skills plus initiation and maintenance of intravenous, intra osseous and access peripheral lines. Administration of emergency medications and intravenous fluid injections. Use of pharyngo/esophageal airway devices, ECG monitoring and interpretation of cardiac rhythms, as well as defibrillation of the cardiac arrest patient. Offered once a year on an as-needed basis. Five-week course.

EM 5.816 EMT INTERMEDIATE PART B

(10 class hrs/wk 7 cr)
Second of a two-term course that covers theory and practice of procedural responsibilities delegated to the EMT Intermediate student. Incorporates discussion, demonstration and practical application of the following: roles and responsibilities, patient assessment, oxygen ventilation, airway adjuncts, shock, intravenous and intraosseous therapy, ECG monitoring and defibrillation, pharmacology and current field protocols. Completion of the Intermediate courses will allow a student to be eligible to sit for state certifying examinations. Prerequisite: Successful completion of EM 5.815 EMT Intermediate Part A.

EM 5.820 EMERGENCY COMMUNICATION AND PATIENT TRANSPORTATION

(5 class hrs/wk 3 cr)
Covers ambulance operation, rules and regulations regarding ambulance licensing, inventory, maintenance and safety. Includes emergency response driving and route planning, MAP book orientation, communication systems, radio types, HEAR system and dispatch systems.

EM 5.825 EMT RESCUE

(6 class hrs/wk 3 cr)
Covers basic methodology and equipment used for emergency rescue. Topics covered include auto extrication, rapid extrication techniques, traffic safety, with a focus on traffic accidents.

EM 5.830 CRISIS INTERVENTION

(3 class hrs/wk 3 cr)
Covers methods of recognizing and managing symptoms of crisis. How to manage death in the field; the dying patient; and stress response of friends, family and the emergency worker. Critical incident stress debriefing is included.

EN.....Developmental English

EN 1.133 THE WRITE COURSE

(4 class hrs/wk 4 cr) F/W/Sp/Su
Introduces the writing skills required for effective communication in course work and in the workplace. Reviews and teaches mechanics and grammar through mastery of a variety of sentence structures. Focuses on effective sentences and basic paragraph writing. Meets in a variety of instructional settings: classroom, workshop, and computer classroom. Prerequisite: appropriate minimum score on writing portion of College Placement Test.

EN 1.157, 1.159 ACADEMIC ENGLISH: NON-NATIVE SPEAKERS

(5 class hrs/wk 4 cr) F/W/Sp
An integrated course in reading, writing, speaking and listening for speakers of other languages who want to improve communication skills in English for academic or personal purposes. Instruction is in both class and through individualized lab exercises. Emphasis on teaching students to be independent learners by developing personal language learning strategies.

EN 1.160 READING AND VOCABULARY DEVELOPMENT FOR NON-NATIVE SPEAKERS

(2 class hrs/wk 2 cr) F/W
Class for non-native speakers of English. Extensive reading focuses on strategies and skills to read different kinds of texts more effectively. Vocabulary development stresses decoding skills and vocabulary in context.

ENG.....English

➤ ENG 104 INTRODUCTION TO LITERATURE: FICTION

(3 class hrs/wk 3 cr) F/W/Sp
Examines fiction through literary works, such as the novel and the short story. Studies fiction through the reading of significant short stories and novels, with an emphasis on interpretive analysis and the fiction writer's craft. Note: Need not be taken in sequence.

➤ ENG 105 INTRODUCTION TO LITERATURE: DRAMA

(3 class hrs/wk 3 cr) F/W/Sp
Introduces Western drama from its origin in ancient Greece to today's theatre, stressing conventions of drama as both a literary and performing art. Note: Need not be taken in sequence.

➤ ENG 106 INTRODUCTION TO LITERATURE: POETRY

(3 class hrs/wk 3 cr) F/W/Sp
Studies poetry drawn from American, English and world literature. Works are read in entirety when possible, with emphasis on elements such as structure, style, imagery, figurative language and musical devices. Note: Need not be taken in sequence.

➤ ENG 107, 108, 109 LITERATURE OF THE WESTERN WORLD

(3 class hrs/wk 3 cr)
Discusses masterpieces of Western literature from the ancient world to the present. ENG 107: The Classical Ages; ENG 108: The Middle Ages to the Age of Reason; ENG 109: 18th Century to the Present. Note: Need not be taken in sequence.

➤ ENG 110 INTRODUCTION TO FILM STUDIES

(3 class hrs/wk 3 cr)
Introduces students to the methods, criticism and theory of film. Students attend discussions and view films.

➤ ENG 121 MYSTERY FICTION

(3 class hrs/wk 3 cr)
Explores the range and development of mystery fiction from pre-Poe to the present.

➤ ENG 201, 202, 203 SHAKESPEARE

(3 class hrs/wk 3 cr) F/W/Sp
Studies major plays of Shakespeare, including the structure, characterization, setting and imagery employed in selected comedies, tragedies, histories and poems. Note: Need not be taken in sequence.

➤ ENG 204, 205, 206 SURVEY OF ENGLISH LITERATURE

(3 class hrs/wk 3 cr) F/W/Sp
Studies representative works in English literature for their inherent worth and for their reflection of the times in which they were written. ENG 204: ballads through Donne; ENG 205: Defoe through the Romantics; ENG 206: Brontë through Golding. Note: Need not be taken in sequence.

➤ ENG 207, 208, 209 LITERATURE OF THE NON-WESTERN WORLD

(3 class hrs/wk 3 cr)
ENG 207: Literature of Asia, representative works of poetry, prose and drama; ENG 208: Literature of Africa, literary works of both tribal and colonial origin; ENG 209: Literature of the Americas (excluding the United States and Canada). Includes works of Hispanic, Native American and Afro-American origin pre-dating the Spanish Conquest through contemporary writers. Note: Need not be taken in sequence.

➤ ENG 211 LITERATURE IN ATHLETICS

(3 class hrs/wk 3 cr)
Studies the literature of sports and its reflection of our culture and world. Focuses on works of 20th century American writers. Special emphasis is placed on evolved myths of the athlete and of athletics.

➤ ENG 221 INTRODUCTION TO CHILDREN'S LITERATURE

(3 class hrs/wk 3 cr)
Surveys selected children's literature including stories, legends, poems and rhymes.

➤ ENG 253, 254, 255 SURVEY OF AMERICAN LITERATURE

(3 class hrs/wk 3 cr)
Presents intensive readings of significant U.S. authors representing major literary periods. ENG 253: Puritanism through Civil War; ENG 254: Transcendentalism through early Realism; ENG 255: Realism and Naturalism to the present. Provides an understanding of and appreciation for American culture as expressed in literature.

➤ ENG 260 INTRODUCTION TO WOMEN WRITERS

(3 class hrs/wk 3 cr)
Introduces major works of literature by women authors, exploring women's literary history through poetry, short stories, essays, plays, novels and letters.

➤ ENG 261 INTRODUCTION TO SCIENCE FICTION

(3 class hrs/wk 3 cr)
Explores science fiction, fantasy and speculative futures through popular fiction. Discusses content, styles, techniques and conventions of the genre.

➤ ENG 275 BIBLE AS LITERATURE

(3 class hrs/wk 3 cr)
Surveys selected Biblical readings that acquaint students with literary forms, styles and content of Biblical materials. Points out our literary and artistic indebtedness to the Biblical heritage.

ENGR.....Engineering

ENGR 111 ENGINEERING ORIENTATION I

(3 class hrs/wk 3 cr) F
Covers engineering as a profession, historical development, ethics, curricula and engineering careers. Introduces design, problem analysis and solution, and the general skills necessary for success in the engineering program. Corequisite MTH 111 College Algebra.

ENGR 112 ENGINEERING ORIENTATION II

(5 class hrs/wk 4 cr) W
Covers systematic approaches to problem solving using the computer. Includes logic analysis, flow charting, input/output design, introductory computer programming, and the use of engineering software. Prerequisite: Math 111 College Algebra.

ENGR 201 ELECTRICAL FUNDAMENTALS

(5 class hrs/wk 4 cr) F
Covers fundamentals circuit analysis, including node and mesh analysis, superposition, and Thevenin and Norton's Theorem. Introduces op-amps, capacitors and inductors. Covers AC circuit analysis techniques. Prerequisite: MTH 251 Calculus.

ENGR 202 ELECTRICAL FUNDAMENTALS

(5 class hrs/wk 4 cr) W
Covers Fourier Series representation of periodic functions, Sinusoidal steady state and analysis of three-phase circuits; introduces mutual inductance and transformers; looks at resonant circuits. Continuation of op-amp circuits. Prerequisites: MTH 252 Calculus; ENGR 201 Electrical Fundamentals.

ENGR 203 ELECTRICAL FUNDAMENTALS

(5 class hrs/wk 4 cr) Sp
Covers transient circuit analysis – RL, RC, RLC. Introduces LaPlace Transform and its use in circuit analysis, the transfer function, Bode diagram and two port networks. Prerequisites: MTH 253 Calculus; ENGR 202 Electrical Fundamentals.

ENGR 211 STATICS

(4 class hrs/wk 4 cr) F
Introduces engineering statics, including the laws of mechanics, vector algebra, moments, force systems, equilibrium, trusses, beams, cables, friction, centroids, moments of inertia and virtual work. Prerequisite: MTH 252 Calculus and working knowledge of spreadhssets, computations and graphing.

ENGR 212 DYNAMICS

(4 class hrs/wk 4 cr) W
A study of the dynamics of rigid bodies, including the kinematics and kinetics of single particles and systems of particles, linear momentum, moments of momentum, relative motion, energy and impulse momentum. Prerequisites: ENGR 211 Statics; MTH 252 Calculus and working knowledge of spreadhssets, computations and graphing.

ENGR 213 STRENGTH OF MATERIALS

(4 class hrs/wk 4 cr) Sp
Introduces the mechanics of deformable bodies in equilibrium, treating the internal effects of external forces upon bodies and the interrelationships between stress and strain. Prerequisites: ENGR 211 Statics; MTH 252 Calculus, working knowledge of spreadsheet computation and graphing.

ENGR 245 ENGINEERING GRAPHICS AND DESIGN

(6 class hrs/wk 4 cr) Sp
Includes two-dimensional and three-dimensional graphics, sketching, multiview projection, dimensioning, descriptive geometry, engineering design and an introduction to AutoCad®. Corequisite: MTH 111 College Algebra.

ENGR 271 DIGITAL LOGIC DESIGN

(6 class hrs/wk 4 cr) Sp
Provides an introduction to digital logic and state machine design. Covers logic design, including logic gates, gate minimization methods and design with standard medium scale integration (MSI) logic circuits. Includes basic memory elements (flip-flops) and their use in simple-state machines. Prerequisites: ENGR 201 Electrical Fundamentals; MTH 251 Calculus.

ET.....Engineering Technology

ET 4.001 INTRODUCTION TO ENGINEERING TECHNOLOGY: CIVIL

(2 class hrs/wk 1 cr) F
An introduction to civil engineering technologies. Includes structural technology, surveying, CAD, water/wastewater treatment, utilities, and utility design. Prerequisite: MTH 65 Elementary Algebra.

ET 4.002 INTRODUCTION TO ENGINEERING TECHNOLOGY: ELECTRICAL

(2 class hrs/wk 1 cr) F
An introduction to electrical engineering technologies. Includes component identification, soldering, wire wrapping, circuit boards, schematics, Pspice programming, and a design and fabrication project. Prerequisite: MTH 65 Elementary Algebra.

FA.....Farrier Science

FA 8.200 FARRIER SCIENCE

(34.5 class hrs/wk 22 cr) F/W/Sp
Provides the basic knowledge and skills to enter the farrier, or horseshoeing, trade. Students acquire entry-level knowledge and skills in the areas of horse anatomy and physiology, hoof care, hoof disorders and diseases, use of hand tools, basic forging, regular horseshoeing and corrective shoeing. In addition, basic horse handling skills and methods of restraint are taught. Note: Fourteen-week class.

FN.....Foods and Nutrition

FN 225 NUTRITION

(4 class hrs/wk 4 cr) F/W/Sp
Introduces nutrients, their functions, sources and effects of deficiency and toxicity. Examines current recommendations for Americans and topics of current interest. Includes digestion, metabolism and changing nutrient needs through the life cycle. Provides opportunity to evaluate personal dietary intake for three days. Note: A background in chemistry is recommended.

G.....Geology

G 120 REGIONAL GEOLOGY

(3 class hrs/wk 3 cr)
An introduction to geology and the processes that have shaped Oregon's landscape. Includes volcanic activity, plate tectonics, erosion and deposition by river, glaciers and ocean. Field trip included to either the Cascades or the Coast.

GA.....Graphic Arts

The prerequisites and corequisites for the Graphic Arts courses listed below are enforced for program majors. Non-Graphics Arts majors must contact an instructor to be considered for a class.

GA 3.150 INTRODUCTION TO PRINTING AND GRAPHIC ARTS

(4 class hrs/wk 3 cr)
Introduces the history, terminology and current state of the printing and graphic arts industry. Includes hands-on experiences in digital prepress technology, reproduction photography, negative imposition, platemaking, press operation and bindery.

GA 3.151 INTRODUCTION TO DIGITAL IMAGING

(3 class hrs/wk 3 cr)
Examines basic Macintosh concepts of opening, creating, saving, transferring, printing and organizing files. Develops skills utilizing current Apple System technology in order to create a solid computer-skills base on which to grow on. Examines word processing software and covers text entry and formatting; creating, saving and revising files; character, paragraph and document formatting; and editing and proofing tools and functions.

GA 3.152 ART AND COPY PREPARATION

(4 class hrs/wk 3 cr)
Studies the preparation of mechanical art for printing. Stresses terminology and practice of mechanical and digital layout and paste-up techniques, including use of headlines, body copy, line cuts and halftones. Includes imposition, screened prints, screen tints, overlays and color preparation.

GA 3.153 DIGITAL ILLUSTRATION I

(3 class hrs/wk 3 cr)
Introduces the use of digital illustration software for image creation. Develops control over lines, shapes and text. Explores tools and menus; creating and editing paths, points, segments and shapes; placing objects; transforming objects; and creating and manipulating text and layers. Prerequisite: GA 3.151 Introduction to Digital Imaging or instructor approval.

GA 3.154 DIGITAL ILLUSTRATION II

(4 class hrs/wk 3 cr)
In-depth exploration of digital illustration software for image creation. Continue to develop control over lines, shapes and text. Master the tools and menus; become proficient at creating and editing paths, points, segments, and shapes; placing objects; transforming objects; and creating and manipulating text and layers. Prerequisites: GA 3.153 Digital Illustration I; GA 3.157 Digital Image Manipulation I; GA 3.158 Digital Prepress I. Corequisites: GA 3.159 Digital Prepress II; GA 3.160 Digital Page Layout II; or instructor approval.

GA 3.156 DIGITAL PAGE LAYOUT I

(3 class hrs/wk 3 cr)
Explores the use of page layout software applications for digital page composition. Documents are produced combining and manipulating text and other graphic elements on a computer. Emphasizes production of digital mechanical files prepared to graphic arts industry standards. Prerequisite: GA 3.151 Introduction to Digital Imaging or instructor approval.

GA 3.157 DIGITAL IMAGE MANIPULATION I

(4 class hrs/wk 3 cr)
Introduces image manipulation software. Investigates simple scanning techniques, line art, gray scale, and color scans; basic image manipulation using halftones and duotones, adjusting brightness and contrast levels of images; saving the image in various formats. Prerequisites: GA 3.150 Intro to Printing and Graphic Arts; GA 3.152 Art and Copy Preparation; GA 3.153 Digital Illustration I; GA 3.156 Digital Page Layout I; or instructor approval. Corequisite: GA 3.158 Digital Prepress I.

GA 3.158 DIGITAL PREPRESS I

(3 class hrs/wk 3 cr)
Explores various processes needed for file preparation to service bureau specifications. Investigates methods to produce digital color proofs, plate-ready film, overlay and laminate proofs. Prerequisites: GA 3.150 Intro to Printing and Graphic Arts; GA 3.152 Art and Copy Preparation; GA 3.153 Digital Illustration I. Corequisites: GA 3.156 Digital Page Layout I; GA 3.157 Digital Image Manipulation I or instructor approval.

GA 3.159 DIGITAL PREPRESS II

(6 class hrs/wk 4 cr)
In-depth exploration of processes for preparing files to service bureau specifications. Develops trapping using choke and spread techniques, overprinting and element linking functions for final assembly of digital files adhering to industry printing process standards. Provides an understanding of standards needed by various printers using a variety of printing methods. Prerequisites: GA 3.157 Digital Image Manipulation I; GA 3.158 Digital Prepress I. Corequisites: GA 3.154 Digital Illustration II; GA 3.160 Digital Page Layout II; or instructor approval.

GA 3.160 DIGITAL PAGE LAYOUT II

(4 class hrs/wk 3 cr)
A comprehensive exploration of digital page layout software while using enhanced features such as formatting text, special effects, tiling and spot color, automatic text chain for long documents and auto picture import. Prerequisites: GA 3.156 Digital Page Layout I; GA 3.157 Digital Image Manipulation I; GA 3.158 Digital Prepress I. Corequisites: GA 3.154 Digital Illustration II; GA 3.159 Digital Prepress II; or instructor approval.

GA 3.161 DIGITAL IMAGE MANIPULATION II

(4 class hrs/wk 3 cr)
Continues exploration of image acquisition and photo manipulation software. Develops various scanning techniques to produce line art, gray scale and color scans. Develop skills necessary to merge high-quality photographs, perform image correction and high-resolution scanning, and prepare files. Prerequisites: GA 3.154 Digital Illustration II; GA 3.157 Digital Image Manipulation I; GA 3.159 Digital Prepress II; GA 3.160 Digital Page Layout II; or instructor approval. Corequisites: GA 3.162 Multimedia I; GA 3.164 Digital Design Principles I.

GA 3.162 MULTIMEDIA I

(3 class hr/wk 3 cr)
Introduces multimedia. Explores software for creating interactive Hypercard stacks using sound, photographic images and quick time moviesoftware. Develops page layouts from images created on a video camera and placed into files through appropriate software. Prerequisites: GA 3.154 Digital Illustration II; GA 3.157 Digital Image Manipulation I; GA 3.159 Digital Prepress II; GA 3.160 Digital Page Layout II; or instructor approval. Corequisites: GA 3.161 Digital Image Manipulation II; GA 3.164 Digital Design Principles I.

GA 3.163 MULTIMEDIA II

(4 class hrs/wk 3 cr)
Continues exploration of multimedia software for creating interactive Hypercard stacks using sound, photographic images and quick time movie software. Creates multimedia presentations, quick time movie productions, sound integration and 3-D modeling. Prerequisites: GA 3.161 Digital Image Manipulation II; GA 3.162 Multimedia I, GA 3.164 Digital Design Principles I; or instructor approval. Corequisites: GA 3.165 Digital Design Principles II; GA 3.172 Digital Project Management.

GA 3.164 DIGITAL DESIGN PRINCIPLES I

(6 class hrs/wk 4 cr)
Studies design principles for digital imaging. Emphasizes application of previously learned skills. Further explores color principles and color models: RGB, CMYK, HSV, HSB, LAB. Students work with typographical control and import high-level graphics to produce magazine-quality files for output. Intended for second-year Digital Imaging students. Prerequisites: GA 3.154 Digital Illustration II; GA 3.157 Digital Image Manipulation I; GA 3.159 Digital Prepress II; GA 3.160 Digital Page Layout II; or instructor approval. Corequisites: GA 3.161 Digital Image Manipulation II; GA 3.162 Multimedia I.

GA 3.165 DIGITAL DESIGN PRINCIPLES II

(6 class hrs/wk 4 cr)
Studies advanced design principles for digital imaging. Emphasizes application of previously learned skills. Uses techniques to produce professional-quality projects to industry standards of layout and design. When possible, students work with clients to produce live art. Intended for second-year Digital Imaging students. Prerequisite: GA 3.164 Digital Design Principles I or instructor approval. Corequisites: GA 3.163 Multimedia II; GA 3.172 Digital Project Management.

GA 3.172 DIGITAL PROJECT MANAGEMENT

(6 class hrs/wk 4 cr)
Investigates the principles of digital project management. Develops group projects to interact with service bureaus and the printing industry. Explores the procedures for developing a digitally created project from concept through the printing process. Stresses preparation of a portfolio of projects for presentation at employment interviews. Prerequisite: GA 3.164 Digital Design Principles I or instructor approval. Corequisites: GA 3.163 Multimedia II; GA 3.165 Digital Design Principles II.

GA 3.181 SPECIAL PROJECTS

(2-10 class hrs/wk 1-6 cr) F/W/Sp
In coordination with the instructor, the student selects projects that provide practical experience within the major field. Note: May be taken for a maximum of 6 credits. Prerequisite: Instructor approval.

GEOG.....Geography

■ GEOG 121 PHYSICAL GEOGRAPHY

(5 class hrs/wk 4 cr)
Provides liberal arts and non-science majors an introduction to the major physical subsystems of the planet earth. Topics studied include weather, climate, climate change, climate classifications, plate tectonics, volcanism, earthquakes, erosion/deposition, glaciers, coastal processes, oceans and marine ecology. Maps and map use are introduced as an embedded skill. Prerequisite: MTH 20 Basic Math

■ GEOG 190 ENVIRONMENTAL STUDIES

(3 class hrs/wk 3 cr)
Introduces representative problems in the relationship between humans and the environment. Emphasizes significant problems occurring in the Pacific Northwest; but others, typical of the United States as a whole, are included. Offered every other year.

■ GEOG 202, 203, 204 WORLD REGIONAL GEOGRAPHY

(3 class hrs/wk 3 cr) F/W/Sp
Studies natural environments, cultural landscapes, economics, and human activities; emphasizes the influence of geographical conditions on human affairs. GEOG 202: Latin America/Caribbean; GEOG 203: Asia; GEOG 204: Africa/Middle East.

GEOG 280 CWE GEOGRAPHY

(6-42 class hrs/wk 2-14 cr) F/W/Sp/Su
An instructional program designed to give students practical experience in supervised employment related to geography. Students identify job performance objectives, work a specified number of hours during the term, and attend a related CWE seminar. Note: Credits are based on identified objectives and number of hours worked. Prerequisite: CWE coordinator approval.

GS.....General Science

● GS 104, 105 PHYSICAL SCIENCE

(5 class hrs/wk 4 cr) F/W
Provides liberal-arts students and non-science majors a broad background in physical sciences. GS 104: fundamental principles of physics; GS 105: principles of chemistry. Note: May not be taken if six or more hours of college-level chemistry or physics have been completed. Students who plan to take a three-term general physical science lab course sequence must include GS 104 and GS 105 as part of that sequence. There is no restriction on the order in which the courses are taken. Prerequisite: Students must have a working knowledge of elementary algebra.

● GS 106 PHYSICAL SCIENCE

(5 class hrs/wk 4 cr) Sp
Provides liberal arts students and non-science majors a broad background in physical sciences. Topics include principles of nuclear energy, astronomy, meteorology and earth science. Field trips highlight the topics discussed. Note: Students who plan to take a three-term general physical science lab course sequence must include GS 104 and GS 105 as part of that sequence. There is no restriction on the order in which the courses are taken.

● GS 107 ASTRONOMY

(5 class hrs/wk 4 cr) F/Sp
Introduces rudiments of astronomy, including studies of the solar system, our galaxy and the universe. Laboratory exercises include independent observational activities. Note: Students who plan to take a three-term general physical science lab course sequence must include GS 104 and GS 105 as part of that sequence. There is no restriction on the order in which the courses are taken.

● GS 108 OCEANOGRAPHY

(5 class hrs/wk 4 cr) F/W
Introductory lab science course in oceanography that examines the four major categories of oceanographic study: geological, physical, chemical and biological. Emphasizes the geological and geophysical aspects of the sea floor; physical and chemical properties of sea water, waves, tides, ocean circulation and currents; marine ecosystems; and ocean utilization. Note: May substitute for GS 106 for students requiring a three-term sequence.

GS 121 PLANETS STARS AND GALAXIES

(3 class hrs/wk 3 cr)
Learn the nature of the night-time sky. Surveys the worlds of our solar system, studies the life cycle of the stars and discusses the origin and fate of the universe. Lectures are integrated with star gazing, weather permitting.

GS 151 ENERGY IN SOCIETY

(3 class hrs/wk 3 cr) Sp
Surveys the nature, history and use of energy. Analyzes traditional and alternative energy sources and their scientific, technical, environmental and economic aspects.

GS 152 SCIENCE, TECHNOLOGY AND SOCIETY

(3 class hrs/wk 3 cr) F/W/Sp
Investigates the nature of scientific endeavors and analyzes specific science and technology issues that affect societies in the United States and globally.

GS 153 INTRODUCTION TO COSMOLOGY

(3 class hrs/wk 3 cr)
Journey to the beginning of time and discover the origin of our universe, its history and its future according to the Big Bang Theory of contemporary science.

GS 160 OBSERVATIONAL ASTRONOMY

(3 class hrs/wk 3 cr)
Learn to recognize constellations, identify planets, observe meteors and experience the many fascinating phenomena of the night sky. Observing techniques and fundamental astronomical concepts are taught. Course includes outdoor observations and possible field trip.

GS 170 FIELD ECOLOGY

(1-12 class hrs/wk 1-3 cr)
A variety of courses on the biology and ecology of the Northwest. Emphasizes field study of plants, animals, land, water and climate. Includes courses such as Alvord Desert Ecology, Cascade and Crater Lake Ecology, Coastal Ecology and Oregon Old Growth. Note: Most courses involve a weekend trip with pre- and post-trip evening meetings. May be taken as electives by transfer students, but also generally valuable for learning more about the environment.

GS 199 GENERAL SCIENCE: SPECIAL STUDIES

(1-12 class hrs/wk 1-4 cr)
Students desiring to take another General Biology alternative under the same course number or to carry independent studies in the life sciences may do so under this number and receive transferable credits. Note: Students are screened for transferable credit. The number of credits given depends upon the nature of the study and the amount of effort needed to accomplish the task.

GS 280B CWE PHYSICAL SCIENCE

(6-42 class hrs/wk 2-14 cr) F/W/Sp/Su
An instructional program designed to give students practical experience in supervised employment related to physical science. Students identify job performance objectives, work a specified number of hours during the term, and attend a related CWE seminar. Note: Credits are based on identified objectives and number of hours worked. Prerequisite: CWE coordinator approval.

HD.....Human Development

HD 100 COLLEGE SUCCESS

(1-4 class hrs/wk 3 cr) F/W
Focuses on personal development and behaviors that promote success in college. Topics include communication, creative thinking, test anxiety, stress management, goal setting, learning styles and time management.

HD 110A CAREER PLANNING I

(1 class hr/wk 1 cr)
Presents all aspects of becoming a college student and relates this information to students' chosen career area. Students will learn about the physical, emotional and intellectual requirements of being a college student at Linn-Benton Community College. The goal of this class is to provide students with information that will facilitate informed decision making as they negotiate the first quarter of college life. Instructor approval required.

HD 110B CAREER PLANNING II

(1 class hr/wk 1 cr)
This course gives students an opportunity to examine in some detail their chosen field of study and its demands. In addition, they will receive information about the work opportunities, wages, etc., that result from this field of study. These pieces of information will be paired with individual student interest and aptitude inventory data to help students make an informed decision to continue in this major. Instructor approval required.

HD 114 LIFE PLANNING

(2 class hrs/wk 2 cr)
Presents skills in self-awareness, role alternatives, goal setting, plan implementation and development of resources. Includes theory, self-assessment and practical application.

HD 116 HUMAN POTENTIAL

(2 class hrs/wk 2 cr)
Focuses on developing skills to become more self-determining, self-affirming and empathetic towards others. Personal strengths, motivation and goals are an integral part of this process.

HD 190 ASSERTIVENESS TRAINING

(1 class hr/wk 1 cr) F/W/Sp
Facilitates the learning of communication skills based on a foundation of respect for self, respect for others and respect from others.

HD 204 ELIMINATING SELF-DEFEATING BEHAVIOR

(3 class hrs/wk 3 cr)
Covers making choices that enhance quality of life, becoming aware of our self-defeating behavior, deciding whether to continue the behavior or change it, and discovering reasons and benefits for choosing this way.

HD 206 COPING SKILLS FOR STRESS

(2 class hrs/wk 2 cr) F/W/Sp
Provides information about causes and cures of stress from the point of view of self-talk and the power of our minds to reduce the impact of stress. The class is support oriented and is conducted as part lecture and part group process.

HD 208 CAREER/LIFE PLANNING

(3 class hrs/wk 3 cr) F/W/Sp
Explores values, interests and skills helpful to individuals desiring directions or change in professional, personal and/or educational goals. This class is grounded in theory and includes experiential exercises, self-assessment and information resources.

HD 209 THE COMPLETE JOB FINDER

(1-3 class hrs/wk 1-3 cr)
Develops skills in systematic job search techniques, resume writing, application processes and interviewing.

HD 290 APPLIED ASSERTION

(2 class hrs/wk 2 cr)
Builds on the information and skills introduced in the basic class in assertiveness and focuses on facilitating the application of assertive concepts to the lifestyle of each individual.

HDFS.....Human Development and Family Studies

HDFS 198 CHILD AND FAMILY STUDIES: INDEPENDENT STUDIES

(3 class hrs/wk 1-3 cr) F/W/Sp
Offers topics of study in Child and Family Studies with individual research or field study.

HDFS 199 CHILD AND FAMILY STUDIES: SPECIAL TOPICS

(3 class hrs/wk 1-3 cr)
Increases the student's knowledge about selected topics in the field of child and family studies. Topics reflect current issues, concerns and trends and are chosen to increase the student's knowledge in the areas of human development, interpersonal relationships, family dynamics, and education.

HDFS 200 HUMAN SEXUALITY

(3 class hrs/wk 3 cr) F/W/Sp
Studies the anatomical, physiological, psychological and sociological aspects of human sexuality throughout the life cycle. Topics of study include contraception, sexually transmitted diseases, pregnancy, childbirth, sexual response patterns, sexual expression, sexual attitudes, and sexual myths and fallacies. Information on contemporary issues is presented.

HDFS 201 INDIVIDUAL AND FAMILY DEVELOPMENT

(3 class hrs/wk 3 cr) F/W/Sp
Studies individual and family development, dynamics and relationships across the lifespan. Emphasizes nature/nurture, continuity/discontinuity, and the interaction of the family with other systems.

HDFS 222 PARTNER AND FAMILY RELATIONSHIPS

(3 class hrs/wk 3 cr) F/Sp
Students become familiar with different family structures and key processes such as communication, power, roles, affection and commitment. They understand how these processes emerge and change over the family life cycle. Students also examine the interface of family processes and social and work relationships.

HDFS 225 CHILD DEVELOPMENT

(3 class hrs/wk 3 cr) F/W/Sp
Provides an introduction to basic issues and current research on child growth and development within a family context. Studies the stages of development from conception through adolescence.

HDFS 226 TIME TO GROW

(3 class hrs/wk 3 cr) Sp
A telecourse that explores how and why children grow and develop the way they do. Covers the interplay of biological factors, individual personality, the family and other environmental factors that shape the growing child. Topics include prenatal through adolescent development.

HDFS 229 SCHOOL AGE AND ADOLESCENT DEVELOPMENT

(3 class hrs/wk 3 cr) F
Focuses on the development of 5-18 year old children. All domains of development are covered: cognitive, emotional, language, moral, physical, social, spiritual and volitional. Includes topics for those interested in working with children in this age range, e.g. curriculum design, school age care, building relationships and effective guidance.

HDFS 242 BALANCING SCHOOL, WORK AND FAMILY

(1 class hr/wk 1 cr) F/W/Sp
Presents information on balancing the demands of school, work and family. Covers examining priorities, handling stress, communication skills, goal setting and self-esteem.

HDFS 247 INFANT AND TODDLER CARE

(3 class hrs/wk 3 cr) Sp
Family and center providers learn the elements of quality care for infants and toddlers, including physical, social, emotional development, group care techniques and family/provider interaction.

HDFS 248 LEARNING EXPERIENCES FOR CHILDREN

(3 class hrs/wk 3 cr) F/W
Focuses on understanding and creating quality curricula. Includes experiences with planning, implementing and evaluating materials and activities designed to foster the child's appreciation of literature and social relations. Emphasizes language development and experiences. Prerequisite: Instructor permission.

HDFS 257 FAMILY, SCHOOL AND COMMUNITY

(3 class hrs/wk 3 cr) Sp
Designed to help future teachers and child care workers recognize and understand their unique position as resource coordinators for families. Students become familiar with community resources and various family support programs. Students develop skills in talking with parents and working with families.

HDFS 280 CWE CHILD DEVELOPMENT

(4-28 class hrs/wk 2-14 cr) F/W/Sp
Provides practical experience in a child and/or family education and/or support program. Students identify job performance objectives, work a specified number of hours during the term, and attend a related CWE seminar. Credits are based on identified objectives and number of hours worked. This is a supervised work experience that must be approved by the CWE coordinator prior to enrolling in the class.

HDFS 285 PROFESSIONAL ISSUES IN CHILD AND FAMILY STUDIES

(3 class hrs/wk 3 cr) W
Focuses on the legal and ethical issues in working with children and families, e.g. licensing, health and safety standards, adult:child ratios and child abuse reporting. Includes the role of professional organizations and advocacy training.

HE.....Health

HE 112 EMERGENCY FIRST AID

(8 class hrs/wk 1 cr)
Covers basic first aid information in an attempt to prepare the student to properly administer the necessary immediate care to an injured or suddenly ill person. Note: Full day or two evening classes.

HE 125 OCCUPATIONAL SAFETY

(3 class hrs/wk 3 cr)
Introduces accident prevention by developing an awareness of safety practices relating to personnel, design, equipment and maintenance.

HE 151 DRUGS IN SOCIETY

(3 class hrs/wk 3 cr)
Designed to address pharmacology of popular drugs in our society. Also discusses contemporary issues involving the effects of drugs on both the individual and society.

HE 201 A LIVING LOOK AT DEATH

(3 class hrs/wk 3 cr)
Begins, and may well end, with many questions about the mystery of death that are unanswerable, but our aim is to explore the personal and cultural significance of death through readings and literature, films, field experiences, introspection, and mutual discussion. Considers the predominate human responses to death and dying, such as denial, acceptance and rebellion, both historically and corss-culturally, and seek to understand how these responses order our experiences of dying, funerals and other ritual for the dead, and bereavement.

HE 204 EXERCISE AND WEIGHT MANAGEMENT

(3 class hrs/wk 3 cr)
Provides students with scientifically based strategies for controlling and managing weight. By studying the interaction between nutrition, food intake and exercise, students understand how the fat thermostat is lowered. Exercise is the most critical factor in proper weight management; and students, in conjunction with lectures and classroom activities, participate in aerobic exercise during each class session. Students design and monitor their personal weight management and exercise program.

HE 205 DIET AND NUTRITION IN THE NINETIES

(3 class hrs/wk 3 cr)
Provides an in-depth look at the American diet. Students analyze their individual nutrition habits; develop a low-fat, low-sodium, low-sugar nutrition plan; and examine current consumer issues.

HE 207 STRESS MANAGEMENT

(3 class hrs/wk 3 cr)
Provides a clear understanding of the meaning of stress in everyday life. Students learn how they react and adjust to stressors. Relaxation techniques are taught and practiced.

HE 220 INTRODUCTION TO EPIDEMIOLOGY AND HEALTH DATA ANALYSIS

(3 class hrs/wk 3 cr)
Introductory course in epidemiology and statistics for students in health-related studies. Designed to provide preparatory background for taking subsequent courses in epidemiology and health data analysis offered by the Department of Public Health. Covers measure of disease frequency, analytical epidemiology, study designs, experimental design, descriptive statistics and inferential statistics, including z-test, t-test and chi-square.

HE 250 PERSONAL HEALTH

(3 class hrs/wk 3 cr)
Surveys health attitudes, outlooks and feelings as they affect the individual, community, nation and world. Emphasizes improving quality of health by providing reliable information to achieve a long and productive life.

HE 252 FIRST AID

(3 class hrs/wk 3 cr)
Provides first aid instruction and practice in skills that enable students to take care of themselves and to aid others in the event of an accident or illness.

HE 253 AIDS AND SEXUALLY TRANSMITTED DISEASES

(3 class hrs/wk 3 cr)
Provides an understanding and knowledge of the etiology, epidemiology, prevention strategies, and future trends of AIDS and sexually transmitted diseases in our world today. The global, as well as domestic, impact of these diseases is studied. Special emphasis given to AIDS and STDs in the U.S., focusing on available treatments, health care costs, vaccine trials, as well as cultural, social, psychological, legal, economic and ethical issues.

HE 261 CARDIOPULMONARY RESUSCITATION (CPR)

(8 class hrs/wk 1 cr)
Provides students with current principles and practical techniques for basic life support in accordance with guidelines specified by the American Heart Association. Addresses needs of adult, child and infant victims while providing optional instruction in special techniques and skills required by health care professionals.

HE 262 CONSUMER HEALTH ISSUES IN THE '90s

(3 class hrs/wk 3 cr)
Gives students the knowledge, understanding and skills necessary to make intelligent consumer decisions int he health marketplace. Students will be encouraged to see themselves as an active participant rahter than as a blind recipient of health care information and services. The course will explore individual choices in prevention, self-care and treatment modalities, as well as issues relating to consumer rights.

HE 263 PSYCHOSOCIAL DIMENSIONS OF HEALTH

(3 class hrs/wk 3 cr)
Examines the social, psychological, cultural, attitudinal, behavioral and environmental factors that influence individual and public health. Provides an overview of psychosocial issues and their impact on health and illness.

HE 270 HISTORY, PHILOSOPHY AND ETHICS OF HEALTH

(3 class hours/wk 3 cr)
Considers the historical, philosophical, and ethical foundations of health issues. Students will explore contemporary values, issues and controversies surrounding current bioethical issues as they relate to individual and societal health. Topics will include treatment decisions, euthenasia, organ transplants, research on human subjects, genetic engineering, patients' rights, and environment.

HE 280 CWE HEALTH

(6-42 class hrs/wk 2-14 cr)
An instructional program designed to give students practical experience in supervised employment related to health. Students identify job performance objectives, work a specified number of hours during the term, and attend a related CWE seminar. Note: Credits are based on identified objectives and number of hours worked. Prerequisite: CWE coordinator approval.

HE 298 MEN'S HEALTH ISSUES

(3 class hrs/wk 3 cr)
Examines current trends in the emotional social and physical parameters of men's health issues. Designed for both men and women interested in the topic of men's health.

HE 298 WOMEN'S HEALTH ISSUES

(3 class hrs/wk 3 cr)
Examines contemporary women's health issues, including primary causes of morbidity and mortality in women, estrogen replacement therapy, clinical research affecting women, stress and depression, weight and global health concerns of women. Designed for both men and women interested in the topic of women's health.

HS.....Human Services

HS 101 INTRODUCTION TO HUMAN SERVICES

(6 class hrs/wk 3 cr)
Course combines class time and field work to help students explore and define helping professions/ systems within a community in terms of service provided and clientele served. Includes both agencies and professional providers and people who provide community services/leadership on an informal basis.

HS 205 YOUTH ADDICTION

(3 class hrs/wk 3 cr)
This course is designed to assist students in working with youth who are chemically dependent. The course will include prevention, intervention, assessment, individual, group and continuing recovery techniques.

HS 207 ADULT CHILDREN OF DYSFUNCTIONAL FAMILIES

(2 class hrs/wk 2 cr)
Provides educational information and group activities to help students explore issues and concerns developed from being raised in a home or environment where dysfunction was present.

HS 265 INTERVENTION STRATEGIES

(3 class hrs/wk 3 cr)
An advanced interviewing course applicable in a variety of employment settings.

HS 266 INTERVENTION STRATEGIES: CASE MANAGEMENT

(3 class hrs/wk 3 cr)
This course provides theory and application casework and interviewing applied to human services. Includes interviewing for treatment, problem solving and crisis intervention. Also included is information on prevention, cultural diversity and case management.

HST.....History

■ HST 101 HISTORY OF WESTERN CIVILIZATION

(3 class hrs/wk 3 cr)
Surveys origins and development of western civilization from ancient times to the height of Medieval civilization. Emphasizes the important influences of Greece, Rome, Byzantium and Islam.

■ HST 102 HISTORY OF WESTERN CIVILIZATION

(3 class hrs/wk 3 cr)
Surveys the origins and development of western civilization from Medieval times through the Renaissance and Enlightenment periods to the American and French Revolutions.

■ HST 103 HISTORY OF WESTERN CIVILIZATION

(3 class hrs/wk 3 cr)
Surveys the origins and development of western civilization from the dawn of the Industrial Revolution in the early 19th century through the struggle between totalitarianism and democracy in the 20th century to the collapse of communism at the start of the 21st century.

HST 150 SCIENCE AND CULTURE IN THE WESTERN TRADITION

(3 class hrs/wk 3 cr)
Surveys the history of western civilization from the perspective of developments in science and technology. Emphasizes the interaction between scientific developments and cultural developments.

■ HST 157 HISTORY OF THE MIDDLE EAST AND AFRICA

(3 class hrs/wk 3 cr)
Surveys the cultural, social, economic and political development in the Middle East and Africa.

■ HST 158 HISTORY OF LATIN AMERICA

(3 class hrs/wk 3 cr)
Surveys the cultural, social, economic and political development in Latin America.

■ HST 159 HISTORY OF ASIA

(3 class hrs/wk 3 cr)
Surveys the cultural, social, economic and political development in Asia. Emphasizes 20th century issues.

HST 198 RESEARCH TOPICS

(1 class hr/wk 1 cr)
Examines in-depth history topics for independent research. Corequisite: WR 123 English Composition: Research Paper.

■ HST 201 U.S. HISTORY: COLONIAL AND REVOLUTIONARY

(3 class hrs/wk 3 cr)
Studies the United States from pre-Columbian European and North American antecedents to colonization; colonial America; Revolutionary America; and Development of US. government, economy and society to 1830.

■ HST 202 U.S. HISTORY: CIVIL WAR AND RECONSTRUCTION

(3 class hrs/wk 3 cr)
The history of the United States from 1830-1900. Includes national expansion, sectionalism, the Civil War and Reconstruction. Concludes with the second Industrial Revolution and its effects.

■ HST 203 U.S. HISTORY: RISE TO WORLD POWER

(3 class hrs/wk 3 cr)
The United States in the 20th Century. Examines the rise to global power, World War I and II, civil rights, labor, women's rights and the Cold War.

■ HST 240 WAR AND THE MODERN WORLD

(4 class hrs/wk 4 cr)
The evolution of the conduct of war in the 19th and 20th centuries as a reflection of social, political and technological developments. Basic course offering for the Peace Studies Program.

HST 280 CWE HISTORY

(6-42 class hrs/wk 2-14 cr) F/W/Sp/Su
An instructional program designed to give students practical experience in supervised employment related to history. Students identify job performance objectives, work a specified number of hours during the term, and attend a related CWE seminar. Note: Credits are based on identified objectives and number of hours worked. Prerequisite: CWE coordinator approval.

HSTS....History of Science

HSTS 151 HISTORY OF SCIENCE

(3 class hrs/wk 3 cr) W
Surveys the history of science from earliest civilization to the present. Emphasizes the concepts of Galileo, Newton, Darwin and others and their impact on society.

HT.....Horticulture

HT 8.102 CAREER EXPLORATION: HORTICULTURE

(1 class hr/wk 1 cr) W
Surveys career opportunities in horticulture. A report on a specific career position is required. Includes resume writing and job interview skills.

HT 8.132 ARBORICULTURE I

(4 class hrs/wk 3 cr) W
Introduces ornamental horticulture, including how to plant, train, prune, protect and repair trees. Note: Course is offered alternate years only. *Offered 1998-99.*

HT 8.133 ARBORICULTURE II

(4 class hrs/wk 3 cr) Sp
Covers how to identify and correct tree problems. Topics include non-parasitic injuries, insects, diseases, inspection and diagnosis, spraying and equipment, tree appraisal, tree removal and climbing. Note: Course is offered alternate years only. *Offered 1998-99.*

HT 8.135 TURF MANAGEMENT I

(4 class hrs/wk 3 cr) W
Introduces and develops the art and science of turf-grass culture. Grass identification and maintenance; fertilizer and water requirements; weed, insect and disease identification and control; and other turf problems are emphasized. Note: Course is offered alternate years only. *Offered 1999-2000.*

HT 8.136 TURF MANAGEMENT II

(4 class hrs/wk 3 cr) Sp
Provides opportunity to adapt and apply principles and theories taught in HT 8.135 Turf Management I. Includes business practices and procedures and field trips to observe common practices, maintenance and management of turf areas. Note: Course is offered alternate years only. *Offered 1999-2000.*

HT 8.137 PLANT PROPAGATION

(5 class hrs/wk 4 cr) Sp
Introduces the principles, methods, techniques and facilities used to propagate ornamentals. Techniques covered include seeding, grafting, cuttings, divisions and tissue culture. Lab activities utilize the LBCC Greenhouse. Students are responsible for the annual plant sale.

HT 8.139 ARBORICULTURE PRACTICUM

(4 class hrs/wk 3 cr) Sp
Practical field experience in climbing and tree work. Taught by certified arborists, emphasizing safety and skill. Note: Limited enrollment. Requires personal protective equipment. Prerequisite: Instructor approval, HE 252 First Aid.

HT 8.140 LANDSCAPE MAINTENANCE

(5 class hrs/wk 3 cr) F
Introduces principles, methods, techniques and use of equipment for maintenance of landscape and turf areas. Note: Course is offered in alternate years only. *Offered 1999-2000.*

HT 8.141 LANDSCAPE PLANNING

(5 class hrs/wk 3 cr) W
Surveys basic layout and design, site utilization and orientation of landscape facilities. Includes landscape contours, grading, trees, shrubs, plant selection and utilization. Principles of art and graphic presentations are covered.

HT 8.168 PLANT IDENTIFICATION

(4 class hrs/wk 3 cr) Sp
Introduces woody plants used for landscape purposes. Students learn to identify each plant by its seasonal characteristics. The form, habit, height, spread, soil requirements, root system, flower, fruit and horticultural usefulness are studied. Plant taxonomy is considered and botanical names are stressed.

HT 8.169 TREE IDENTIFICATION

(4 class hrs/wk 3 cr) F
Introduces trees and large woody shrubs used for landscaping purposes. Students learn to recognize each tree by its seasonal characteristics: leaves, fruits, flowers and stems. The form, habit, spread, soil requirements and horticultural usefulness are studied. Note: Course is offered in alternate years only. *Offered 1998-99.*

HUM.....Humanities

➤ HUM 100 INTRODUCTION TO HUMANITIES

(3 class hrs/wk 3 cr) F/W/Sp
Examines the connections among arts, ideas and human experiences through study and experience of selected works. Emphasizes arts and ideas as both reflections of and influences on social and cultural change. Attendance at out-of-class activities is required.

HV.....Heavy Equipment Mechanics/Diesel

HV 3.128 PNEUMATIC BRAKING AND FUEL INJECTION SYSTEM

(20 class hrs/wk 2-10 cr) F
Covers the theory, repair testing and calibration of diesel fuel pumps, governors and injectors. Nozzles testers, injector comparitors and fuel pump test benches are used in training. Also teaches the theory, repair and testing of pneumatic brakes and accessory systems. Students repair and test compressors, governors, valves and braking components.

HV 3.129 HEAVY EQUIPMENT/ DIESEL ENGINES

(20 class hrs/wk 1-10 cr) W
Covers operating principles, maintenance, repair and overhaul of various types and sizes of diesel engines. Includes both two-and four-stroke diesel engines, their component parts and related accessories, and standardized manufacturer's specifications. Prerequisite: Instructor approval required.

HV 3.130 HEAVY EQUIPMENT/ DIESEL TUNE-UP

(20 class hrs/wk 1-10 cr) Sp
Studies diesel tune-up and techniques for optimum engine performance, including diagnostic troubleshooting, load testing and engine break-in procedure through use of the dynamometer. Prerequisite: Instructor approval required.

HV 3.131 HEAVY EQUIPMENT SERVICE AND REPAIR

(20 class hrs/wk 1-10 cr) F/W/Sp
Emphasizes advanced instruction through practice and laboratory exercises in an open lab. Live projects are used, preparing students for job entry in the area of heavy equipment mechanics. Prerequisite: Instructor approval required.

HV 3.132 ADVANCED MOBILE HYDRAULICS

(3 class hrs/wk 2 cr) F
Covers advanced hydraulic theory along with service and repair of valves, pumps, motors and connectors. Systems design and modification are included.

HV 3.134 BASIC HYDRAULICS

(5 class hrs/wk 3 cr) W
Covers hydraulic theory along with pump, actuator application, and valve design and theory.

HV 3.137 HEAVY EQUIPMENT AGRICULTURAL MACHINE SERVICE REPAIR

(20 lab hrs/wk 10 cr) F/W/Sp
Emphasizes advanced instruction through practice and laboratory exercises in an open lab. Live projects are used, preparing student for job entry in the area of heavy equipment mechanics.

HV 3.295 POWER TRAIN SYSTEMS

(20 class hrs/wk 1-10 cr) F/W/Sp
Studies the complete power train system, with emphasis on the theory, application and servicing of clutch systems, manual transmissions, transfer cases, drive lines, universal joints and differential assemblies.

HV 3.296 STEERING, SUSPENSION AND BRAKING SYSTEMS

(20 class hrs/wk 1-10 cr) F/W/Sp
Covers fundamental principles of automotive suspension systems, with emphasis on frames, steering systems, alignment and wheel balancing. A comprehensive study of disc and drum braking systems and their components is included.

HV 3.297 ELECTRICAL AND FUEL SYSTEMS

(20 class hrs/wk 1-10 cr) F/W/Sp
Introduces principles and terminology of fuel and carburetion systems and testing, servicing and repairing of electrical systems. Students work with techniques and overhaul procedures for carburetors, fuel pumps, fuel tanks, fuel gauges, fuel lines, fittings, charging systems, starting systems and other electrical components. Prerequisite: Placement Test scores for Reading Level I and MTH 20 Basic Mathematics or equivalent.

HV 3.303 MOBILE AIR CONDITIONING AND COMFORT SYSTEMS I

(5 class hrs/wk 3 cr)
Theoretic principles of mobile heating and air conditioning systems with emphasis on design, function, adjustment, service and testing of components.

HV 3.307 MECHANICAL PROCESSES I

(3 class hrs/wk 2 cr)
Required for Automotive and Heavy Equipment Mechanics/Diesel majors. Covers competencies and skills required for the first year. Covers safety, hand tools, power tools, precision measurement, metric measurement, fasteners, torque, and service manual usage.

HV 3.308 MECHANICAL PROCESSES II

(3 class hrs/wk 2 cr)
Required for Automotive and Heavy Equipment Mechanics/Diesel majors. Covers pulling, pushing and lifting devices; tubing, hoses and fittings; bearings and lubrication; and gaskets, seals and sealants.

HV 3.309 MECHANICAL PROCESSES III

(3 class hrs/wk 2 cr)
Required for Automotive and Heavy Equipment Mechanics/Diesel majors. Shop math, heavy material handling, hazardous material handling, electrical principles and meter usage.

IN.....Industrial Technical

IN 3.198 INDUSTRIAL TECHNICAL SEMINAR: LEADERSHIP

(1 class hr/wk 1 cr) F/W/Sp
Provides leadership development through the Industrial Technical Society. Members of Industrial Department organizations participate as officers at a divisional organization level. Opportunities for directing and organizing affairs of the Society, planning, budgeting, promoting, implementing and evaluating of ITS activities, including technical workshops and special technical projects.

IN 3.442 INDUSTRIAL TECHNICAL SOCIETY SEMINAR

(1 class hr/wk 1 cr) F/W/Sp
Seminar for students in various industrial and technical disciplines. Students participate in organizing activities such as technical seminars, workshops, field trips or construction and repair projects related to their program.

JN.....Journalism

JN 134 INTRODUCTION TO PHOTOJOURNALISM

(4 class hrs/wk 3 cr) W
Introduces photojournalism techniques, including digital imaging, films, equipment, light and photographic reproduction. Students receive hands-on instruction in both conventional and electronic darkroom techniques. Includes lab work. Prerequisite: PHO 261 Introduction to Photography or instructor approval.

JN 201 MEDIA AND SOCIETY

(4 class hrs/wk 4 cr) F
Studies the history, development and technology of communications and the mass media. Includes media impact on American and global culture, communication theory and the structure of various media industries.

JN 215A JOURNALISM LAB

(2 class hrs/wk 1 cr) F/W/Sp
Offers supervised editorial work on the college's student newspaper (*The Commuter*) in reporting and editing. Provides training and experience with computerized word processing. Note: Course serves as the lab for JN 216 News Reporting and Writing and JN 217 Feature Writing. Also may be taken independently from those courses. May be repeated for up to 6 credits.

JN 215B DESIGN AND PRODUCTION LAB

(4 class hrs/wk 2 cr) F/W/Sp
Offers supervised experience in newspaper page design, headline writing, computer pagination, digital imaging, photography, advertising and related newspaper production skills. Students apply skills in production lab for the college's student newspaper (*The Commuter*). Note: Serves as lab to JN 218 Copy Editing and Page Design. Also may be taken independently. May be repeated for up to 6 credits.

JN 216 NEWS REPORTING AND WRITING

(3 class hrs/wk 3 cr) F/W
Presents basics of journalistic writing, including news style, grammar and story structures. Students also study interviewing and other news gathering techniques and journalistic ethics and law. Corequisite: JN 215A Journalism Lab.

JN 217 FEATURE WRITING

(3 class hrs/wk 3 cr) Sp
Studies various feature writing forms, including profiles, human interest, travel and analysis, with emphasis on backgrounding, depth reporting, descriptive writing and freelance writing—from story development to marketing. Corequisite: JN 215A Journalism Lab.

JN 218 COPY EDITING AND PAGE DESIGN

(3 class hrs/wk 3 cr) W
Introduces the principles and practices of editing news and feature articles; writing headlines and captions; and designing pages with text, photographs and graphics. Includes electronic page layout techniques. Prerequisite: JN 216 News Reporting and Writing or instructor approval. Corequisite: JN 215B Design and Production Lab.

JN 280 CWE JOURNALISM

(6-42 class hrs/wk 2-14 cr) F/W/Sp/Su
An instructional program designed to give students practical experience in supervised employment related to journalism. Students identify job performance objectives, work a specified number of hours during the term, and attend a related CWE seminar. Note: Credits are based on identified objectives and number of hours worked. Prerequisite: CWE coordinator approval.

MA.....Manufacturing Technology

MA 3.390 MACHINE TOOL I

(3 class hrs/wk 2 cr) F/W/Sp
Instructs beginning students in the basic operation of the vertical mill and engine lathe. All tools and materials are furnished, with the exception of one 6-inch scale and approved safety glasses.

MA 3.391 MACHINE TOOL II

(3 class hrs/wk 2 cr) F/W/Sp
Continues the basic skills of operating the engine lathe. Students work on a series of exercises involving thread cutting, turning between centers, knurling, facing and other basic lathe operations. Prerequisite: MA 3.390 Machine Tool I.

MA 3.392 MACHINE TOOL III

(3 class hrs/wk 2 cr) F/W/Sp
Continues Machine Tool I and II. Students learn basic and intermediate operations on the vertical milling machine. Prerequisite: MA 3.391 Machine Tool II.

MA 3.393 MACHINE TOOL IV

(3 class hrs/wk 2 cr) F/W/Sp
Allows students to work on projects requiring milling machine and lathe operations and in which assembly of parts is required. Basic operation of the surface grinder is covered when the student project is finish-ground to specified tolerances. Prerequisite: MA 3.392 Machine Tool III.

MA 3.394 MACHINE TOOL V

(3 class hrs/wk 2 cr) F/W/Sp
Requires students to do more advanced milling machine and lathe operations, including indexing with the dividing head, holding parts with special fixtures, calculating dimensions using trigonometry and collet turning in the lathe. Prerequisite: MA 3.393 Machine Tool IV.

MA 3.395 MACHINE TOOL VI

(3 class hrs/wk 2 cr) F/W/Sp
Continues the project method of teaching basic and intermediate operations on the mill, lathe and grinder, along with their related holding fixtures and devices. Prerequisite: MA 3.394 Machine Tool V.

MA 3.396 OPERATIONS AND PROCESSES I

(3 class hrs/wk 3 cr) F
A theory and procedures class for basic machine tool operation. Emphasizing safe and correct operation of the drill press, lathe and mill. Covers layout, speeds and feeds, process planning and selection of tooling.

MA 3.397 OPERATIONS AND PROCESSES II

(2 class hrs/wk 2 cr) W
Focuses on intermediate machine tool operation. The various machines with their capability, capacity and processes are discussed and illustrated. Prerequisites: MA 3.396 Operations and Processes I.

MA 3.398 OPERATIONS AND PROCESSES III

(2 class hrs/wk 2 cr) Sp
Focuses on advanced machine tool operation and processes. Developing knowledge necessary to make machine and tool selection, to develop process plans and to create set-ups for multi-machine projects. Prerequisites: MA 3.397.

MA 3.400 MACHINE TOOL PROJECTS

(2-6 class hrs/wk 1 - 3 cr) F/W/Sp
An independent study course for Manufacturing Technology. Emphasizes student-generated, instructor-guided projects.

MA 3.418 GEOMETRIC CONTROLS

(3 class hrs/wk 2 cr) Sp
Presents an overview of geometric dimensioning and tolerancing as used in modern industry. Focuses on practical and applied methods, with an emphasis on interpretation and use. Shows the power of GD&T in clarifying part-geometry and its use in everyday shop projects. Prerequisite: MA 3.417 Machining Graphics.

MA 3.419 CNC LAB

(2.5-12.5 class hrs/wk 1-5 cr) F/W/Sp
Laboratory class consisting of Computer Numerical Control skill projects. Uses the CNC mill and lathe to process parts programmed in the Computer Integrated Manufacturing sequence. Additional projects are defined and contracted between the student and the instructor. Note: Variable credit; may be repeated.

MA 3.420 NUMERICAL CONTROL: MILL

(4 class hrs/wk 3 cr) W
Covers the ASCII/EIA, Hurco and Servo languages of CNC machine tool programming. Programs are written, coded and loaded into machine memory. Parts are drawn and cut from code on the CNC mill. Prerequisite: MA 3.422 Manufacturing Lab I or instructor permission.

MA 3.421 NUMERICAL CONTROL: LATHE

(4 class hrs/wk 3 cr) Sp
Covers the more advanced programming and control of the CNC lathe. Lecture and projects designed to reveal the power and sophistication of higher level ISO language. FAPT graphic programming is introduced. Coding, set-up and operation of an industry-level CNC turning center. Prerequisite: MA 3.420 Numerical Control: Mill.

MA 3.422 MANUFACTURING LAB 1

(3-15 class hrs/wk 1-5 cr) F/W/Sp
A laboratory class consisting of focused skill projects. Emphasis on safe operation of machine tools in metal cutting. A specific number of projects is set for the term.

MA 3.423 MANUFACTURING LAB II

(3-15 class hrs/wk 1-5 cr) F/W/Sp
Focused skill projects. Emphasizes safe operation while increasing speed and efficiency. Projects may require several set-ups. Specified project list. Prerequisites: MA 3.396 Operations and Processes I; MA 3.422 Manufacturing Lab I.

MA 3.424 MANUFACTURING LAB III

(3-15 class hrs/wk 1-5 cr) F/W/Sp
Focused skill projects. Emphasizes safe and efficient machining of components for assemblies. May require the use of several machines and set-ups. Specified project list. Prerequisites: MA 3.423 Manufacturing Lab II; MA 3.397 Operations and Processes II.

MA 3.425 MACHINERY'S HANDBOOK I

(2 class hrs/wk 2 cr) W
Involves students in active use of the Machinery's Handbook, a primary shop reference. The content, organization and utility are highlighted. Provides information for the machinist to use in lab projects. Prerequisite: MA 3.396 Operations and Processes I.

MA 3.426 MACHINERY'S HANDBOOK II

(2 class hrs/wk 2 cr) Sp
Advanced concepts from Machinery's Handbook. Data collection and problem solving are emphasized. Covers concepts used in advanced machine tool projects. Prerequisites: MA 3.397 Operations and Processes II; MA 3.425 Machinery's Handbook I.

MA 4.130 MACHINE PROCESSES

(3 class hrs/wk 2 cr) F/W/Sp
Provides an overview of the machine tool metalworking trades and the relationship between the technical trades. The class consists of lecture-discussion, demonstration and hands-on lab time and is designed for students with majors other than manufacturing technology.

ME.....Metallurgy Technology

ME 3.444 WELDING METALLURGY I

(5 class hrs/wk 4 cr) Sp
An introduction to the physical and mechanical properties of weld metal and how the application of soldering, brazing and fusion processes affect the structural and service requirements of metal joints. Investigations will be made to determine operator responsibility in regard to completing joints in welded metals that are capable of matching or exceeding the strength and reliability of the base metals. Students are instructed on the use of Material Safety Data Sheets as they relate to their assignments and the disposal of hazardous materials used in the course of their activities. During the term, students will work in groups of two and three to a team for the purpose of delegation of responsibilities towards the completion of assigned tasks.

ME 3.445 WELDING METALLURGY II

(5 class hrs/wk 4 cr) W
Includes the basic processes of welding fabrications and investigates structural characteristics of metals related to quality and low-cost welded assemblies. Students examine welds made on low, medium and high carbon steels, low alloy high strength steels, stainless steels, and non-ferrous alloys using a variety of weld methods. Students are instructed on the use of Material Safety Data Sheets as they relate to their assignments and the disposal of hazardous materials used in the course of their activities. During the term, students will work in groups of two and three to a team for the purpose of delegation of responsibilities towards the completion of assigned tasks.

ME 3.446 METALS INVESTIGATION AND EVALUATION

(3 class hrs/wk 2 cr) W
This course is designed to assist the machine tool technologist in understanding basic metallurgical principles. Major subject areas include: metal identification, brazing and welding, effects of machining and fabrication on service performance, heat treating of ferrous and non-ferrous metals, surface hardening, penetrant and magnetic particle inspection, effects of severe temperature changes on metal performance and measurement of mechanical properties.

ME 3.447 METALLURGY FOR MECHANICS

(2 class hrs/wk 2 cr) W
Introduces metallic structure, including its composition and properties. Students are familiarized with methods of metal identification, effects of heat treatment on ferrous and non-ferrous metals, and effects of poor workmanship on service life or performance of metals.

ME 3.450 COMPUTER APPLICATIONS

(1 class hr/wk 1 cr)
This course is designed to provide students with basic information about computer systems and terminology, with special reference made to hand-held programmable machines and their industrial applications.

ME 4.120 FUNDAMENTALS OF SPECIFICATIONS

(3 class hr/wk 3 cr) Sp
This course is designed to give the student basic skills in writing and interpretation of specification. Students will begin with examples of misinterpreted specification followed by discussion. Assignments will be given that will help them understand proper formatting and styles of procedural and material specifications. Students will be required to submit specifications for evaluation to two independent industries using available multimedia capabilities.

ME 4.122 STRENGTH OF MATERIALS

(3 class hrs/wk 3 cr) Sp
An introduction to the mechanics dealing with forces as they relate to tension, compression, torsion and shear. Three major factors will be involved, including metals, time and force. Mechanical properties of metal will be examined as these properties relate to service performance.

ME 4.161 MATERIALS TESTING I

(4 class hrs/wk 3 cr) F
Studies the properties of engineering materials. Covers the fundamental aspects of the behavior of engineering materials, including elastic and plastic deformation, fracture creep fatigue, impact, temperature effects and corrosions according to the American Society of Testing Materials. Also includes destructive and nondestructive evaluation, elementary principles of measurement, methodology test equipment, instrumentation and analysis of data.

ME 4.162 MATERIALS TESTING II

(4 class hrs/wk 3 cr) W
Students are introduced to a variety of testing applications including: corrosion, stress corrosion, jominy hardenability, creep, creep rupture, stress rupture, impact, fatigue and a measure of effects of temperature on mechanical properties. Tests are conducted in accordance with American Society of Testing Materials (ASTM). Data collection is performed with data acquisition equipment and spreadsheet analysis software where possible. Students are instructed on the use of Material Safety Data Sheets as they relate to their assignments and the disposal of hazardous materials used in the course of their activities. During the term, students will work in groups of two and three to a team for the purpose of delegation of responsibilities toward the completion of assigned tasks.

ME 4.163 MATERIALS TESTING III

(4 class hrs/wk 3 cr) Sp
Surveys testing techniques, including bend, elevated temperature, non-metallic creep, flare and burst, corrosion of coated surfaces and reliable conversion to test data to identify related mechanical properties. Tests are conducted in accordance with the American Society of Testing Materials (ASTM). Data collection is performed with data acquisition equipment and spreadsheet analysis software where possible. During the term, students will work in groups of two and three to a team for the purpose of delegation of responsibilities toward the completion of assigned tasks.

ME 4.167 BASIC PLASTIC INJECTION MOLDING

(4 class hrs/wk 3 cr)
This course offers instruction on the basic principles and fundamentals of injection molding processes from its historical inception to the current technology. Students enrolled in this course will have hands-on opportunities with state-of-the-art equipment.

ME 6.270 METALLURGY READING AND CONFERENCE

(1-30 class hrs/wk 1-10 cr)
Topics covered and credit to be assigned are agreed upon by the instructor and the student. Subject areas of particular interest to the student or areas where the student needs additional work can be covered within this course. Prerequisite: Instructor approval.

ME 6.276 PHYSICAL METALLURGY

(6 class hrs/wk 4 cr) W
A study of the concepts, structures, properties, heat treatment, methods of forming and evaluation of metals and alloys.

ME 6.281 MAGNETIC PARTICLE TESTING AND PENETRANT TESTING: LEVEL I AND II

(5 class hrs/wk 3 cr) F
An introductory course in the theory and applied techniques of liquid penetrant and magnetic particle inspection. Training is provided on hazardous materials safety data sheets (MSDS). Students perform hands-on exercises with visible and fluorescent liquid penetrants and a variety of magnetic particle testing instrumentations. Course meets minimum training requirements as recommended by SNT-TC-IA practices for Level I and II certification.

ME 6.282 ULTRASONIC AND ELECTROMAGNETIC TESTING: LEVEL I

(5 class hrs/wk 3 cr) W
Introduces basic principles and provides hands-on time with calibration and application of contact immersion testing, application of electromagnetic instrumentations, and data acquisition. Ultrasonics a minimum of 40 hrs., and electromagnetic a minimum of 24 hrs. Course meets minimum training requirements in ultrasonic testing as recommended by SNT-TC-IA practices for Level I certification.

ME 6.283 RADIOGRAPHIC TESTING: LEVEL I

(5 class hrs/wk 3 cr) Sp
An introductory course in the theory and techniques of radiographic testing and inspection. Introduces safety practices and radiation types. Students perform hands-on exercises with x-ray equipment. Course meets minimum training requirements as recommended by SNT-TC-IA practices for Level I certification.

ME 6.284 RADIOGRAPHIC TESTING: LEVEL II

(6 class hrs/wk 4 cr) Sp
Reviews basic radiographic principles and introduces film quality techniques, radiographic evaluation and interpretation, and manufacturing processes with associated discontinuities. Course meets minimum training requirements as recommended by SNT-TC-IA practices for Level II certification.

ME 6.285 ULTRASONIC AND ELECTROMAGNETIC TESTING: LEVEL II

(6 class hrs/wk 4 cr) W
Reviews basic principles and provides hands-on time with calibration and application of contract immersion testing, application of electromagnetic instrumentations, and data acquisition. Ultrasonics a minimum of 40 hrs., and electromagnetic a minimum of 24 hrs. Course meets minimum training requirements in ultrasonic testing as recommended by SNT-TC-IA practices for Level II certification.

ME 6.290 CERTIFIED QUALITY TECHNICIAN PREPARATION

(3 class hrs/wk 3 cr)
Prepares individuals for the certified quality technician examination (CQT). Areas of instruction include quality management concepts, quality costs, inspection and testing methods, metrology and calibration, sampling principles, quality audit concepts, fundamental statistical methods, reliability and maintainability, human resources, mathematics and metric basics.

ME 6.293 INTRODUCTION TO METALLURGY

(6 class hrs/wk 4 cr) F
This course is a basic introduction of metallurgical principles. This includes a study of the crystalline and atomic structure of metals and alloys as it relates to processing of raw materials, manufacturing of metal products, fabrication, research, nondestructive inspection of materials and a measurement and evaluation of the physical and mechanical properties of materials. Students will be introduced to a variety of measurement and inspection methods with many hands-on applications using state-of-the-art instrumentation. All topics introduced will be covered in greater detail during subsequent courses. Students are instructed on the use of Material Safety Data Sheets as they relate to their assignments and the disposal of hazardous materials used in the course of their activities. During the term, students will work in groups of two and three to a team for the purpose of delegation of responsibilities toward the completion of assigned tasks.

ME 6.294 PROCESS METALLURGY

(6 class hrs/wk 4 cr) Sp
Studies metallurgical principles, including raw material requirements for metals-processing furnaces and refractories, furnace fuels and combustions, heat flow, energy balances and alloy systems.

ME 6.298 METALLOGRAPHY I

(4 class hrs/wk 3 cr) W
This course is an introduction to metallographic principles and operation of specific metallographic equipment. Practical applications of metallographic mounting sequences will include sample preparation, mounting, grinding, etching, microscopic inspection, macroscopic study, and photography. Students are instructed on the use of Material Safety Data Sheets as they relate to their assignments and the disposal of hazardous materials used in the course of their activities.

ME 6.299 METALLOGRAPHY II

(4 class hrs/wk 3 cr) Sp
Introduces use of metallurgical equipment, including specimen procurement, mounting, polishing, etching, visual examination, sketching of structural characteristics, photomacrography and photomicrography of ferrous and non-ferrous materials. Students are instructed on the use of Material Safety Data Sheets as they relate to their assignments and the disposal of hazardous materials used in the course of their activities. During the term, students will work in groups of two and three to a team for the purpose of delegation of responsibilities toward the completion of assigned tasks.

MO.....Medical Office

MO 5.414 DRUG CLASSIFICATIONS AND NAMES

(2 class hrs/wk 2 cr) W/Sp
Drug classifications and uses for students enrolled in the Medical Office Specialist, Administrative Medical Assistant, Medical Transcriptionist and Medical Assistant programs. Drugs used in local hospitals and clinics will be introduced for spelling, pronunciation and basic knowledge of use.

MO 5.550 HUMAN RELATIONS IN THE MEDICAL OFFICE

(3 class hrs/wk 3 cr) F
Introduces concepts of human relations as they pertain to students' success in a medical office as well as their personal lives. Follows the DACUM essentials as outlined by the American Medical Assistants Association.

MO 5.625 CLINICAL OFFICE PROCEDURES I FOR MEDICAL ASSISTANTS

(5 hrs/wk 3 cr) F/Sp
Teaches the basic clinical office procedures that are performed in the medical office, such as vital signs, asepsis and sterilization, bloodborne pathogen training, diagnostic procedures and specimen training. It also covers prescription parts, safekeeping, record keeping, reordering and controlled substances. Prerequisite: Enrolled in Administrative Medical Assistant program or completion of two terms of Medical Assistant program or by instructor approval.

MO 5.626 CLINICAL OFFICE PROCEDURES II FOR MEDICAL ASSISTANTS

(5 class hrs/wk 3 cr) W
This course is a continuation of Clinical Office Procedures I for the Medical Assisting Program. It includes areas of surgical asepsis, collection of specimens for laboratory testing, common office emergencies and preplanned actions for coping with emergencies and administration of medications. Prerequisite: MO 5.625 Clinical Office Procedures I.

MO 5.630 MEDICAL TERMINOLOGY I

(3 class hrs/wk 3 cr) F/W/Sp/Su
Introduces the terminology of anatomy and physiology fundamental to the understanding of the physician's diagnosis and treatment. It includes basic root words, prefixes and suffixes.

MO 5.631 MEDICAL TERMINOLOGY II

(3 class hrs/wk 3 cr) F/W/Sp
Continues MO 5.630 Medical Terminology I as applied to the human body. Body systems, pathology, diseases, laboratory tests, pharmacology and abbreviations are studied. Prerequisite: MO 5.630 Medical Terminology I.

MO 5.632 MEDICAL TERMINOLOGY III

(3 class hrs/wk 3 cr) Sp
Continuation of Medical Terminology II, emphasizing specific pathology and medical practice areas. Prerequisite: MO 5.631 Medical Terminology II.

MO 5.640 MEDICAL ASSISTING EXTERNSHIP I

(9 class hrs/wk 3 cr) F/W/Sp/Su
The student will participate in externship for a minimum of 90 hours for 3 credits. This is usually 9 hours per week for 10 weeks, in an approved office and clinical training site. Ten hours of seminar experience is designed to aid the transition from college to the site, usually for 1 hour per week. Prerequisite: Enrollment in Medical Assisting program sequence or by successfully challenging prior program requirements.

MO 5.641 MEDICAL ASSISTING EXTERNSHIP II

(18 class hrs/wk 6 cr) F/W/Sp/Su
Provides a clinical externship during the last term for the Medical Assisting student and is a continuation of MO 5.640 Medical Assisting Externship I. Continues to participate in medical assisting skills and activities. Includes participating in a weekly seminar to review, evaluate and plan clinical experiences, goals and objectives. Prerequisite: Be in the last term of the Medical Assisting program or by instructor approval.

MO 5.645 MEDICAL ASSISTING SKILLS TESTING LAB

(2 class hrs/wk 1 cr) F/W/Sp/Su
The laboratory class is designed to allow Medical Assisting students to practice and perform all front and back office skills with supervision, before entering the clinical externships. Prerequisite: MO 5.625 Clinical Office Procedures I for Medical Assistants; enrolled in MO 5.526 Clinical Office Procedures II for Medical Assistants; MO 5.655 Phlebotomy for Medical Assistants; MO 5.650 Basic Electrocardiography Techniques; OA 2.565 Coding and Insurance; OA 2.527 Transcribing Machine I; OA 2.656M Information Processing: Medical Reports; and OA 2.670 Medical Office Procedures.

MO 5.650 BASIC ELECTROCARDIOGRAPHY TECHNIQUES

(1 class hrs/wk 1 cr) W
The student will learn the procedures involved in proper application of electrocardiogram (ECG) leads to the patient in order to obtain a recording of the electrical impulses of the heart. Prerequisite: Admission into the Medical Assisting program.

MO 5.655 PHLEBOTOMY FOR MEDICAL ASSISTANTS

(3 class hrs/wk 2 cr) W
This course is designed for the Medical Assistant to become skilled in collecting blood specimens for laboratory testing. Students will learn proper labeling and preservation techniques on samples collected. Selected tests will be performed on blood collected. Prerequisite: Admission into the Medical Assisting program or instructor approval.

MP.....Musical Performance

Note: Each MP class may be taken three times for credit.

MP 101/201 SYMPHONIC BAND

(3 class hrs/wk 1 cr) W/Sp
In conjunction with the Oregon State University Department of Music, provides an opportunity for participation in a symphonic band. Note: May require an audition. An unsuccessful audition will result in disenrollment.

MP 102 CONCERT BAND

(3 class hrs/wk 1 cr) F/W/Sp
In conjunction with the Oregon State University Department of Music, provides an opportunity for participation in a concert band. Note: May require an audition. An unsuccessful audition will result in disenrollment.

MP 103/203 MARCHING BAND

(3 class hrs/wk 1 cr) F
Provides opportunity for participation in a marching band in conjunction with the Oregon State University Department of Music. This performance group of more than 160 musicians performs for home football games as well as one trip each year to an off-campus game. Note: May require an audition. An unsuccessful audition will result in disenrollment.

MP 105/205 JAZZ BAND

(2 class hrs/wk 1 cr) F/Sp/Su
In conjunction with the Oregon State University Department of Music, provides an opportunity for participation in a jazz band. Note: May require an audition. An unsuccessful audition will result in disenrollment.

MP 115/215 COMMUNITY CHORALE

(2 class hrs/wk 1 cr) F/W/Sp
Provides performance-oriented class for major choral works.

MP 122/222 CONCERT CHOIR

(3 class hrs/wk 2 credits)
Uses vocal music to present different problems and styles. Note: May require an audition. An unsuccessful audition will result in disenrollment.

MP 131/231 CHAMBER CHOIR

(3 hrs/wk 2 credits)
Small, select vocal group that studies and performs early to contemporary literature. Audition required. Note: May require an audition. An unsuccessful audition will result in disenrollment.

MP 141/241 SYMPHONY ORCHESTRA

(3 hrs/wk 1 credits)
In conjunction with the Oregon State University Department of Music, provides opportunity for participation in a symphony orchestra. This large ensemble of 65-80 players performs orchestra repertoire from the 18th, 19th and 20th centuries. Note: May require an audition. An unsuccessful audition will result in disenrollment.

MP 142/242 CHAMBER ORCHESTRA

(2 class hrs/wk 1 cr) F/W/Sp
Provides an opportunity for participation in a strings orchestra. The group performs repertoire from the 18th, 19th and 20th centuries.

MP 151/251 REHEARSAL AND PERFORMANCE

(3-15 class hrs/wk 1-3 cr)
Offers credit for music rehearsal directly related to Performing Arts Department performance. Prerequisite: Instructor approval.

MP 171/271 INDIVIDUAL LESSONS: PIANO

(1 class hr/wk 1 cr) F/W/Sp
Provides individual instruction in piano. Note: Requires additional tutorial fee.

MP 174/274 INDIVIDUAL LESSONS: VOICE

(1 class hr/wk 1 cr) F/W/Sp
Provides individual instruction in voice. Note: Requires additional tutorial fee.

MP 181/281 INDIVIDUAL LESSONS: FLUTE

(1 class hr/wk 1 cr) F/W/Sp
Provides individual instruction in flute. Note: Requires additional tutorial fee.

MP 183/283 INDIVIDUAL LESSONS: CLARINET

(1 class hr/wk 1 cr) F/W/Sp
Provides individual instruction in clarinet. Note: Requires additional tutorial fee.

MP 184/284 INDIVIDUAL LESSONS: SAXOPHONE

(1 class hr/wk 1 cr) F/W/Sp
Provides individual instruction in saxophone. Note: Requires additional tutorial fee.

MP 186/286 INDIVIDUAL LESSONS: TRUMPET

(1 class hr/wk 1 cr) F/W/Sp
Provides individual instruction in trumpet. Note: Requires additional tutorial fee.

MTH.....Math

Note: Many math courses require a calculator of some type. Please see your instructor to determine the type of calculator that is appropriate for your course.

MTH 20 BASIC MATHEMATICS

(4 class hrs/wk 4 cr) F/W/Sp/Su
Provides a thorough review of arithmetic, including fundamental operations with whole numbers, fractions, decimals, percentages, geometry and measurement. Provides a basis for MTH 60 Introduction to Algebra. Note: A minimum competency level is required to pass this course.

MTH 60 INTRODUCTION TO ALGEBRA

(4 class hrs/wk 4 cr) F/W/Sp/Su
First course in algebra for students who have no previous algebra experience or who need a thorough review. Assumes no familiarity with algebra. Introduces basic operations with integers, exponents, algebraic expressions, linear equations, graphing, dimensional analysis, scientific notation, ratio and proportion, realistic percent problems and other problems that lend themselves to one-variable solutions and includes mean, median, mode and range. Problem solving is emphasized throughout the course. Application problems are realistic with some data to be collected, analyzed and discussed in a group setting with results submitted in written form. Note: A minimum competency level is required to pass this course. Prerequisite: MTH 20 Basic Mathematics or equivalent.

● MTH 61 SURVEY OF MATHEMATICAL FUNDAMENTALS

(3 class hrs/wk 3 cr) F/W/Sp/Su
Survey course for the Associate of Applied Science degree. Includes applications of basic algebra, ratio and proportion, charts, tables, graphs, data analysis and problem solving, and provides an introduction to practical geometry. Emphasis is on applications. Application problems are realistic with some data to be collected, analyzed and discussed in a group setting with results submitted in written form. Note: A minimum competency level is required to pass this course. Prerequisite: MTH 60 Introduction to Algebra or equivalent.

● MTH 62 OCCUPATIONAL TRIGONOMETRY

(1 class hr/wk 1 cr) Sp
Provides an introduction to right triangle trigonometry and its applications. Occupational formulas and applications are used. Note: A minimum competency level is required to pass this class. Prerequisite: MTH 61 Survey of Mathematical Fundamentals or instructor approval.

● MTH 63 INDUSTRIAL SHOP MATH

(1 class hr/wk 1 cr) W
A math course designed to acquaint the students with measuring tools in the industrial shop and the types of computations and problem-solving methods frequently needed in industrial settings. Prerequisite: MTH 60 Introduction to Algebra or equivalent.

● MTH 64 BUSINESS APPLICATIONS OF MATH FUNDAMENTALS

(2 class hr/wk 1 cr) Sp
Covers the mathematics of finance, including simple interest and compound interest as applied to bank loans, installment buying, credit purchases and annuities. Note: Five-week class. Prerequisite: MTH 61 Survey of Mathematical Fundamentals or instructor approval.

● MTH 65 ELEMENTARY ALGEBRA

(4 class hrs/wk 4 cr) F/W/Sp/Su
A non-traditional course that incorporates some geometry, statistics and trigonometry. Designed for the student who is familiar with beginning algebra concepts (see MTH 60). Topics include graphing linear, quadratic and exponential functions; solving linear and quadratic equations; solving application problems with one or two variables; using linear and other mathematical models. Problem solving is emphasized throughout the course. Application problems are realistic with some data to be collected, analyzed and discussed in a group setting with results submitted in written form. A minimum competency level is required to pass this course. Note: Students use graphing calculators in this course. Prerequiste: MTH 60 Introduction to Algebra or equivalent.

● MTH 95 INTERMEDIATE ALGEBRA

(4 class hrs/wk 4 cr) F/W/Sp/Su
A non-traditional course in algebra that includes some geometry and statistics. Designed for the student who is familiar with elementary algebra as well as basic geometry and statistics (see MTH 65). Topics include graphing quadratic exponential, logarithmic, and other functions; multiplying and factoring polynomials; performing operations with rational expressions; solving systems of linear equations; solving quadratic equations by factoring; performing arithmetic with complex numbers; developing and applying mathematical models. Problem solving is emphasized throughout the course. Application problems are realistic with some data to be collected, analyzed and discussed in a group setting with results submitted in written form. A minimum competency level is required to pass this course. Note: Students use graphing calculators in this course. Prerequisite: MTH 65 Elementary Algebra or equivalent.

● MTH 97 PRACTICAL GEOMETRY

(4 class hrs/wk 4 cr) F/W/Sp/Su
Presents applied, informal geometry for students who did not take geometry in high school or who need a thorough review. Includes problem solving, geometric shapes, angle measure, perimeter, area and volume, congruence and similarity, circles, basic constructions and an introduction to right triangle trigonometry. Prerequisite: MTH 95 Intermediate Algebra or equivalent.

● MTH 105 INTRODUCTION TO CONTEMPORARY MATHEMATICS

(4 class hrs/wk 4 cr) F/W/Sp
A survey course in mathematics for students in the liberal arts and other non-science majors. Topics are selected from areas such as management science, statistics, social choice, the geometry of size and shape, and art. Stresses the application of mathematics to the problems of contemporary society and the critical role these applications play in economic, political and personal life. Prerequisite: MTH 95 Intermediate Algebra and MTH 97 Practical Geometry or equivalent.

● MTH 111 COLLEGE ALGEBRA

(5 class hrs/wk 5 cr) F/W/Sp/Su
Explores relations and linear, quadratic, exponential, polynomial, rational and logarithmic functions. Includes theory of equations, matrices and determinants, and introduces sequences and series. Prerequisite: MTH 95 Intermediate Algebra and MTH 97 Practical Geometry or equivalent.

● MTH 112 TRIGONOMETRY

(5 class hrs/wk 5 cr) F/W/Sp/Su
Introduces trigonometric functions, trigonometric identities, inverse trigonometric functions, trigonometric equations, right triangle trigonometry, complex numbers and polar coordinates. Includes parametric equations, vectors, 3-D geometry and conic sections. Prerequisite: MTH 111 College Algebra and MTH 97 Practical Geometry or equivalent.

● MTH 116 CALCULUS PREPARATION

(5 class hrs/wk 5 cr) F/W/Sp
Survey course of material needed for calculus. Topics include elementary functions, conic sections, polar coordinates, the geometry of 2-space and 3-space, vectors in 2-space and 3-space, and sequences and series. Prerequisites: MTH 111 College Algebra and MTH 112 Trigonometry or equivalent.

● MTH 159 PROBLEM SOLVING

(2 class hrs/wk 2 cr) F/W
Helps students develop general problem-solving techniques applicable to many problem situations. Strategies discussed include recognizing patterns, working backward, using a variable, and guess and test. Practice in applying strategies is provided through a variety of problems drawn from logic, geometry, probability and quantitative data analysis. Prerequisite: MTH 65 Elementary Algebra or equivalent.

MTH 199 MATHEMATICS: SPECIAL STUDIES

(1 class hr/wk 1 cr)
Presents selected topics in mathematics.

Note: Many math courses require a calculator of some type. Please see your instructor to determine the type of calculator that is appropriate for your course.

● MTH 211 FUNDAMENTALS OF ELEMENTARY MATHEMATICS I

(4 class hrs/wk 4 cr) F

First course in the mathematics sequence for prospective elementary and middle school teachers. This sequence develops the understanding of basic mathematical concepts necessary to teach mathematics at levels K - 8. Topics include problem solving, whole numbers, algorithms for computation, numeration systems, number theory and fractions. Prerequisite: MTH 95 Intermediate Algebra or equivalent.

● MTH 212 FUNDAMENTALS OF ELEMENTARY MATHEMATICS II

(4 class hrs/wk 4 cr) W

Second course in the mathematics sequence for prospective elementary and middle school teachers. Topics include decimals, percent, ratio and proportion, integers, real numbers, basic statistics and probability. Prerequisite: MTH 211 Fundamentals of Mathematics I.

● MTH 213 FUNDAMENTALS OF ELEMENTARY MATHEMATICS III

(4 class hrs/wk 4 cr) Sp

Third course in the mathematics sequence for prospective elementary and middle school teachers. Covers basic geometry. Topics include shapes and their properties; symmetry; angle measure; measurement of length, area and volume; congruence and similarity; Pythagorean Theorem; and coordinate geometry. Prerequisites: MTH 97 Practical Geometry or equivalent and MTH 212 Fundamentals of Mathematics II or instructor approval.

● MTH 231 ELEMENTS OF DISCRETE MATHEMATICS

(4 class hrs/wk 4 cr) W

Covers elementary logic, mathematical induction, functions and sequences, finite and infinite sets, counting techniques, basic matrix algebra, relations, graphs and trees. Prerequisite: MTH 251 Calculus.

● MTH 232 ELEMENTS OF DISCRETE MATHEMATICS

(4 class hrs/wk 4 cr) Sp

Covers basic matrix linear algebra, combinatorics, graph theory and algorithms. Prerequisite: MTH 231 Elements of Discrete Mathematics.

● MTH 241 MATH FOR BIOLOGICAL/MANAGEMENT/ SOCIAL SCIENCES

(4 class hrs/wk 4 cr) F/W/Sp

This course is an introduction to calculus as applied to business, the social sciences and life sciences. It uses an intuitive development of the calculus of polynomial, exponential and logarithmic functions, extrema theory and applications. Prerequisite: MTH 111 College Algebra.

● MTH 243 INTRODUCTION TO STATISTICS

(4 class hrs/wk 4 cr) F/W

An introductory statistics course emphasizing interpretation of statistical results. The course focuses on sampling procedures, experimental design, descriptive statistics, and inferential statistical techniques to analyze survey and experimental data from a wide range of fields including health care, biology, psychology, physics and agriculture. Includes basic concepts in graphical interpretation of one and two variable data, probability, probability distributions (binomial, normal, t-Distribution, and chi-square), confidence intervals for means and proportions, and hypothesis testing. Prerequisite: MTH 111 College Algebra or equivalent.

● MTH 245 MATH FOR BIOLOGICAL/MANAGEMENT/ SOCIAL SCIENCES

(4 class hrs/wk 4 cr) F/W/Sp

A survey course of discrete mathematics for non-physical science majors. Topics include systems of inequalities, linear programming and the simplex method, probability and probability distributions, and an introduction to descriptive statistics. Prerequisite: MTH 111 College Algebra.

● MTH 251 CALCULUS

(5 class hrs/wk 5 cr) F/W/Sp/Su

First course in the calculus sequence for students of mathematics, science and engineering. Includes differentiation, extrema, optimization problems, and an introduction to the definite integral and the fundamental theorem of calculus. Prerequisite: MTH 112 Trigonometry or MTH 116 Calculus Preparation or equivalent.

● MTH 252 CALCULUS

(5 class hrs/wk 5 cr) F/W/Sp

Second course in the calculus sequence for students of mathematics, science and engineering. Includes area under a curve, Riemann Sums, numerical integration, techniques of integration, improper integrals, and application of integration to finding volumes, work, fluid pressure, controids, arc length and surface area. Prerequisite: MTH 251 Calculus.

● MTH 253 CALCULUS

(4 class hrs/wk 4 cr) F/W/Sp

Third course in the calculus sequence for students of mathematics, science and engineering. Includes infinite series, parametric equations, polar coordinates, calculus of 2-space and 3-space vectors and an introduction to functions of several variables. Prerequisite: MTH 252 Calculus.

● MTH 254 CALCULUS

(4 class hrs/wk 4 cr) F/W/Sp

Fourth course in the calculus sequence for students of mathematics, science and engineering. Includes vector-valued functions, functions of several variables and multiple integration. Prerequisite: MTH 253 Calculus.

● MTH 255 VECTOR CALCULUS

(4 class hrs/wk 4 cr) W

An intermediate treatment of multivariate calculus with a vector approach. Provides the mathematical skills for courses in advanced calculus, fluid mechanics and electromagnetic theory. Prerequisite: MTH 254 Calculus.

● MTH 256 APPLIED DIFFERENTIAL EQUATIONS

(4 class hrs/wk 4 cr) Sp

Beginning course in differential equations for students majoring in mathematics, sciences or engineering. Covers ordinary differential equations, series solutions and Laplace transforms. Prerequisite: MTH 253 Calculus.

● MTH 265 STATISTICS FOR SCIENTISTS AND ENGINEERS

(4 class hrs/wk 4 cr) W

Covers probability and inferential statistics applied to scientific and engineering problems. Includes random variables, expectation, sampling, estimation, hypothesis testing, regression, correlation and analysis of variance. Prerequisite: MTH 252 Calculus.

MTH 280 CWE MATHEMATICS

(6-42 class hrs/wk 2-14 cr) F/W/Sp/Su

An instructional program designed to give students practical experience in supervised employment related to mathematics. Students identify job performance objectives, work a specified number of hours during the term, and attend a related CWE seminar. Note: Credits are based on identified objectives and number of hours worked. Prerequisite: CWE coordinator approval.

MTH 1.302 PROBLEM SOLVING WITH THE TI82/TI83 CALCULATOR

(20 class hrs 1 cr) F/W/Sp

This self-paced course develops the student's ability to use the TI-82 graphics calculator to solve mathematical problems. The course covers performing basic calculations, using the editing features and the memory of the calculator, graphing on the calculator, using the statistics menu, entering programs into the calculator and writing simple programs. Pre- or Corequisite: MTH 65 Elementary Algebra.

MUS.....Music

➤ MUS 101 MUSIC FUNDAMENTALS

(3 class hrs/wk 3 cr) F/W/Sp

Studies fundamentals of music: music reading, simple chord structures, use of harmony for voice and instruments.

➤ MUS 105 INTRODUCTION TO ROCK MUSIC

(3 class hrs/wk 3 cr)

Examines the relationship between rock music and society. Emphasizes the musical and lyrical significance of rock music as contemporary social commentary.

MUS 131/132 GROUP PIANO I, II

(2 class hrs/wk 2 cr)
Provides classroom instruction for the beginning piano student. Note: Must be taken in sequence. Prerequisite to MUS 132: MUS 131 Group Piano I.

MUS 134/135 GROUP VOICE I, II

(2 class hrs/wk 2 cr)
Provides classroom instruction for the beginning voice student. Note: Must be taken in sequence. Prerequisite to MUS 135: MUS 134 Group Voice I.

➤ MUS 161 MUSIC APPRECIATION

(3 class hrs/wk 3 cr) F/W/Sp
Studies music through the elements or language of music, musical forms and the history of music.

➤ MUS 205 INTRODUCTION TO JAZZ

(3 class hrs/wk 3 cr)
Provides a listener's approach to the development of jazz through its various styles and its place in Afro-American and 20th Century socio-political history.

MUS 280 CWE MUSIC

(6-42 class hrs/wk 2-14 cr) F/W/Sp/Su
An instructional program designed to give students practical experience in supervised employment related to music. Students identify job performance objectives, work a specified number of hours during the term, and attend a related CWE seminar. Note: Credits are based on identified objectives and number of hours worked. Prerequisite: CWE coordinator approval.

NU.....Nursing Assistant

NU 5.406 NURSING ASSISTANT

(30 hrs/wk 8 cr) F/W/Sp/Su
125 hours fulfilling the Oregon State Board of Nursing requirements (75 hours of classroom/skills laboratory instruction and 50 hours of clinical experience). Course includes instruction in basic bedside nursing skills, basic restorative services, mental health and social service needs, personal care skills and patient rights. Students will learn the knowledge and skills necessary to care for the convalescing patient and patients in long-term care facilities. Following successful completion of the course, the student may take the Board of Nursing Nurse Assistant Competency Evaluation Program (NACEP) and apply for certification as a Nursing Assistant. Note: Selected immunizations and reading test required. Prerequisite: Instructor approval.

NUR.....Nursing

NUR 101 NURSING I

(15 class hrs/wk 9 cr) F
Introduces the nursing roles as provider and manager of care and member of the profession. A systems approach is used to teach the nursing process, beginning theory and nursing skills. Emphasizes communication, nursing process, gerontology, medical asepsis and safety. Fundamental nursing skills are practiced in the campus skills lab before providing nursing care in the long-term care clinical setting. Prerequisite: Admission to the Nursing Program, MTH 65 Elementary Algebra, and OA 121 Keyboarding.

NUR 102 NURSING II

(17 class hrs/wk 9 cr) W
Integrates fundamental principles from NUR 101 and builds on an understanding of the nursing roles as provider and manager of care and member of the profession. Emphasizes patient needs in an acute and long-term care settings. Patient/family teaching, discharge planning and pathophysiology are introduced in the nursing care plans. Systems studied include perioperative, respiratory, cardiovascular, endocrine, biopsychosocial (mental health) and gastrointestinal. Nursing skills from NUR 101 and NUR 121 are practiced and more skills are added. Prerequisite: NUR 101 Nursing I.

NUR 103 NURSING III

(17 class hrs/wk 9 cr) Sp
Principles from NUR 101 and NUR 102 provide the framework for continued study of nursing. The nursing process is used to focus on patients with stressors related to the following systems: reproductive (normal maternity/the newborn), the hospitalized child and family, respiratory (including fluid and electrolytes), cardiovascular and sensory (ear, eye, nose and throat). Prerequisite: NUR 102 Nursing II.

NUR 110 NURSING TRANSITIONS

(1 class hr/wk 1 cr) F
Designed to offer incoming freshmen an opportunity to receive help and support needed while entering the nursing program. Provides a variety of topics on stress management, study skills and review of curriculum content. Provides a support group through informal discussions and opportunity for problem solving.

NUR 121 NURSING SKILLS: DRUG ADMINISTRATION

(2 class hrs/wk 2 cr) F
Provides an introduction to the study of drugs. Emphasizes general topics of drug administration, such as drug metabolism, drug interactions, adverse drug reactions and the administration of parenteral and non-parenteral drugs. Special consideration in administering drugs to the aged and to children are discussed. Students learn to use drug information resources, study one prototype drug in each major classification and demonstrate proficiency in specified skills of drug administration.

NUR 122 CONTEMPORARY NURSING I

(1 class hr/wk 1 cr) Sp
Defines the nursing role based on the history of the profession, current theories on the nature of health and disease, and selected responsibilities of the nurse in society and as a practitioner. Reciprocal influences between society and nursing are identified as they relate to biological, sociological, psychological and therapeutic settings. Current issues, trends and practices in nursing are identified. Prerequisite: Instructor approval required.

NUR 201 NURSING IV

(16 class hrs/wk 8 cr) F
Emphasizes the nurse as provider of care, manager of care and member of the profession in the acute- and long-term care setting. Covers the care of patients at all developmental stages with complex stressors affecting multibody systems. Psychiatric nursing interventions are observed in acute care sites and in community settings. Nursing process is used to focus on patients who have interruptions of the nervous, cardiovascular, psychosocial, musculoskeletal, renal and immune systems as well as altered cell growth. Integration of freshman nursing procedures, as well as catheterization of the urinary system and multiple intravenous therapy skills, are practiced throughout the quarter. Prerequisite: Instructor approval required.

NUR 202 NURSING V

(17 class hrs/wk 9 cr) W
Analyzes the nurse as provider of care, member of the profession and manager of care in acute and long-term care settings. The nursing process is used to study patients with interruptions of cellular functions and the respiratory, gastrointestinal and reproductive systems. Manager concepts for nursing care presented. Nursing skills presented include complex IV therapy, stoma care, trach care, management of chest tubes and mechanical ventilation. Prerequisite: Instructor approval required.

NUR 203 NURSING VI

(20 class hrs/wk 10 cr) Sp
Integrates and evaluates the role of the nurse as provider of care, member of the profession and manager of care in the acute care and long-term care setting. Students are responsible for managing three to four or more patients. Psychiatric interventions are observed at acute care sites as well as in community settings. Students care for patients of all developmental stages with multiple complex stressors involving trauma. Systems studies include the neurological, reproductive, renal, endocrine and cardiovascular. Students integrate and practice all previously learned skills. Prerequisite: Instructor approval required.

NUR 215 HEALTH AND PHYSICAL ASSESSMENT

(4 class hrs/wk 3 cr)
Provides the fundamental knowledge and technical skills necessary to obtain complete health histories and physical assessments from patients of all age groups in a variety of clinical settings. Prerequisite: NUR 103 or licensed nurse (LPN, RN).

NUR 222 CONTEMPORARY NURSING II

(1 class hrs/wk 1 cr) W
Continuation of NUR 122. Introduces students to and enables discussion of ethical, legal and professional responsibilities in relation to employment, licensure, professional organizations and changing trends in health care. Includes job search skills. Prerequisite: Instructor approval.

OA.....Business Technology

OA courses may not be accepted as transfer courses at all four-year institutions. Be sure to check with your advisor if you have questions.

OA 121 KEYBOARDING

(5 class hrs/wk 1-2 cr) F/W/Sp/Su
Beginning typing for those with no previous instruction or those needing a review of basic techniques. Basic techniques of the touch system on alphabetic keys and the top-row numbers. Students will be using microcomputers for the course. While learning the keyboard, students also learn to work with an interactive keyboarding software program that enables them to load a program, make menu selections, enter text and print documents. Individualized instruction is provided. Each student may advance at his/her own rate. Note: Five-week class.

OA 122 FORMATTING

(5 class hrs/wk 2 cr) F/W/Sp/Su
Introductory class using WordPerfect software to learn basic document formatting for business memos, letters, simple tables and reports. Students will learn fundamental operation of a personal computer and printer and basics of WordPerfect processing software. Note: Five-week class. Prerequisite: OA 121 Keyboarding or equivalent (touch typing at 25 wpm or higher).

OA 123A TYPING SKILLBUILDING

(5 class hrs/wk 2 cr) F/W/Sp/Su
A computerized typing skillbuilding program designed to build students' speed and accuracy abilities on the computer keyboard. The program will determine current typing speed, diagnose problems, prescribe appropriate practice, and evaluate progress. Note: Five-week class. Prerequisite: OA 121 Keyboarding or equivalent.

OA 123B ADVANCED TYPING SKILLBUILDING

(5 class hrs/wk 2 cr) F/W/Sp/Su
A computerized typing skillbuilding program designed to further improve students' speed and accuracy abilities. The program will determine current typing speed, diagnose problems, prescribe appropriate practice and help students evaluate their problem areas. Note: Five-week class. Prerequisite: OA 123A Typing Skillbuilding.

OA 124 TYPING: SPEED AND ACCURACY DEVELOPMENT

(5 class hrs/wk 3 cr) F/W/Sp
A computerized accuracy- and speed-building keyboarding program is used to diagnose the student's current keyboarding problems, prescribe appropriate practice materials, develop the student's overall keyboarding skill, and evaluate student's skill development process. Note: Ten-week class. Prerequisite: OA 121 Keyboarding or equivalent.

OA 201 WORDPERFECT FOR BUSINESS

(5 class hrs/wk 3 cr) F/W/Sp/Su
In-depth course where students learn to create and revise a variety of business documents using the commands and features of WordPerfect for Windows. Prerequisite: OA 121 Keyboarding or equivalent (touch typing at 25 wpm or higher).

OA 201B INTRODUCTION TO WORDPERFECT WITH WINDOWS

(5 class hrs/wk 2 cr) F/W/Sp/Su
Introduces students to the features of WordPerfect word processing and how these features can be used to create, edit, save and print documents for business and personal applications. After covering the basic concepts of creating, editing, proofreading and formatting documents, students choose and explore one of the following: creating tables, graphics in documents or merging files. Note: Five-week class. Prerequisite: OA 121 Keyboarding or equivalent.

OA 202 MS Word For Business

(5 hrs per week/3 credits) F/W/Sp/Su
Mastery course where students learn to create and revise a variety of business documents using the commands and features of MS Word for Windows. Prerequisite: OA 121 Keyboarding or equivalent.

OA 202A INTRODUCTION TO MS WORD

(5 class hrs/wk 2 cr) F/W/Sp/Su
This course introduces the features of MS Word word processor and how these features can be used to create, edit, save, and print documents for business and personal use. Basic writing tools and formatting techniques are covered, as well as features to save time and enhance documents. Students will choose and explore one of the following topics: tables, graphics, mail merge, or research paper format. Prerequisite: OA 121 Keyboarding or equivalent.

OA 203 ADVANCED WORD PROCESSING

(5 class hrs/wk 3 cr) F/Sp
Explores advanced functions of the popular word processing packages for the Windows environment. Using a project approach and hands-on learning, students learn how to apply concepts and software functionality to job-related projects. Prerequisite: Successful completion of OA 201 WordPerfect for Business or OA 202 MS Word for Business.

OA 2.500 BUSINESS ORIENTATION

(1 class hr/wk 1 cr) F
Combination of lecture and field trips to help students become familiar with the services offered at LBCC and to acquaint students with different types of positions available in administrative, legal and medical offices. Workplace skills, such as stress, time management and self-esteem, are covered.

OA 2.513 DATA ENTRY SKILLBUILDING

(5 class hrs/wk 2 cr) F/W/Sp
Develops speed and accuracy using the top-row numbers and 10-key numeric pad to enter typical business applications, such as payroll, account receivables, inventory, etc. Note: Five-week class. Prerequisite: OA 121 Keyboarding or minimum 25 wpm by touch.

OA 2.515 BUSINESS MATH WITH CALCULATORS

(3-4 class hrs/wk 1-2 cr) F/W/Sp/Su
Provides the opportunity to learn operation of the electronic calculator. This knowledge is applied to business mathematics in areas such as payroll, banking, insurance, simple interest, discounts and consumer credit. Students advance at their own rate. Prerequisite: MTH 20 Basic Mathematics or equivalent.

OA 2.515C ELECTRONIC CALCULATOR

(4 class hrs/wk 1 cr) F/W/Sp/Su
Provides the opportunity to operate the electronic calculator including addition, subtraction, multiplication and division; dividing with constants, mixed operations; memory key; base, rate and percentage. Speed and accuracy standards will be applied to straight-copy, 10-key pad timing. Note: Five -week class. Prerequisite: MTH 20 Basic Mathematics or equivalent.

OA 2.515M BUSINESS MATH WITH CALCULATORS: MEDICAL

(4 class hrs/wk 1-2 cr) F/W/Sp/Su
Provides the opportunity to operate the electronic calculator. This knowledge is applicable in medical areas such as measurements, metrics, income/payroll, medical dosages (intake and output) and vital signs. Students advance at their own rate. Prerequisite: MTH 20 Basic Mathematics or equivalent.

OA 2.524 MEDICAL TRANSCRIPTION I

(5 class hrs/wk 1-3 cr) F/W/Sp/Su
Introduces the transcription of medical terminology in word lists and paragraphs, as well as preparation of basic medical forms. Covers the typing of radiology, history and physical, and pathology reports. Prerequisites: OA 2.527 Transcribing Machines I; MO 5.630 Medical Terminology I; OA 2.656M Information Processing: Medical Reports.

OA 2.525 MEDICAL TRANSCRIPTION II

(5 class hrs/wk 1-3 cr) F/W/Sp/Su
Further develops student's skill in preparing medical forms and records from dictated material. Covers the typing of operation, discharge summary and autopsy reports. Prerequisites: MO 5.631 Medical Terminology II; OA 2.524 Medical Transcription I.

OA 2.527 TRANSCRIBING MACHINES

(5 class hrs/wk 3 cr) F/W/Sp/Su
Provides the opportunity to develop an entry-level job skill on the transcribing machine. Prerequisites: OA 2.588 Editing Skills for Information Processing with a minimum of a "C" grade; OA 122 Formatting; OA 201 WordPerfect for Business or OA 202 MS Word for Business.

OA 2.529 APPLIED MEDICAL TRANSCRIPTION

(10 class hrs/wk 1-5 cr) F/W/Sp/Su
Introduces transcription of medical terminology in word lists and paragraphs, followed by preparation of medical forms and records from dictated material. Covers the typing of radiology, pathology, history and physical, operation, discharge summary and autopsy reports. Prerequisites: MO 5.631 Medical Terminology II; OA 2.527 Transcribing Machines; OA 2.656M Information Processing: Medical Reports.

OA 2.551 OFFICE COMMUNICATIONS

(6 class hrs/wk 3 cr) F/Sp
Prepares students to handle both the written and the verbal communication needs of a typical office. Students receive practice in writing business letters, memos and reports as well as training in presenting material orally in a clear, concise and convincing manner. Prerequisite: OA 2.588 Editing Skills for Information Processing with a minimum of a "C" grade; OA 122 Formatting. Corequisite: OA 201 WordPerfect for Business or OA 202 MS Word for Business or approved substitution.

OA 2.557 ADVANCED BUSINESS MATH APPLICATIONS

(4 class hrs/wk 1 cr) F/W/Sp/Su
Reviews the operation of the 10-key electronic calculator. Covers advanced business math applications such as calculating interest, maintaining bank records, and computing markup and markdown. Note: Five-week class. Prerequisite: MTH 61 Survey of Mathematical Fundamentals or equivalent.

OA 2.565 CODING AND INSURANCE PROCEDURES

(3 class hrs/wk 3 cr) W/Sp
An introductory course designed for the beginning coder and the practical application of the varying aspects of medical insurance. Course is designed to include lecture, practice sessions, and application of CPT coding, ICD-9-CM coding, medical insurance forms, and billing utilizing Student Workbook and special speakers. Prerequisite: MO 5.630 Medical Terminology I.

OA 2.579 INTEGRATED SOFTWARE APPLICATIONS

(4 class hrs/wk 3 cr) Sp
This course examines office information and decision support systems. Students study procedures related to the import/export functions of technology and software as they relate to producing business documentation. The course also analyzes supporting electronic technology and its applied use, applies integration techniques, and uses these analyses and application techniques to complete business-related projects. The use of software, local area networks, the World Wide Web, electronic communications, and peripheral devices will be included. Prerequisites: BA 110D Data Base; BA 110S Spreadsheets; OA 122 Formatting; OA 201 WordPerfect for Business or OA 202 MS Word for Business or BA 210 Software Applications.

OA 2.588 EDITING SKILLS FOR INFORMATION PROCESSING

(3 class hrs/wk 3 cr) F/W/Sp
Basic review of English grammar, punctuation, style, and usage. Emphasis is on proofreading and editing. Must score 40 or higher on CPT for entrance.

OA 2.590 READING AND CONFERENCE: SECRETARIAL SKILLS

(2-10 class hrs/wk 1-5 cr)
Individualized course covering subject areas of particular interest to the student or areas where additional work is needed. Note: Number of credits is determined by amount of time spent.

OA 2.610 OFFICE PROCEDURES

(6 class hrs/wk 3 cr) Sp
Focuses on the electronic office and how to be successful in a diverse office environment. Emphasizes personal qualities and skills needed by office personnel as a foundation for a career in business. Prerequisite: OA 201 WordPerfect for Business or OA 202 MS Word for Business or approved substitution; OA 2.588 Editing Skills for Information Processing with a minimum of a "C" grade. Corequisite: OA 2.551 Office Communications.

OA 2.612 CWE SEMINAR

(1 class hr/wk 1 cr) F/W/Sp
The CWE Seminar will provide a forum for students to discuss their CWE training experience and to review for the Certified Professional Secretaries examination. Corequisite: OA 2.613 CWE.

OA 2.613 CWE (COOPERATIVE WORK EXPERIENCE)

(3-40 class hrs/wk 1-14 cr) F/W/Sp/Su
Provides supervised employment in a medical, legal or business office, primarily for second-year students to gain practical experience in their chosen field. Thirty working hours equals one college credit.

OA 2.616 JOB SUCCESS SKILLS

(1 class hr/wk 1 cr) Sp
Covers techniques for marketing "your skills" to a prospective employer. Topics include employability traits, job research techniques, resume writing, job applications, employment tests, cover letter, mock interview, and professional dress and grooming.

OA 2.645 ADMINISTRATIVE PROCEDURES I

(8 class hrs/wk 6 cr) F
Designed for students in the Administrative Assistant TPAD and Legal Secretary programs to incorporate general office procedures with functions relating to a high performance office setting. Prerequisite: BA 210 Software Applications; OA 2.588 Editing Skills for Information Processing with a minimum of a "C" grade. Corequisite: OA 2.551 Office Communications; OA 203 Advanced Word Processing.

OA 2.646 ADMINISTRATIVE PROCEDURES II

(6 class hrs/wk 3 cr) W
Building on the teamwork, self-management and problem-solving skills acquired in Administrative Procedures I, students participate in a simulated office environment. This is a capstone course that emphasizes personal qualities and skills needed by office personnel as a foundation for a career in business. Prerequisite: OA 2.645 Administrative Procedures I.

OA 2.647 HIGH PERFORMANCE OFFICE

(3 class hrs/wk 3 cr) W
Includes competencies and responsibilities of the worker for self-management, team building and problem solving. Topics include personal values, business ethics, management leadership styles, effective communication techniques, common personnel problems, office ergonomics and more. Corequisites: OA 2.551 Office Communications; OA 203 Advanced Word Processing.

OA 2.652 FILING

(4 class hrs/wk 1 cr) F/W/Sp/Su
A short simulation designed to give students an understanding of basic indexing and filing rules, as well as practice with alphabetic, geographic, subject and numeric filing.

OA 2.656M INFORMATION PROCESSING: MEDICAL REPORTS

(4 class hrs/wk 3 cr) W/Sp
Designed to develop medical transcription skills for medical secretarial students who plan to seek employment in a private physician's office, clinic or hospital or to be a self-employed transcriptionist. Prerequisites: MO 5.630 Medical Terminology I; OA 122 Formatting or OA 201 WordPerfect for Business or OA 202 MS Word for Business; OA 2.588 Editing Skills for Information Processing with a minimum "C" grade.

OA 2.662 LEGAL TRANSCRIPTION

(5 class hrs/wk 1-3 cr) F/W/Sp/Su
Stresses the ability of students to take instructions via transcribing machines using cassette tapes as well as typing legal documents verbatim. Prerequisites: OA 2.527 Transcribing Machines; OA 2.675 Legal Practices, Procedures and Terminology I.

OA 2.670 MEDICAL OFFICE PROCEDURES

(6 class hrs/wk 3 cr) F/Sp
Stresses the specifics of working in a medical office, including insurance, medical records, administrative office procedures, receptionist techniques and communications. Prerequisites: OA 122 Formatting or OA 201 WordPerfect for Business or OA 202 MS Word for Business; WR 115 Introduction to Writing or OA 2.588 Editing Skills for Information Processing with a minimum of a "C" grade.

OA 2.671 MEDICAL LAW AND ETHICS

(2 class hrs/wk 2 cr) W
Includes licensing, confidentiality, legal relationship of physician and patient, and legal and ethical responsibilities of medical personnel.

OA 2.673 COMPUTERIZED MEDICAL ACCOUNTS RECEIVABLE

(3 class hrs/wk 3 cr) W/Sp
Students will have hands-on experience with a computerized medical software program designed to manage accounts receivable and patient flow in a medical office or clinic.

OA 2.675 LEGAL PRACTICES, PROCEDURES AND TERMINOLOGY I

(4 class hrs/wk 3 cr) Sp
Introduction to law office procedures, responsibilities, and standards of a legal secretary including work ethics, analytical and organizational skills, written communications and daily law office routines. Topics presented include qualifications, ethics, teamwork, calendaring and docketing, correspondence, records management, general legal documents, court structure and procedures, Oregon rules of civil procedure and Oregon statutes, civil practice and procedure overview, notary public, bankruptcy. Prerequisite: OA 121 Keyboarding or equivalent.

OA 2.676 LEGAL PRACTICES, PROCEDURES AND TERMINOLOGY II

(4 class hrs/wk 3 cr) F
Continuation of legal practices and procedures and the legal secretary's role. Topics presented include personal and real property, corporations and other businesses, family law (including divorce, mediation and adoptions), estate planning and probate, civil procedures and litigation, criminal procedures and litigation, legal reference materials and citations. Students prepare documents, applying and practicing what has been learned. Prerequisites: OA 2.588 Editing Skills for Information Processing; OA 122 Formatting; OA 201 WordPerfect for Business or OA 202 MS Word for Business.

OA 2.682 DESKTOP PUBLISHING

(4 class hrs/wk 3 cr) Sp
Extends traditional word processing to encompass the use of page-layout of documents for the office. Students work with presentation software and PageMaker. Includes designing forms. Prerequisite: OA 201 WordPerfect for Business or OA 202 MS Word for Business.

OA 2.683 COMPUTERIZED RECORDS MANAGEMENT

(4 class hrs/wk 3 cr) W
The course will introduce students to filing and database management (manually using the ARMA simplified rules and electronically using MS Word or WordPerfect word processing programs). The fundamentals of managing all phases of the records life cycle will be explored. Prerequisites: OA 2.652 Filing, OA201 WordPerfect for Business, or OA 202 MS Word for Business.

PE.....Physical Education

PE 131 INTRODUCTION TO HEALTH AND PHYSICAL EDUCATION

(3 class hrs/wk 3 cr) F
Surveys professional opportunities in the area of Health and Physical Education. A basic philosophy of physical education and health is provided as well as objectives. Qualifications of a variety of related occupations are discussed. This is a required course for all Physical Education and Health majors.

PE 180B ADVANCED BASKETBALL: WOMEN

(3 class hrs/wk 1 cr) F/W/Sp
Prepares the student for competition at the intercollegiate level. Note: Requires five meetings a week plus participation in 30 games. Prerequisite: Instructor approval.

PE 180C BASKETBALL SKILLS: WOMEN

(3 class hrs/wk 1 cr) F/W
Provides opportunity for refinement and improvement of fundamental skills. Intercollegiate activity.

PE 180G ADVANCED VOLLEYBALL: WOMEN

(3 class hrs/wk 1 cr) F
Prepares students for competition at the intercollegiate level. Emphasizes the development of skills for competitive play. Prerequisite: Instructor approval.

PE 1851 BEGINNING VOLLEYBALL

(3 class hrs/wk 1 cr) F/W/Sp
Introduces the skills and techniques basic to volleyball, including different offensive and defensive forms of team play, strategies, etiquette and rules of the game.

PE 1851 INTERMEDIATE VOLLEYBALL

(3 class hrs/wk 1 cr) F/W/Sp
Emphasizes increasing a player's abilities within a team situation. Designed for the player who has mastered beginning volleyball skills.

PE 1851 ADVANCED VOLLEYBALL

(3 class hrs/wk 1 cr) F/W/Sp
Increases skill levels and mental strategies, with emphasis on increasing a player's abilities within a team situation.

PE 1852 WALK FOR HEALTH

(3 class hrs/wk 1 cr)
Emphasizes aerobic activity with a balance of stretching and strengthening activities. Instruction focuses on fitness walking mechanics, physiological effects of cardiovascular activity and important equipment.

PE 1854 ADVANCED WEIGHT TRAINING

(3 class hrs/wk 1 cr)
Provides instruction and practices in conditioning programs specific to sports participation.

PE 1855 RELAXATION AND MASSAGE

(3 class hrs/wk 1 cr) F/W/Sp
Provides individual skill practice in relaxation techniques that produce a physiological response to stress relief.

PE 1856 SKIING

(8 class hrs/wk 1 cr) W
Provides opportunity for students to have on-slope instruction at local ski facility by ski instructors. Note: Eight-week class.

PE 1856 SKI CONDITIONING

(3 class hrs/wk 1 cr) F
Improves personal fitness specifically for downhill and cross country skiing. Instruction in aerobic fitness, strength and flexibility exercises are included.

PE 1857 INTERMEDIATE BASKETBALL

(3 class hrs/wk 1 cr) F/W/Sp
Emphasizes basketball conditioning, skill development and game situations. Features game format.

PE 1857 ADVANCED BASKETBALL

(3 class hrs/wk 1 cr) F/W/Sp
Provides the recreational player additional opportunity for skill development. Features game format.

PE 1859 EARLY BIRD FITNESS

(3 class hrs/wk 1 cr)
Development of total body fitness, incorporating muscular strength, aerobic conditioning, flexibility, nutrition and exercises that help reduce body fat and provide toning, strength and stress release.

PE 185A AEROBIC WEIGHT TRAINING

(3 class hrs/wk 1 cr) F/W/Sp/Su
Provides a structured and uplifting circuit training activity to improve overall fitness levels.

PE 185B BEGINNING WATER AEROBICS

(3 class hrs/wk 1 cr) F/W/Sp
Designed to develop total body tone, strengthening and firming of stomach, legs, hips, thighs, arms and upper body. Exercises include stretching and flexibility, cardiovascular warm-up and muscle toning.

PE 185B INTERMEDIATE WATER AEROBICS

(3 class hrs/wk 1 cr) F/W/Sp
Designed to improve cardiovascular fitness through an individual water workout program.

PE 185F BEGINNING BOWLING

(3 class hrs/wk 1 cr) W
Stresses bowling fundamentals. Provides basic foundation from which students may progress to advanced bowling skills.

PE 185F INTERMEDIATE BOWLING

(3 class hrs/wk 1 cr) W
Increases skills and techniques of bowling. Rules and courtesies of the game as well as social and recreational value to the student are stressed.

PE 185F ADVANCED BOWLING

(3 class hrs/wk 1 cr) W
Continues the emphasis on increasing the student's bowling skills and techniques. Rules and courtesies of the game as well as social and recreational value to the student are stressed.

PE 185G BODY CONDITIONING

(3 class hrs/wk 1 cr) F/W/Sp
Provides instruction and practice in exercises that condition the body. Develops a level of strength, flexibility and endurance that enables students to maintain an erect carriage, complete their work, participate in active recreation and possess a reserve of energy.

PE 185H BODY TONING

(3 class hrs/wk 1 cr) F/W/Sp
Provides instruction to develop total body tone, including strengthening and firming of stomach, legs, hips, thighs, arms and upper body.

PE 185I COUNTRY DANCE

(3 class hrs/wk 1 cr)
Introduces students to a variety of country dances, including sequenced "line" dances, as well as various steps and rhythms. The Texas Two-Step, the Waltz and several other dances are featured along with various dance techniques. Students are expected to dance.

PE 185J BEGINNING AEROBIC DANCE

(3 class hrs/wk 1 cr)
Provides an exercise program choreographed to music and designed to tone, trim and firm all body muscle groups as it strengthens and conditions the cardiovascular system.

PE 185J INTERMEDIATE AEROBIC DANCE

(3 class hrs/wk 1 cr)
Provides an exercise program choreographed to music and designed to tone, trim and firm all body muscle groups as it strengthens and conditions the cardiovascular system.

PE 185K BEGINNING STEP AEROBICS

(3 class hrs/wk 1 cr) F/W/Sp
Introduces students to stepping techniques, including proper and safe movement on and off the bench. Students increase their skill level to enter step classes offered at any level. Students also build on all stepping techniques, including "adding-on" to patterns and transitioning into new combinations.

PE 185K INTERMEDIATE STEP AEROBICS

(3 class hrs/wk 1 cr) F/W/Sp
Designed to meet the needs of experienced step aerobic participants. Students learn to execute more advanced combinations, plus improve their fitness level by learning power moves designed to increase the intensity level of their workout.

PE 185K Step Aerobics/Slide

(3 class hrs/wk 1 cr) F/W/Sp
Provides the student with the techniques of step slide training. This includes benefits, safety precautions, and specific fitness principles.

PE 185M BEGINNING GOLF

(3 class hrs/wk 1 cr) F
Introduces the mental and physical needs involved in golf, including grip, stance, swing techniques, rules, strategy and etiquette.

PE 185M INTERMEDIATE GOLF

(3 class hrs/wk 1 cr) W/Sp
Provides a more detailed presentation of golf techniques and strategy to improve and correct basic swing errors.

PE 185M ADVANCED GOLF

(3 class hrs/wk 1 cr) W/Sp
Provides a detailed presentation of golf technique and strategy to improve and correct basic swing errors. Also includes on-course play.

PE 185P JOGGING

(3 class hrs/wk 1 cr) F/Sp
Provides instruction and practice in jogging to increase maximum amount of oxygen that the body can process in a given time.

PE 185Q BEGINNING KARATE

(2-3 class hrs/wk 1 cr) F/W/Sp
Introduces basic Tae Kwon Do (Korean Karate). Includes blocks, kicks, punches, forms and some freestyle. Emphasizes establishing and maintaining good body condition.

PE 185Q INTERMEDIATE KARATE

(3 class hrs/wk 1 cr) F/W/Sp
Teaches Karate skills in blocking, kicking, punches and forms. Emphasizes body condition and physical fitness. Prerequisite: Basic skills acquired in TAE Kwon Do or Beginning Karate course, or instructor approval.

PE 185S BEGINNING SCUBA

(4 class hrs/wk 2 cr)
Provides instruction in the use of self-contained underwater breathing apparatus (SCUBA). Includes five academic (classroom) modules, five confined water (pool) modules and four open-water dives to certify students as a PADI Open Water Scuba Diver.

PE 185T FLAG FOOTBALL

(3 class hrs/wk 1 cr) F
Develops the skills fundamental to flag football. Note: Organization of class depends upon skill level.

PE 185U SAND VOLLEYBALL

(3 class hrs/wk 1cr)
Introduces skills and techniques to basic and intermediate sand volleyball, including different offensive and defensive formats of team play, strategies, and etiquette of the game.

PE 185W SOFTBALL

(3 class hrs/wk 1 cr) Sp
Provides instruction and experience in fundamental softball skills, as well as providing game experience. Emphasizes slow pitch rather than fast pitch style of play.

PE 185Y BEGINNING TENNIS

(3 class hrs/wk 1 cr) F/Sp
Provides instruction and practice in rules, etiquette, grip, stance, forehand and backhand drives, service, volley, lob, overhead smash, receiving, playing position and class play, and game strategy for both singles and doubles.

PE 185Y INTERMEDIATE TENNIS

(3 class hrs/wk 1 cr) F/Sp
Covers advanced tennis strategies and skills.

PE 185Y ADVANCED TENNIS

(3 class hrs/wk 1 cr) F/Sp
Prepares students for competition, emphasizing development of skills for competitive play.

PE 185Z ADVANCED TRACK

(3 class hrs/wk 1 cr) W/Sp
Provides individualized practice in and concentration on developing skills and techniques in selected track and field events.

PE 185Z TRACK SKILLS

(3 class hrs/wk 1 cr) F/W/Sp
Provides individualized practice in and concentration on developing skills and techniques in selected track and field events.

PE 185Z TRACK CONDITIONING

(3 class hrs/wk 1 cr) F/W/Sp
Provides physical training and skill development for competitive track and field.

PE 190A BASEBALL CONDITIONING

(3 class hrs/wk 1 cr) W
Emphasizes physical conditioning that develops strength and agility for better efficiency in baseball skills. Team concepts are taught through offensive and defensive strategies to improve team play.

PE 190B BASEBALL SKILLS: HITTING AND PITCHING

(3 class hrs/wk 1 cr) W
Enables student to refine basic baseball skills in hitting, pitching and catching. Provides instruction and practie in team offensive hitting concepts and pitching philosophies.

PE 190C BEGINNING BASEBALL

(3 class hrs/wk 1 cr) F
Introduces fundamental baseball skills. Includes some conditioning. Learning is enhanced through scrimmage format.

PE 190D ADVANCED BASEBALL

(3 class hrs/wk 1 cr) Sp
Prepares students for intercollegiate competition in baseball.

PE 190E BASEBALL CONDITIONING AND HITTING

(3 class hrs/wk 1 cr)
Refine students baseball hitting skills through the use of hitting theory and power hitting circuits. Helps students recognize and prescribe remedies for common hitting faults through video taping.

PE 190H ADVANCED BASKETBALL: MEN

(3 class hrs/wk 1 cr) F/W/Sp
Prepares the student for competition at the intercollegiate level. Note: Requires five meetings a week plus participation in 30 games. Prerequisite: Instructor approval.

PE 190J BASKETBALL CONDITIONING

(3 class hrs/wk 1 cr) F
Prepares the student for competition at the intercollegiate level.

PE 190K BASKETBALL SKILLS: MEN

(3 class hrs/wk 1 cr) W
Prepares students for competing at the intercollegiate level. Continues improvement on conditioning, plus development of on-court skills. Prerequisite: Instructor approval.

PE 194A PROFESSIONAL ACTIVITIES: BASKETBALL/ VOLLEYBALL

(4-6 class hrs/wk 2 cr)
Basketball: Provides technical information for prospective basketball instructors. Presents classroom techniques and teaching strategies in the area of basketball.
Volleyball: Provides technical information on how to perform individual skills, offensive and defensive styles, and strategies of play and practical experience for prospective teachers of physical education.

PE 194C PROFESSIONAL ACTIVITIES: GOLF/TENNIS

(4-6 class hrs/wk 2 cr)
Golf: Provides prospective physical education teachers with a framework for golf instruction. Includes lecture, skill development, strategies and course play.
Tennis: Provides prospective physical education instructors a working knowledge of tennis fundamentals and strategies. Combines both lecture and on-court activities.

PE 194E PROFESSIONAL ACTIVITIES: SWIMMING

(4-6 class hrs/wk 2 cr)
Provides prospective physical education instructors knowledge and skills to teach, effectively and safely, basic swimming skills. Includes lecture and in-water skill instruction.

PE 194F PROFESSIONAL ACTIVITIES: TRACK

(4-6 class hrs/wk 2 cr)
Provides prospective physical education teachers a 12-week class that includes technical information and learn-by-doing activities for all track and field events.

PE 194H PROFESSIONAL ACTIVITIES: WEIGHT TRAINING/ AEROBIC FITNESS

(4-6 class hrs/wk 2 cr)
Weight Training: Provides technical and in-depth information for students seeking a future in teaching weight training. Includes lecture on and participation in weight training.
Aerobic Fitness: Provides prospective physical education instructors with the knowledge and skills to teach effectively various forms of aerobic fitness. Emphasizes areas such as aerobic dance, step aerobics and water aerobics. Includes lecture and aerobic activity.

PE 194J PROFESSIONAL ACTIVITIES: RACQUET GAMES

(4-6 class hrs/wk 2 cr)
Provides technical and in-depth information for students seeking a future in teaching indoor racquet activities.

PE 194K DEFENSIVE TACTICS

(3 class hrs/wk 2 cr)
Comprehensive plan of instruction in legal responsibilities, use of force, defensive and offensive defense tactics and correct search procedures. Students are required to participate in both lecture and lab exercises.

PE 199 ATHLETIC ORIENTATION

(1 class hrs/wk 1 cr)
Introduces students to a wide variety of information as it relates to athletics and the various problems students face as participants.

PE 207 SPORTS OFFICIATING

(3 class hrs/wk 2 cr)
Studies the organization and techniques of officiating sports. Comprehensive instruction in rules, officiating technique, scoring and practice experience.

PE 231 LIFETIME WELLNESS

(3 class hrs/wk 3 cr) F/W/Sp/Su
Evaluates the present status of the student's total wellness level. Provides an exercise prescription and information on nutrition, stress management and psychological health. Prepares the student to enter the worksite as a healthy individual and to maintain this wellness level.

PE 232 BACKPACKING: MAP AND COMPASS SKILLS

(3 class hrs/wk 3 cr)
Prepares the individual for safe, challenging and enjoyable wilderness trips. Emphasizes physical conditioning, equipment, clothing, food, safety and the use of map and compass.

PE 259 CARE AND PREVENTION OF ATHLETIC INJURIES

(3 class hrs/wk 3 cr)
Studies techniques for preventing and treating high-incidence injuries in physical education and sports activities. Gives special attention to injuries common to school-age population. For those interested in coaching, athletic training and physical therapy.

PE 280A CWE PHYSICAL EDUCATION

(6-42 class hrs/wk 2-14 cr) F/W/Sp/Su
An instructional program designed to give students practical experience in supervised employment related to physical education. Students identify job performance objectives, work a specified number of hours during the term, and attend a related CWE seminar. Note: Credits are based on identified objectives and number of hours worked. Prerequisite: CWE coordinator approval.

PE 280B CWE RECREATION

(6-42 class hrs/wk 2-14 cr) F/W/Sp/Su
An instructional program designed to give students practical experience in supervised employment related to recreation. Students identify job performance objectives, work a specified number of hours during the term, and attend a related CWE seminar. Note: Credits are based on identified objectives and number of hours worked. Prerequisite: CWE coordinator approval.

PE 291 LIFEGUARD TRAINING

(6 class hrs/wk 2 cr) F/Sp
Provides the necessary minimum skills training for a person to qualify to serve as a non-surf guard. Note: Six-week class.

PE 292 WATER SAFETY INSTRUCTION

(6 class hrs/wk 2 cr) F/Sp
Trains individuals to teach all the basic swimming and water safety classes of the American Red Cross. Note: Six-week class.

PH.....Physics

● PH 201, 202, 203 GENERAL PHYSICS

(7 class hrs/wk 5 cr) F/W/Sp
College-level course for students planning to transfer to a four-year college or university. *PH 201:* motion, forces, momentum, energy, fluids. *PH 202:* heat, vibrations, wave motion, sound, electricity. *PH 203:* magnetism, optics, atomic and nuclear physics, special relativity. Note: Must be taken in sequence. Calculator with trigonometric, logarithmic and scientific notation functions required. Experience with computer spreadsheet and word processing software is helpful but not required. Prerequisites to PH 201: MTH 111 College Algebra, MTH 112 Trigonometry. Prerequisite to PH 202: PH 201 General Physics. Prerequisites to PH 203: PH 201, 202 General Physics.

● PH 211, 212, 213 GENERAL PHYSICS WITH CALCULUS

(7 class hrs/wk 5 cr) F/W/Sp
Presents calculus-based principles of physics for students in science and engineering. PH 211 — measurement, vectors, Newton's law of motion, center of mass, gravitation, linear forces, momentum, energy and work, rotational motion, angular momentum, fluid and solid mechanics; PH 212 — fluid mechanics, harmonic motion, waves, sound, thermodynamics, static and direct current electricity, Coulomb's law; PH 213 — alternating current electricity, magnetism, induced emf, inductance, LC oscillations, LRC circuit, Maxwell's equations, Hall effect, law of Biot and Sarat, Ampre's law, magnetic dipole, Faraday's law, Lenz's law, electromagnetic waves, light, optics, diffraction. Note: Must be taken in sequence. Calculator with trigonometric, logarithmic, scientific notation and linear regression functions required. Experience with computer spreadsheet and word processing software is helpful but not required. Prerequisite to PH 211: MTH 252 Calculus; Corequisite to PH 211: MTH 253 Calculus. Prerequisites to PH 212: PH 211 General Physics; MTH 253 Calculus. Prerequisites to PH 213: PH 211, PH 212 General Physics; MTH 253 Calculus.

PHL.....Philosophy

PHL 198 INDEPENDENT STUDIES

(1 class hr/wk 1 cr)
Offers selected philosophy topics for independent research. Prerequisite: Instructor approval.

➤ PHL 201 INTRODUCTION TO PHILOSOPHY

(3 class hrs/wk 3 cr)
Introduces the philosophical task, the major areas of philosophical speculation and the role critical thinking plays in everyday life.

➤ PHL 202 ELEMENTARY ETHICS

(3 class hrs/wk 3 cr)
Develops the idea of humans as moral agents and considers critically various interpretations of the ideals and standards of moral conduct.

➤ PHL 215 HISTORY OF WESTERN PHILOSOPHY

(3 class hrs/wk 3 cr) Sp
Studies Western philosophy from the ancient Greeks to the 20th century.

PHL 298 INDEPENDENT STUDY: LOGIC

(1 class hr/wk 1 cr)
Offers individual study of patterns of logic, rules of inference through formalized logical language and techniques of deductive and predicate logic.

PHO.....Photography

PHO 198 INDEPENDENT STUDIES

(2-6 class hrs/wk 1-3 cr) F/W/Sp
Offers individual instruction in advanced problems relevant to the student's interest and needs. Prerequisite: Instructor approval.

PHO 261 INTRODUCTION TO PHOTOGRAPHY

(4 class hrs/wk 3 cr) F/W/Sp
Introduces principles of photography, including exposure, camera handling, natural and artificial lighting, composition, developing and printing black-and-white, history and current applications. Limited number of cameras available for checkout. Lab work included.

PHO 262 INTERMEDIATE PHOTOGRAPHY

(4 class hrs/wk 3 cr) Sp
Studies advanced black-and-white darkroom techniques with fibre papers, including archival processing; fine printing controls; use of toners, bleaches and intensifiers; mounting and presentation methods; the Zone System of exposure; and other fine art photography techniques. Lab work included. Prerequisite: PHO 261 Introduction to Photography or instructor approval.

PHO 263 COLOR PHOTOGRAPHY

(4 class hrs/wk 3 cr) F
Introduces color theory and practice, including exposure and processing of color negative and positive films, printing from negatives and slides, color balance and composition, and alternative processes. Lab work included. Prerequisite: PHO 261 Introduction to Photography or instructor approval.

PS.....Political Science

■ PS 104 PROBLEMS IN AMERICAN POLITICS

(3 class hrs/wk 3 cr)
Explores current policy issues in American politics, which may range from international to national to local topics. Examples include unemployment, military affairs, civil rights and education.

PS 198 RESEARCH TOPICS

(1 class hr/wk 1 cr)
Examines in-depth selected political science topics for independent research. Corequisite: WR 123 English Composition.

■ PS 200 INTRODUCTION TO POLITICS

(3 class hrs/wk 3 cr)
Basic introduction to the central themes and fundamental issues of political life. Examines the nature and meaning of politics; relation between politics and society and politics and economics; the basic concepts associated with the organization and operation of different systems of government; and the major political ideologies of the modern world: liberal-capitalism, socialism, communism, fascism.

■ PS 201 INTRODUCTION TO AMERICAN POLITICS AND GOVERNMENT

(3 class hrs/wk 3 cr)
Introduces and analyzes American politics. Studies the development of American national government, the character of American political thought and the relationship between democracy and capitalism. Includes case studies of Federalism, corporate welfare, and environmental regulation debates.

■ PS 203 STATE AND LOCAL GOVERNMENT: POLITICS IN OREGON

(3 class hrs/wk 3 cr) C
General introduction to the role, organization and functions of government at the state and local level in the United States. Special emphasis will be placed on the use of Oregon state and local government as a source of examples and case studies.

■ PS 204 INTRODUCTION TO COMPARATIVE POLITICS

(3 class hrs/wk 3 cr)
Major governmental, economic and social concepts applied comparatively to a variety of political settings including the United States, Western Europe, former communist states and developing nations. Emphasizes political analysis, including the comparative study of political behavior, institutions and social movements.

■ PS 205 INTRODUCTION TO INTERNATIONAL RELATIONS

(3 class hrs/wk 3 cr)
Analysis of the international system and factors affecting world politics. Focuses on current world events. Topics include problems of poverty and economic development, imperialism, environmental and resource issues, and current international conflicts and sources of war and peace.

■ PS 220 U.S. FOREIGN POLICY

(3 class hrs/wk 3 cr)
Analyzes selected U.S. foreign policy problems and experiences through case studies. Places foreign policy in the perspective of history and the context of international political, economic and strategic issues. Explores the diversity of perceptions about U.S. foreign relations. Note: Course is offered alternate years only.

■ PS 240 INTRODUCTION TO PUBLIC POLICY

(3 class hrs/wk 3 cr)
If politics is the *process* by which the government makes key decisions, *policy* is the result of those decisions. This is a course in public policy: what the American government says and does about the nation's problems and how effective it is in tackling the most important problems facing the United States. Topics include: economic, welfare, environmental and defense policy.

■ PS 252 CONSTITUTIONAL LAW

(3 class hrs/wk 3 cr)
Introduction to the basic principles of the U.S. Constitution with emphasis on leading Supreme Court cases in civil liberties and civil rights. Focus is on current constitutional controversies including: privacy rights, school choice, government regulation of private property, school prayer, search and seizure, and free speech and press.

PS 280 CWE POLITICAL SCIENCE

(6-42 class hrs/wk 2-14 cr) F/W/Sp/Su
An instructional program designed to give students practical experience in supervised employment related to political science. Students identify job performance objectives, work a specified number of hours during the term, and attend a related CWE seminar. Note: Credits are based on identified objectives and number of hours worked. Prerequisite: CWE coordinator approval.

PSY.....Psychology

■ PSY 101 PSYCHOLOGY AND HUMAN RELATIONS

(3 class hrs/wk 3 cr) F/W
Focuses on the practical application of psychology to relations with people in everyday situations. Topics include self-concept, social perception, emotions, needs, values, healthy relationships, interpersonal communications, conflict and behavioral change.

PSY 198 INDEPENDENT STUDIES: RESEARCH TOPICS

(1 class hr/wk 1 cr)
Provides in-depth examination of a selected psychological topic to develop skills in independent research. Intended primarily for the psychology major. Prerequisite: WR 123 English Composition. Corequisite: PSY 203 General Psychology to be taken prior to or concurrently with PSY 198.

■ PSY 200 PSYCHOLOGY AS A NATURAL SCIENCE

(4 class hrs/wk 4 cr)
Surveys the theories and principles of the psychology of individual development. Includes discussion of the scientific method, history of psychology, biological bases of behavior, sensation, perception, consciousness, motivation, emotion, cognitive development, learning, memory and intelligence.

■ PSY 203 GENERAL PSYCHOLOGY

(3 class hrs/wk 3 cr)
Describes individual differences and methods of measurements. Discusses personality theory, conflict and stress, and abnormal and social psychology. PSY 203 is being offered to serve students who have completed PSY 201 and PSY 202 and plan to complete the sequence. PSY 203 will only be offered Fall Term 1996. All new students should begin in PSY 200 or PSY 205.

■ PSY 205 PSYCHOLOGY AS A SOCIAL SCIENCE

(4 class hrs/wk 4 cr)
Surveys theories and principles of social psychology. Includes discussion of psychosocial development, gender development, personality, stress, psychopathology and psychotherapy, attitudes and social behavior.

■ PSY 212 PSYCHOLOGY OF LEARNING

(3 class hrs/wk 3 cr)
Studies the development of learning theory in humans and animals. Topics include: classical conditioning, conditioned and unconditioned stimuli, conditioned and unconditioned responses, discrimination, generalization, operant conditioning, social learning theory, social cognitive learning theory, memory acquisition, extinction, spontaneous recovery, reinforcement, punishment, shaping, schedules of reinforcement, latent learning and modeling.

■ PSY 215 INTRODUCTION TO DEVELOPMENTAL PSYCHOLOGY

(3 class hrs/wk 3 cr)
Outlines cause of psychological/physical development from conception to death. Emphasizes how and why human beings change (or remain the same) from their beginnings to their last years of life.

■ PSY 219 INTRODUCTION TO ABNORMAL PSYCHOLOGY

(3 class hrs/wk 3 cr)
This course will discuss theories, diagnosis, and treatment of the major psychopathological syndromes. Specific disorders such as anxiety, depression, schizophrenia, psychophysiological disorders, personality disorders, and sexual variations and dysfunctions will be covered.

■ PSY 231 HUMAN SEXUALITY

(3 class hrs/wk 3 cr)
Discusses the biological, social and psychological aspects of human sexual functioning. Emphasizes sexual response patterns, sexual attitudes, sexual myths and fallacies.

■ PSY 235 HUMAN DEVELOPMENT: CHILD

(3 class hrs/wk 3 cr)
Discusses theoretical perspectives and social, physiological and psychological forces that impact on the stages of development from conception to puberty.

■ PSY 236 HUMAN DEVELOPMENT: ADULT

(3 class hrs/wk 3 cr)
Introduces human development through theoretical perspectives and social, physiological and psychological forces that impact on the stages of development from adolescence to old age.

■ PSY 237 HUMAN DEVELOPMENT: AGING

(3 class hrs/wk 3 cr)
Emphasizes adult development from a multi-disciplinary perspective, focusing on issues and transitions of later life. Includes biological/psychological aging, health issues, patterns of successful aging, grandparenthood and kinship relations.

PSY 280 CWE PSYCHOLOGY

(6-42 class hrs/wk 2-14 cr) F/W/Sp/Su
An instructional program designed to give students practical experience in supervised employment related to psychology. Students identify job performance objectives, work a specified number of hours during the term, and attend a related CWE seminar. Note: Credits are based on identified objectives and number of hours worked. Prerequisite: CWE coordinator approval.

R.....Religion

➤ R 101 INTRODUCTION TO RELIGIOUS STUDIES

(3 class hrs/wk 3 cr)
Examines the nature of religion as experienced historically and globally. Explores the nature of religious experience and the divine; the compatibility of science and religion; and the nature of religious language, myth and symbol.

➤ R 102 RELIGIONS OF WESTERN WORLD

(3 class hrs/wk 3 cr)
Investigates religion in the Western World. Includes discussion of Judaism, Christianity and Islam. Focuses on how the outward forms of religious expression integrate with other cultural traditions.

➤ R 103 RELIGIONS OF EASTERN WORLD

(3 class hrs/wk 3 cr)
Investigates religion in the Eastern World. Includes discussion of Hinduism, Buddhism and Taoism. Focuses on how the outward forms of religious expression integrate with other cultural traditions.

R 198 INDEPENDENT STUDIES: RESEARCH TOPICS

(1-3 class hrs/wk 1-3 cr)
Offers selected topics of study in religion with individual research and/or field study. Corequisite: WR 123 English Composition.

➤ R 211 THE OLD TESTAMENT: HISTORICAL BACKGROUND

(3 class hrs/wk 3 cr)
Describes the history and culture of the Hebrew people, including conditions affecting the production of the Old Testament.

➤ R 212 THE NEW TESTAMENT: HISTORICAL BACKGROUND

(3 class hrs/wk 3 cr)
Discusses the historical developments of the New Testament, including development of Christianity and its significance in human experience.

RD.....Reading

RD 103 COLLEGE READING

(3 class hrs/wk 3 cr) F/W/Sp/Su
Develops skills for students with average reading skills who need to improve their efficiency to cope successfully with college reading materials. Improves comprehension, builds vocabulary and increases reading speed. Note: A minimum competency is required to pass this course. Prerequisite: Placement is made by test results.

RD 120 CRITICAL READING AND THINKING

(3 class hrs/week 3 cr) F/W/Sp
Develops higher level reading skills for students who want to develop the more advanced reading and critical thinking skills. Improves analytical and inferential comprehension skills and critical thinking, builds vocabulary and increases reading rate. Note: A minimum competency is required to pass this course. Prerequisite: Placement is made by test results.

RD 1.175 READING IMPROVEMENT I

(3 class hrs/wk 3 cr) F/W/Sp/Su
Develops fundamental reading skills for students who experience severe difficulty when attempting to read college textbooks. Improves comprehension, builds vocabulary and increases reading speed. Note: A minimum competency is required to pass this course. Prerequisite: Placement is based on test results.

RD 1.176 READING IMPROVEMENT II

(3 class hrs/wk 3 cr) F/W/Sp/Su
Develops fundamental reading skills for students who have considerable difficulty when attempting to read college textbooks. Improves comprehension, builds vocabulary and increases reading speed. Note: A minimum competency is required to pass this course. Prerequisite: Placement is based on test results.

RH.....Refrigeration, Heating and Air Conditioning

RH 3.527 ALTERNATIVE ENERGY SOURCES

(3 class hrs/wk 3 cr) F
Introduces students to traditional energy usage, energy conservation and the supplemental role alternative sources play today and in the future. Energy sources, such as nuclear, hydroelectric, solar, wind and biomass, are evaluated for their potential use.

RH 3.542 RHAC GRAPHICS

(2 class hrs/wk 2 cr) Sp
Covers job-related skills in interpreting trade drawings and plans for installing and servicing commercial installations and domestic appliances.

RH 3.552 TRADE AND ELECTRICAL COMPONENTS I

(4 class hrs/wk 3 cr) F
Basic course emphasizing specific trade applications of electricity and electrical components for refrigeration, heating and air conditioning. Safety, basic function and application of individual components and equipment are covered.

RH 3.553 TRADE AND ELECTRICAL COMPONENTS II

(4 class hrs/wk 3 cr) W
Continues the application of the various components used in refrigeration, heating and air conditioning. Lab classes include wiring required circuits and extensive use of test meters.

RH 3.580 INTRODUCTION TO REFRIGERATION/HEATING/AIR CONDITIONING

(9 class hrs/wk 6 cr) F
Covers the history of refrigeration; types of jobs available; safety, theory and terminology; soldering and brazing skills; tools; and basic operations within the industry.

RH 3.583 PRINCIPLES OF REFRIGERATION

(9 class hrs/wk 6 cr) W
Includes refrigeration system component operations and assembling, evacuation and charging techniques. Domestic refrigeration equipment repair and testing also are emphasized.

RH 3.584 SHEET METAL BASICS

(6 class hrs/wk 4 cr) W
Introduces sheet metal design and layout of fittings. Students master the use of hand tools and machine forming to construct fittings for HVAC installation.

RH 3.585 PRINCIPLES OF HEATING

(9 class hrs/wk 6 cr) Sp
Helps students gain experience, through lecture and related laboratory projects, in the latest technology in installing, maintaining, troubleshooting and repairing heating systems.

RH 3.587 OPERATION PRINCIPLES OF AIR CONDITIONING

(9 class hrs/wk 6 cr) W
Introduces the uses of conditioned air and psychometrics in the air conditioning industries. Principles of air movement, total body comfort, air distribution systems, heating and cooling load calculations, and air balancing are covered.

RH 3.588 PNEUMATIC CONTROLS

(6 class hrs/wk 4 cr) F
Covers the design, application, terminology and maintenance of pneumatic control systems and components. Specialized pneumatic control tools and theory relating to the heating, ventilating and air conditioning trade are stressed.

RH 3.589 DIAGNOSIS, SERVICE AND REPAIR

(9 class hrs/wk 6 cr) F
Covers the domestic and commercial applications in refrigeration, heating and air conditioning systems. Customer relations, related paperwork and electrical troubleshooting skills also are emphasized.

RH 3.590 CONTROL APPLICATION

(6 class hrs/wk 4 cr) W

Examines the installation and operation of refrigerant controls and electrical controls used in the refrigeration and air conditioning industry. Practical application of electrical control circuitry is covered.

RH 3.591 COMMERCIAL AND INDUSTRIAL REFRIGERATION

(9 class hrs/wk 6 cr) Sp

Introduces commercial and industrial refrigeration systems and control circuits through lecture, lab and field trips. Absorption and centrifugal chiller theory is covered. Electrical and mechanical troubleshooting is emphasized.

RH 3.592 SYSTEMS DESIGN

(6 class hrs/wk 4 cr) Sp

Covers designing, choosing equipment, drawing and installing various heating systems, including load calculations and pipe sizing.

SD.....Supervisory Management

SD 101 SUPERVISION: FUNDAMENTALS

(3 cr) F/Sp

Introduces students to current management theory in the areas of motivation, leadership, organization, planning and decision making. Also examines the skills necessary to be an effective supervisor and encourages students to evaluate their own leadership potential. In addition, the course looks at the changing focus of supervision within a diverse workplace.

SD 101A BECOMING A SUPERVISOR

(1 cr) F/Sp

A course for men and women who hope to acquire, will soon acquire or have recently acquired supervisory responsibilities. Discusses skills and abilities needed to be an effective supervisor as well as common problems experienced by new supervisors. Students explore ways to enhance their chances of being promoted to the supervisory level of management. Note: Three-week class.

SD 101B SUPERVISION: HUMAN BEHAVIOR

(1 cr) F/Sp

Discusses the "why" behind human behavior. Focuses on individual differences, attitude development, motivation and managing the difficult employee. Note: Three-week class.

SD 101C SUPERVISION: EFFECTIVE LEADERSHIP

(1 cr) F/Sp

Helps students develop their leadership potential. Explains "what the experts say" about leadership. Also covers key components of leadership: delegation, decision making and problem solving. Note: Three-week class.

SD 102 SUPERVISION: TECHNIQUES

(3 cr) F/W

The focus of this class is on the supervision skills that are used in effective communication, as well as organizational change and stress management. 102A explores communication with emphasis on interview techniques, listening skills and non-verbal communication. In 102B and 102C the students will also explore organizational change and stress management.

SD 102A EFFECTIVE COMMUNICATION

(1 cr) F/W

Provides an increased awareness of the role communication plays in effective supervision. Interviewing techniques, open and closed questioning, listening and non-verbal skills are examined.

SD 102B IMPROVING PRODUCTIVITY AND CHANGE

(1 cr) F/W

This class uses case studies and discussion to learn methods of supervising teams through the change process. In addition we learn new management techniques for improving productivity with emphasis on quality and customer service.

SD 102C STRESS AND TIME MANAGEMENT

(1 cr) F/W

Explores the relationship of conflict, stress and time management as they apply to the role of supervisor. Stress reduction and effective time management techniques are discussed as are ways of avoiding job burnout.

SD 103 ISSUES IN SUPERVISION

(3 cr) W/Sp

This class introduces students to the legal and ethical environment of supervision. Students will learn current employment regulations and appropriate methods of management to insure a legal and ethical work environment. The focus is on employee recruitment, appraisal, discipline, termination and conflict management.

SD 103A ETHICS AND LEGAL ISSUES IN SUPERVISION

(1 cr) W/Sp

This class covers employment law as it relates to supervision. The students will discuss sexual harassment, discrimination, affirmative action, drug and alcohol abuse and compliance with the Americans with Disabilities Act. Students will learn tactics for dealing with these issues in an effective, legal manner.

SD 103B HIRING PROCESS & PERFORMANCE APPRAISAL

(1 cr) W/Sp

Helps supervisors develop skillful interviewing and training techniques. Two areas of interviewing are stressed — job interviews and employee appraisal interviews. Effective methods of training and directing personnel are explored.

SD 103C COACHING & COUNSELING FOR SUPERVISORS

(1 cr) W/Sp

Teaches effective coaching and disciplining skills. Emphasizes the skills required for the supervisor of today to meet the challenges of tomorrow.

SD 104 SUPERVISION: APPLIED COMMUNICATIONS

(3 class hrs/wk 3 cr) F/Sp

Helps supervisors develop skills in making oral business presentations, conducting productive meetings and writing effective letters and reports.

SD 104A SUPERVISION: WRITTEN COMMUNICATION

(3 class hrs/wk 1 cr) F/Sp

Presents techniques for writing effective good news, bad news and persuasive letters. Explores techniques for writing effective business reports. Note: Three-week class.

SD 104B SUPERVISION: CONDUCTING A MEETING

(3 class hrs/wk 1 cr) F/Sp

Covers the skills necessary to conduct effective meetings, including planning the agenda, facilitating a productive meeting and follow-up. Note: Three-week class.

SD 104C SUPERVISION: BUSINESS PRESENTATION

(3 class hrs/wk 1 cr) F/Sp

Assists supervisors in effective oral business presentations. The effective use of visual aids and presentation techniques are explored. Note: Three-week class.

SD 280 CWE SUPERVISION

(6-42 class hrs/wk 2-14 cr) F/W/Sp/Su

An instructional program designed to give students practical experience in supervised employment related to supervisory management. Students identify job performance objectives, work a specified number of hours during the term, and attend a related CWE seminar. Note: Credits are based on identified objectives and number of hours worked. Prerequisite: CWE coordinator approval.

SOC.....Sociology

SOC 198 RESEARCH TOPICS

(1 class hr/wk 1 cr)

Requires an in-depth review of current knowledge about a sociological topic. Intended primarily for the sociology major to develop skills in independent research. Prerequisite: WR 123 English Composition.

■ SOC 204 GENERAL SOCIOLOGY

(3 class hrs/wk 3 cr)

Introduces the sociological perspective: the components of society and social organization, culture, socialization and stratification.

■ SOC 205 GENERAL SOCIOLOGY

(3 class hrs/wk 3 cr) F/W/Sp
Applies sociological perspectives to the study of social change and trends in family, religion, education, economics and politics.

■ SOC 206 GENERAL SOCIOLOGY

(3 class hrs/wk 3 cr)
Surveys social issues and movements. Stresses application of basic concepts to contemporary problems in group life.

■ SOC 211 SOCIOLOGY OF DEVIANCE AND SOCIAL CONTROL

(3 class hrs/wk 3 cr)
Three parallel intents have determined the contents and organization of this course: to present a comprehensive coverage of the major sociological theories of deviance; to show how these different perspectives might be brought together to obtain a more complete understanding of deviance causation; and to emphasize that the social processes that produce and maintain deviance are essentially the same ones that produce and maintain conformity.

■ SOC 222 MARRIAGE RELATIONSHIPS

(3 class hrs/wk 3 cr) F/W/Sp
Examines intimate relationships, courtship, marriage and family patterns -- old, new and unconventional. Focuses on how relationships are built, maintained, changed and terminated. Prerequisite: SOC 204 General Sociology or instructor approval.

SOC 280 CWE SOCIOLOGY

(6-42 class hrs/wk 2-14 cr) F/W/Sp/Su
An instructional program designed to give students practical experience in supervised employment related to sociology. Students identify job performance objectives, work a specified number of hours during the term, and attend a related CWE seminar. Note: Credits are based on identified objectives and number of hours worked. Prerequisite: CWE coordinator approval.

SP.....Speech

SP 111 FUNDAMENTALS OF SPEECH

(3 class hr/wk 3 cr) F/W/Sp/Su
Provides opportunities to prepare and present original speeches with emphasis on content, organization, audience adaptation, delivery and language.

SP 112 INTRODUCTION TO PERSUASION

(3 class hrs/wk 3 cr) F/W/Sp
Studies concepts and principles of persuasion through persuasive public speaking. Introduces the nature and logic of reasoning, propositions, issues, evidence and rational discourse in influencing attitudes or behavior. Also introduces speaker credibility, audience motivation, and use of language and delivery in persuasion.

SP 199 SPECIAL STUDIES IN SPEECH

(3-9 class hrs/wk 1-3 cr)
Offers individual and special studies arranged with an instructor. Note: May be repeated for a maximum of 9 credits.

SP 218 INTERPERSONAL COMMUNICATION

(3 class hrs/wk 3 cr) F/W/Sp/Su
Explores communication in various types of one-to-one relationships and develops skills essential for maintaining those associations. Competencies enhanced involve relational communication and self concept, perceptual understanding, gender and multicultural differences, verbal usage, nonverbal behavior, empathy in listening, self disclosure, development of a positive climate and conflict resolution.

SP 218B INTERPERSONAL COMMUNICATION–BUSINESS

(3 class hrs/wk 3 cr)
Explores one-to-one communication in business/workplace relationships and develops skills essential for maintaining those associations. Competencies enhanced involve building a positive workplace climate in relational communication and the effect on that climate of perceptual understanding, gender and multicultural differences, self worth, language usage, nonverbal behavior, empathy in listening, diffusing defensiveness and conflict resolution.

SP 219 SMALL GROUP COMMUNICATION

(3 class hrs/wk 3 cr) F/W/Sp
Investigates interaction at the small-group level. Many interesting aspects of group communication are experienced and explored. Both the process and dynamics of groups will be important, as well as group tasks and outcomes. Small-group communication is viewed from historical, sociological and cultural perspectives. Students gain insight as to the critical role groups and group communication plays in the structure and functioning of civilization.

SP 229 ORAL INTERPRETATION OF LITERATURE

(3 class hrs/wk 3 cr)
Offers instruction and practice in the oral presentation of various types of written literature, including poetry and prose.

SP 237 COMMUNICATION AND GENDER

(3 class hrs/wk 3 cr)
Investigates the impact of gender on communication, specifically looking at issues of conflict, decision making, leadership, non-verbal messages, language, power and interpersonal relationships.

SP 280 CWE SPEECH

(6-42 class hrs/wk 2-14 cr) F/W/Sp/Su
An instructional program designed to give students practical experience in supervised employment related to speech. Students identify job performance objectives, work a specified number of hours during the term, and attend a related CWE seminar. Note: Credits are based on identified objectives and number of hours worked. Prerequisite: CWE coordinator approval.

SP 1.103 OCCUPATIONAL SPEECH COMMUNICATION

(3 class hrs/wk 3 cr)
Emphasizes practical verbal communication skills for professional/technical students. Includes job search skills, practice in personal and workplace communication, and conflict resolution strategies.

SPN.....Spanish

SPN 101, 102, 103 FIRST-YEAR SPANISH I, II, III

(4 class hrs/wk 4 cr) F/W/Sp
Introduces Spanish, stressing speaking, reading and exercises in elementary composition. Must be taken in sequence, but entrance is permitted at any level.

SPN 111, 112, 113 BEGINNING SPANISH COMMUNICATION

(3 class hrs/wk 3 cr) W/Sp
Introduces the language and culture of Latin America and Spain through oral communication. Includes practice in idiomatic usage, vocabulary and aural comprehension.

➤ SPN 201, 202, 203 SECOND-YEAR SPANISH I, II, III

(4 class hrs/wk 4 cr) F/W/Sp
Presents intensive oral and written exercises designed to help the student acquire an accurate and fluent use of Spanish. Includes study of selections from representative authors. Note: Must be taken in sequence, but entrance permitted at any level. Prerequisite: SPN 103 First-Year Spanish or three years high school Spanish equivalent or instructor approval.

SPN 280 CWE SPANISH

(6-42 class hrs/wk 2-14 cr) F/W/Sp/Su
An instructional program designed to give students practical experience in supervised employment related to Spanish. Students identify job performance objectives, work a specified number of hours during the term, and attend a related CWE seminar. Note: Credits are based on identified objectives and number of hours worked. Prerequisite: CWE coordinator approval.

SS.....Study Skills

SS 1.125 STUDY SKILLS

(3 class hr/wk 3 cr) F/W/Sp/Su
Provides students the study skills needed to be successful students. Time management, listening and notetaking, reading and studying textbooks, using the library, preparing for examinations and taking examinations are among skills taught. These skills are taught in combination with understanding attitude, motivation, and student behavior. Prerequisite: Appropriate reading competence as indicated by college placement test.

SS 1.134 STUDY SKILLS: VOCATIONAL

(2-6 class hrs/wk 0-3 cr) F/W/Sp
Provides individualized instruction to develop specific skills in various vocational programs. The instruction is supplemental to the regular course offerings and does not substitute for that instruction. Diagnosis of deficiencies and interests of students determine level of instruction.

SS 1.150 TECHNIQUES OF STUDYING

(1 class hrs/wk 1 cr) F/W/Sp
Develops reading comprehension, vocabulary and study skills for students in designated programs. Emphasizes the materials used in the particular program.

SS 1.180 LECTURE READINESS/ STUDY PREPARATION

(6 class hrs .25 cr) F/W/Sp
Self-paced pre-notetaking mini-course. Prepares students for effective notetaking by providing an overview of concentration and pre-lecture preparation skills. Includes self-analysis of skills and problem solving for different classroom lecture situations.

SS 1.181 TAKING LECTURE NOTES

(15 class hrs .75 cr) F/W/Sp
Self-paced mini-course. Covers learning about effective listening techniques, outlining skills, and the Cornell method of notetaking and studying. Application activities reinforce concepts in each area.

SS 1.182 STUDYING NOTES/ MAPPING

(6 class hrs .25 cr) F/W/Sp
Self-paced mini-course. Introduces students to a variety of mapping models and their use. Presents reviewing and recitation strategies to improve retention of information from the student's notes. Explanation of skills and application practice are included.

SS 1.183A HOW TO READ A TEXTBOOK: PART 1

(10 class hrs .5 credit) F/W/Sp/Su
Self-paced mini-course. Subjects covered include reading for main ideas and learning organizational patterns. Students learn to determine the main idea of a paragraph by learning the differences between a topic sentence and a main idea. Students also are exposed to four major types of organizational patterns used by textbook authors. Students become better able to remember and understand textbook material.

SS 1.183B HOW TO READ A TEXTBOOK: PART 2

(10 class hrs .5 cr) F/W/Sp/Su
Self-paced mini-course. Prepares students to take textbook notes, including answering questions, outlining, mapping, underlining, and highlighting. Students also learn to review for short-term and long-term memory.

SS 1.183C HOW TO READ A TEXTBOOK: PART 3/ PSYCHOLOGY/SOCIOLOGY

(10 class hrs .5 cr) F/W/Sp/Su
Self-paced mini-course. Prepares students to begin reading textbooks more efficiently. Students learn to utilize aids and instructions provided by the author. Students also learn to establish a meaningful purpose for reading a textbook and to preview effectively for textbook content. Students practice skills through psychology or sociology texts.

SS 1.183D HOW TO READ A TEXTBOOK: PART 3/NURSING

(12 class hrs .5 cr) F/W/Sp/Su
Self-paced mini-course. Prepares students to read textbooks more efficiently. Students learn to utilize aids and instructions provided by the author. Students also learn to preview and to establish a purpose for reading the textbook. Students practice skills through use of the nursing text.

SS 1.184 TEST ANXIETY REDUCTION

(6 class hrs 0 cr) F/W/Sp
Self-paced mini-course. Assists students in understanding the nature of test anxiety and provides practice in relaxation and desensitization techniques. Students also learn methods of tension management to use before and during a test.

SS 1.184A STUDYING FOR TESTS

(15 class hrs .75 cr) F/W/Sp
Self-paced mini-course. Presents strategies for test preparation. Students learn how to anticipate course requirements and plan study time. The methods for identifying, organizing, and actively learning the important information in a course are taught.

SS 1.184B TEST-TAKING TIPS

(6 class hrs .25 cr) F/W/Sp
Self-paced mini-course. Helps students evaluate their test-taking attitude, develop successful test-taking strategies, manage time during test taking, evaluate test performance and feel more confident with the test-taking process.

SS 1.184C TAKING OBJECTIVE TESTS

(6 class hrs .25 cr) F/W/Sp
Self-paced mini-course. Helps students understand and practice strategies appropriate for taking the three major types of objective tests.

SS 1.184D TAKING ESSAY TESTS

(6 class hrs .25 cr) F/W/Sp
Self-paced mini-course. Helps students understand and practice organizational strategies and techniques appropriate for taking different types of essay tests.

SS 1.185 SPEED READING

(10 class hrs .5 cr) F/W/Sp
Self-paced mini-course. Exposes students to information about each person's ability to increase reading speed without significant loss in comprehension. Utilizes the computer to provide opportunities to improve eye movement.

SS 1.186A VOCABULARY IMPROVEMENT I

(20 class hrs 1 cr) F/W/Sp
Self-paced mini-course. Teaches students who need basic vocabulary development or students of limited English proficiency to use context clues to determine the meaning of unfamiliar words. Students learn to use words in various contexts. Note: Placement is by pre-test.

SS 1.186B VOCABULARY IMPROVEMENT II

(20 class hrs 1 cr) F/W/Sp
Self-paced mini-course. Teaches students who need vocabulary improvement to use context clues to determine the meanings of unfamiliar words. Students learn to use the words in various contexts. Note: Placement is by pre-test.

SS 1.186C VOCABULARY IMPROVEMENT III

(20 class hrs 1 cr) F/W/Sp
Self-paced mini-course. Teaches students who want to enrich their vocabulary to use context clues to determine the specific meanings of a word in a given context. Students learn to determine the meanings of words in various contexts. Note: Placement is by pre-test.

SS 1.186D VOCABULARY IMPROVEMENT IV

(20 class hrs 1 cr) F/W/Sp
Self-paced mini-course. Teaches students who want to improve their vocabulary to determine the meanings of unfamiliar words by using context clues. Students encounter the unfamiliar words in various contexts to learn various meanings. Note: Placement is by pre-test.

SS 1.187 STEP-BY-STEP PATTERN FOR LIBRARY RESEARCH

(6 class hrs .25 cr) F/W/Sp/Su
Self-paced mini-course. Provides students with guided instruction in learning about a variety of research options and how to implement them. Through exercises and videotape information, students learn to evaluate the quality and appropriateness of research sources and how to record for future use.

SS 1.188 TIME MANAGEMENT FOR STUDENTS

(10 class hrs .5 cr) F/W/Sp/Su
Self-paced mini-course. Students learn systems and structures to manage their time efficiently for greater success in classes. Topics include breaking large projects into smaller parts, improving concentration, and structuring homework assignments.

ST.....Science and Technology

ST 1.106 SCIENCE AND CULTURE IN THE WESTERN TRADITION

(3 class hrs/wk 3 cr)
Surveys the history of western civilization from the perspective of developments in science and technology. Emphasizes the interaction between scientific developments and cultural developments.

ST 1.107 TECHNOLOGY, SCIENCE AND SOCIETY

(3 class hrs/wk 3 cr)
Growth and use of technology in western society is explored in conjunction with aspects of religion, philosophy, sociology and economics. Technology is defined as the physical and intellectual manipulation of tools and materials. Reverse contributions in which technology provides tools to measure, perceive and extend scientific study are discussed.

TA.....Theatre

➤ TA 106 INTRODUCTION TO THEATRE

(3 class hrs/wk 3 cr)
Surveys, from an audience point of view, theatrical production, styles and personnel involved in creating a live theatrical event. Not a performance course.

TA 114 TECHNICAL THEATRE WORKSHOPS: STAGECRAFT

(3 class hrs/wk 3 cr)
Introduces basic theatre technology emphasizing the practical skills and crafts used in the performing arts -- from equipment and materials to constructing and mounting a production. Uses the Performing Arts Department's production schedule as a practical demonstration of these crafts, skills and techniques. Prior experience not required or expected.

TA 121, 122 FUNDAMENTALS OF ACTING I, II

(3 class hrs/wk 3 cr)
Offers basic training in the art of acting. Increases the student's understanding of the performing arts and sensitivity to communication situations. An experience-oriented class. Prerequisite to TA 122: TA 121 Fundamentals of Acting or TA 125 Improvisation.

TA 124 READER'S THEATRE

(3 class hrs/wk 3 cr)
Offers involvement in the performance of poetry and prose. Emphasizes selecting, scripting and directing of appropriate Readers Theatre scenes.

TA 125 IMPROVISATION

(3 class hrs/wk 3 cr)
Introduces sensory awareness and problem-solving exercises and theatre games. Intended to enhance creativity and polish acting skills through improvisation. An experience-oriented course. Prior experience not required or expected.

TA 161 FUNDAMENTALS OF TECHNICAL THEATRE: SCENERY

(5 class hrs/wk 4 cr)
Introduces theatre forms and spaces; the working elements of a theatre; and the basic principles and techniques of scenery construction, scene painting and properties. Prerequisite: TA 114 Technical Theatre Workshops: Stagecraft.

TA 162 FUNDAMENTALS OF TECHNICAL THEATRE: LIGHTING

(5 class hrs/wk 4 cr)
Introduces the history of theatrical illumination and the basic principles of stage lighting and scenic projections. Prerequisite: TA 114 Technical Theatre Workshops: Stagecraft.

TA 163 FUNDAMENTALS OF TECHNICAL THEATRE: SOUND AND STAGE MANAGEMENT

(5 class hrs/wk 4 cr)
Introduces basic principles of sound, the equipment and its operation for sound reinforcement in the theatre. Covers the role and responsibility of the stage manager in relationship to sound, lighting and other technical operations. Prerequisite: TA 114 Technical Theatre Workshops: Stagecraft.

TA 180/282 REHEARSAL AND PERFORMANCE

(3-15 class hrs/wk 1-3 cr) F/W/Sp
Offers credit for participating in a public theatre production of the college. Productions provide both extracurricular activity for non-majors and practical application of classroom theory for theatre students. Note: Each may be repeated for up to 9 credits. Prerequisite to TA 282: 3 credits of TA 180 Rehearsal and Performance. Instructor approval required.

TA 185/285 PRODUCTION WORKSHOP

(3-15) class hrs/wk 1-3 cr) F/W/Sp
Offers practical experience in the preparation of scenery, costumes, properties, sound and publicity for a college theatrical production. Prerequisite to TA 285: 3 credits of TA 185 Production Workshop.

TA 190/290 PROJECTS IN THEATRE

(2-6 class hrs/wk 1-3 cr)
Offers individually arranged projects in the theatre. Note: Each class may be repeated for up to 9 credits. Prerequisite: For TA 190: Instructor approval; for TA 290: 3 credits of TA 190 Projects in Theatre.

TA 198/298 INDEPENDENT STUDIES: THEATRE

(2-6 class hrs/wk 1-3 cr)
Offers individually arranged projects in the theatre. Prerequisite: Instructor approval.

TA 240 CREATIVE DRAMA FOR TEACHERS

(3 class hrs/wk 3 cr)
Explores philosophy, literature, activities and teaching methods of creative dramatics for children. Students experience, evaluate and teach each other through using techniques that tap the child's innate, imaginative potential.

TA 270 STAGE MAKE-UP

(3 class hrs/wk 3 cr)
Teaches basic theory and techniques of theatrical make-up. Includes lecture, demonstration and laboratory experience and is designed for both the theatre major and non-major. No previous experience is required.

TA 280 CWE THEATRE ARTS

(6-42 class hrs/wk 2-14 cr) F/W/Sp/Su
An instructional program designed to give students practical experience in supervised employment related to theatre arts. Students identify job performance objectives, work a specified number of hours during the term, and attend a related CWE seminar. Note: Credits are based on identified objectives and number of hours worked. Prerequisite: CWE coordinator approval.

WD.....Welding

WD 4.151 WELDING I

(4 class hrs/wk 2 cr) F/W/Sp
Stresses safety and equipment familiarization, with lab exercises for skill development in basic gas and electric arc welding. This introductory course includes technical information lectures in related subjects.

WD 4.152 WELDING II

(4 class hrs/wk 2 cr) F/W/Sp
Provides welding skill level required in minor industrial applications. Includes more advanced electric arc-welding and an introduction to gas-shielded arc processes (MIG and TIG). Lab and technical information on related welding subjects included. Prerequisite: WD 4.151 Welding I.

WD 4.153 WELDING III

(4 class hrs/wk 2 cr) F/W/Sp
Advanced course for non-welding majors, designed for a higher degree of welding competency in trade applications. Standard welding practices in MIG and TIG are developed at the advanced level. Prerequisite: WD 4.152 Welding II or instructor approval.

WD 4.240 BASIC ARC WELDING

(14 class hrs/wk 1-6 cr) F
Introduces arc welding practices on mild steel of various thicknesses and joint configurations in all positions.

WD 4.241 INTERMEDIATE ARC WELDING

(12 class hrs/wk 1-6 cr) W
Builds on skills learned in WD 4.240 Basic Arc Welding, including arc welding of mild steel and special ferrous and non-ferrous alloys. Employs the manual arc, TIG and MIG processes.

WD 4.242 FABRICATION AND REPAIR PRACTICES I

(8 class hrs/wk 1-4 cr) F
Introduces oxyacetylene welding practices on mild steel of various thicknesses and joint configurations in all positions.

WD 4.243 FABRICATION AND REPAIR PRACTICES II

(8 class hrs/wk 1-4 cr) W
Lecture/laboratory course in fundamentals of welding fabrication and repair. Introduces basic procedures in planning, sketching, cost evaluation, ordering, layout, metal preparation, tack-up and final welding. Prerequisite: WD 4.240 Basic Arc Welding; WD 4.242 Fabrication and Repair Practices I.

WD 4.245 LAYOUT PROCEDURES FOR WELDING

(4 class hrs/wk 3 cr) Sp
Introduces layout principles and applications. Tools and equipment for layout are studied in respect to their operating performance, with emphasis on maintenance. Includes planning and construction of templates, layout and specific fabrication to examine process quality. Prerequisite: WD 4.247 Interpreting Metal Fabrication Drawings.

WD 4.246 ADVANCED ARC WELDING

(12 class hrs/wk 1-6 cr) Sp
Provides continuation of WD 4.241 Intermediate Arc Welding. Prepares students for welder certification in the manual arc and semi-automatic processes.

WD 4.247 INTERPRETING METAL FABRICATION DRAWINGS

(4 class hrs/wk 3 cr) W
Introduces the principles of interpretation and application of industrial fabrication drawings. Basic principles and techniques of metal fabrication are introduced by planning and construction of templates, layout and other fixtures used in fabrication from drawings. Basic tools and equipment for layout fitting of welded fabrications are utilized.

WD 4.250 FABRICATION AND REPAIR PRACTICES III

(8 class hrs/wk 1-4 cr) Sp
Continues WD 4.243 Fabrication and Repair Practices II. Provides a more in-depth approach to welding design, fabrication and repair. Prerequisite: Instructor approval.

WD 4.251 FUNDAMENTALS OF WELDING INSPECTION

(4 class hrs/wk 3 cr) Sp
Covers general duties and responsibilities of the welding inspector, including the essential subject knowledge required to judge the quality of welded products to meet the requirement of specifications and code standards. The course offers a comprehensive review of welding processes, codes specifications, qualification of welders and welding procedures, metallurgical considerations, materials control, weld defects testing and examination methods; and inspection techniques. Prerequisite: Previous occupational/training experience with direct relationship to weldments, design production, construction-inspection or NDT testing.

WD 4.255, 4.256, 4.257 FABRICATION AND REPAIR PRACTICES IV, V, VI

(14 class hrs/1- 6 cr, variable) F/W/Sp
Sequence provides advanced information and skills in welding repair and fabrication. Group or individual projects require knowledge gained from related classes, including blueprint reading, cost estimating, ordering and inventorying of materials, layout skills, fabrication and final assembly.

WD 4.258 WELDING PRINTS AND PROJECTS

(4 class hrs/wk 3 cr)
Introduces principles of welding fabrication drawings. Visualization of parts and projects, dimensioning and sketching are presented to develop the skills necessary to function in the fabrication and repair field.

WE.....Cooperative Work Experience

WE 202 CWE SEMINAR

(1 class hr/wk 1 cr) F/W/Sp/Su
A seminar, reading program and research paper providing students enrolled in SFE/CWE an opportunity to discuss issues involved in field work, such as ethics, issues, supervision, career opportunities and resume writing. Note: May be repeated for up to 4 credits.

WE 1.201 CWE SEMINAR

(1 class hr/wk 1 cr) F/W/Sp/Su
A Field Experience Seminar course that provides an opportunity for students involved in Cooperative Work Experience to share work-related experiences in a seminar situation with their work experience coordinator and fellow field placement students. Content presented at the seminar includes orientation to Cooperative Education, employability skills, basic planning and basic economics. This course is required for all students enrolled in Cooperative Work Experience and is open to other students who want to participate. Note: May be repeated for up to four credits.

WE 1.280 COOPERATIVE WORK EXPERIENCE

(6-42 class hrs/wk 1-14 cr) F/W/Sp/Su
An instructional program designed to give students practical experience in supervised employment related to their program. Students identify job performance objectives, work a specified number of hours during the term and attend a related CWE seminar. Note: Credits are based on identified objectives and number of hours worked. Prerequisite: CWE coordinator approval.

WR.....Writing

When possible, individual sections of writing classes will be held in or have access to a computer classroom.

WR 115 INTRODUCTION TO WRITING

(3 class hrs/wk 3 cr) F/W/Sp
Reviews basic conventions, purposes and strategies of standard written English. Emphasizes sentence variety, paragraph development and improvement of fluency in writing expository prose. Instills confidence in the student's ability to write acceptably and effectively at the college level. Note: This course does not satisfy institutional writing requirements for the transfer student. Placement determined by pre-enrollment testing.

WR 115W INTRODUCTION TO WRITING: WORKPLACE

(3 class hrs/wk 3 cr) F/W/Sp
Reviews basic conventions, purposes and strategies of standard written English, with an emphasis on workplace writing. Emphasizes writing that helps students use resources, information systems and technology. Students learn to work in teams more effectively by building basic skills in writing, reading and communication. Note: This course does not satisfy institutional requirements for the transfer student. Placement determined by pre-enrollment testing.

WR 121 ENGLISH COMPOSITION

(3 class hrs/wk 3 cr) F/W/Sp
Covers processes and fundamentals of writing expository essays, including rhetorical structure, organization and development, diction and style, revision and editing, mechanics and standard usage required for college-level writing. Emphasizes developing critical thinking skills. Note: Placement determined by pre-enrollment testing.

WR 121W ENGLISH COMPOSITION: WORKPLACE

(3 class hrs/wk 3 cr) F/W/S
Covers processes and fundamentals of expository writing with an emphasis on workplace writing appropriate for technical and professional majors. Emphasizes writing that helps students use resources, information, systems and technology, and work in teams more effectively by building skills in writing, reading, problem-solving and communication. Note: Placement determined by pre-enrollment testing.

WR 122 ENGLISH COMPOSITION

(3 class hrs/wk 3 cr) F/W/Sp
Emphasizes the logical means of developing ideas in argumentative essays, thesis statements and reasoning. Includes logic, style and research. Prerequisite: WR 121 English Composition.

WR 123 ENGLISH COMPOSITION

(3 class hrs/wk 3 cr) W/Sp
Introduces informative and analytical writing supported by research. Students design a research plan, use primary and secondary sources critically, develop research methods, use proper documentation and develop writing strategies for longer papers. Prerequisite: WR 121 English Composition.

WR 214 BUSINESS COMMUNICATIONS

(3 class hrs/wk 3 cr) F/W/Sp
Emphasizes written and oral communication in business, including information gathering, writing, editing, listening, interviewing, non-verbal communication and collaboration. Prerequisite: WR 121 English Composition.

WR 227 TECHNICAL REPORT WRITING

(3 class hrs/wk 3 cr) F/W/Sp
Introduces gathering, evaluating, organizing and presenting technical information to professional and technical audiences. Emphasizes revision, problem solving and team work; includes writing instructions, proposals, progress reports and formal reports. Note: Keyboarding skills encouraged. Prerequisite: WR 121 English Composition.

➤ WR 240 PERSONAL JOURNAL WRITING

(3 class hrs/wk 3 cr) F/W/Sp
Practices the use of journals to record and reflect on personal experiences, to experiment with different writing techniques, and to gather and develop material for other writing projects. Emphasizes learning to write freely.
Note: May be repeated once for credit.

➤ WR 241 INTRODUCTION TO IMAGINATIVE WRITING: FICTION

(3 class hrs/wk 3 cr) F/W/Sp
Studies elements of short fiction (dialogue, setting, character, conflict, etc.) using workshop sessions in which students discuss the exercises and stories of their classmates. Note: May be repeated for up to 6 credits.

➤ WR 242 INTRODUCTION TO IMAGINATIVE WRITING: POETRY

(3 class hrs/wk 3 cr) F/W/Sp
Studies basic elements of poetry, types of poetry, uses for poetry and the process of creating poetry. Emphasizes fostering individual style. Note: May be repeated once for credit.

WR 247 LITERARY PUBLICATION

(3 class hrs/wk 3 cr) W
Provides practical application of composition and literature instruction through work on The Eloquent Umbrella, a student creative arts publication. Note: May be repeated for credit.

WR 280 CWE ENGLISH/WRITING

(6-42 class hrs/wk 2-14 cr) F/W/Sp/Su
An instructional program designed to give students practical experience in supervised employment related to writing. Students identify job performance objectives, work a specified number of hours during the term, and attend a related CWE seminar. Note: Credits are based on identified objectives and number of hours worked. Prerequisite: CWE coordinator approval.

WR 1.131 SPELLING

(3 class hrs/wk 3 cr) F/W/Sp/Su
Teaches spelling skills through structural analysis and spelling principles. Proofreading and dictionary usage are included.

WW.....Water Wastewater Technology

WW 6.154 PROCESS CONTROL I

(6 class hrs/wk 4 cr) F
First course of a two-course sequence addressing advanced level monitoring, operation and control concepts for biological treatment processes. Introduces identification of process monitoring tools, data collection, process control calculations and interpretation for biological process evaluation and problem solving. The activated sludge wastewater treatment process is the application for this class. Quattro Pro is the computer spreadsheet program used for data control and analysis.

WW 6.155 PROCESS CONTROL II

(4 class hrs/wk 3 cr) W
Second course in the two-course sequence addressing advanced level monitoring, operation and control concepts for biological treatment processes. Continues the monitoring and computer-aided data interpretation for biological process evaluation and problem solving. Both suspended growth processes and attached growth processes are the applications for this class. Advanced control topics, including filamentous bacteria identification, biological nitrogen removal and biological phosphorus removal, are covered. Special topics and current issues are discussed as time allows.

WW 6.164 WATER SOURCES

(4 class hrs/wk 3 cr) F
A basic class for water resource managers. Includes surface and groundwater sources. Covers hydrology, water quality, laws and regulations, flow measurements, storage, intake structures and wells.

WW 6.165 WATER DISTRIBUTION AND COLLECTION SYSTEMS

(2 class hrs/wk 2 cr) Sp
A course that describes the management, operation and maintenance of water distribution and sewage collection systems.

WW 6.166 WATER PURIFICATION SYSTEMS

(5 class hrs/wk 4 cr) F
An advanced-level course covering the theory, application and operation of potable water treatment systems. Theory and operation of mixing systems, coagulation chemistry, optimization of chemical applications, flocculation, sedimentation and water filtration are covered. Special related topics in potable water supply may be added as time permits.

WW 6.167 WATER DISTRIBUTION AND COLLECTION LAB

(2 class hrs/wk 1 cr) Sp
This is a laboratory course designed to parallel the topics covered in WW 6.165 Water Distribution and Collection Systems. This course covers the description and application of materials and design practices used in the construction of roads, water distribution systems and sewage collection systems.

WW 6.168 IN-PLANT PRACTICUM

(60 class hrs/wk 2-12 cr) Su
In-Plant Practicum consists of full-time work in a water or wastewater treatment facility. Skills and knowledge developed in first-year courses are combined with on-the-job training by both plant supervisory personnel and LBCC visiting instructors. Prerequisite: HE 112 Emergency First Aid or HE 252 First Aid and instructor approval.

WW 6.171 INDUSTRIAL WATER/ WASTE TREATMENT

(4 class hrs/wk 3 cr) W
This is an overview course covering the related applications of water and wastewater treatment in industrial installations. This course will cover regulatory requirements, ultra-pure water treatment systems, physical-chemical waste treatment systems, and the treatment of metal wastestreams.

WW 6.181 WATER/WASTEWATER MECHANICS

(6 class hrs/wk 3 cr) Sp
This course covers the specific equipment and mechanical skills required in the water and wastewater treatment industry. Topics include blueprint reading, drive systems, application of steel, PVC and copper pipe, valves and hydrants, backflow devices, positive displacement pumps, centrifugal pumps, chlorinators.

WW 6.190 INTRODUCTION TO ENVIRONMENTAL SCIENCE AND TECHNOLOGY

(9 class hrs/wk 6 cr) F
Introduction to field of environmental technology. As an introductory course, give students basic skills in writing/study/vocabulary in both the history of science and technology and environmental processes. Students learn critical thinking and examine social-ethical issues related to technology innovation. Prerequisite: Program admission.

WW 6.191 WATER SYSTEMS OPERATION

(12 class hrs/wk 7 cr) Sp
Develops a basic understanding of water systems operations, including surface water source and watershed management, groundwater sources and development, raw water storage and intakes, coagulation, flocculation, sedimentation, filtration, disinfection, and finished water storage and distribution. Prerequisite: WW 6.190 Introduction to Water and Wastewater Operations. Corequisite: MTH 65 Elementary Algebra.

WW 6.192 WASTEWATER SYSTEMS

(12 class hrs/wk 7 cr) W
Develops a basic understanding of wastewater systems operations, including primary sedimentation, disinfection, aerobic and anaerobic sludge digestion, oxidation ponds, bio-filters and bio-reactors, and solids handling and disposal. Prerequisite: WW 6.190 Introduction to Water/ Wastewater Operations. Corequisite: MTH 65 Elementary Algebra.

WW 6.193 INTRODUCTION TO AQUATIC CHEMISTRY AND MICROBIOLOGY

(8 class hrs/wk 4 cr) F
A basic chemistry and microbiology course for water and wastewater technology students. Supports basic concepts through lab experiments relevant to the water/wastewater field.

WW 6.194 BASIC AQUATIC CHEMISTRY AND MICROBIOLOGY

(8 class hrs/wk 4 cr) W
A continuation of WW 6.193 Introduction to Aquatic Chemistry and Microbiology. Basic concepts will be applied to common water and wastewater analytical techniques, to include: pH, temperature, dissolved oxygen, alkalinity, hardness, solids, microscopic identification, total plate count, and total coliform. Prerequisite: WW 6.193 Introduction to Aquatic Chemistry and Microbiology.

WW 6.195 INTERMEDIATE AQUATIC CHEMISTRY AND MICROBIOLOGY

(8 class hrs/wk 4 cr) Sp
Continues WW 6.194 Basic Aquatic Chemistry and Microbiology. Basic concepts are applied to drinking water, analytical techniques, including alkalinity, hardness, chlorine residual, iron, total dissolved solids, jar test, taste and odor, and total coliform test. Prerequisite: WW 6.193 Introduction to Aquatic Chemistry and Microbiology.

WW 6.197 SOLIDS HANDLING

(4 class hrs/wk 3 cr) Sp
Deals with the various processes of solids handling and management. Includes aerobic and anaerobic digestion, centrifugation, gravity concentration, gravity thickening, flotation thickening, filter presses, vacuum presses, incineration, land fill and land application. Laboratory control procedures and sludge conditioning also are covered.

WW 6.198 INSTRUMENTATION

(5 class hrs/wk 4 cr) Sp
Provides an introduction to the instrumentation processes used to monitor and control contemporary water and wastewater treatment facilities. Measurement of temperature, pressure, liquid level and flow, and the transmission and controller for these parameters are discussed.

WW 6.199 INTRODUCTION TO HYDRAULICS

(4 class hrs/wk 2 cr) F
Provides an introduction to hydraulics for water/ wastewater treatment plant operators. Includes performing basic hydraulic computations, hydraulic measurement units, pressure, head, head loss, flow and pump calculations. Corequisite: MTH 60 Introduction to Algebra.

WW 6.235 APPLIED HYDRAULICS

(3 class hrs/wk 3 cr) W
A practical course covering flow, head and head loss calculations, pump calculations and pump curves. Applications are made to water distribution systems and sewage collection systems. Corequisite: MTH 111T College Algebra: Technical.

NON-CERTIFICATE/ NON-DEGREE COURSES

9.111 METAL WORK TECHNOLOGY AND PRACTICES

(3 class hrs/3 cr)
A general course for people in metal work trades. This course will cover the effects and behavior of welding on steels, nonferrous alloys, and cast irons and high strength low alloy steels with a major emphasis on hands-on participation. Additionally, there will be discussion, demonstration and participation with fastener installation, metal identification, failure analysis, microstructure evaluation and nondestructive evaluation. Student will also acquire skills and knowledge on the heat treatment of metals.

9.124 GEOMETRIC DIMENSIONING AND TOLERANCING

(4 class hrs/4 cr)
A conceptual and practical introduction to the ASME Y14.5M 1994 Standard for Geometric Dimensioning and Tolerancing.

9.148 PREPARATION FOR WELDER CERTIFICATION

(4 class hrs/wk 1-2 cr) F/W/Sp
Provides information and skill development for the welder certification test administered by state of Oregon, Dept. of Commerce, Boiler Division. The test is provided upon completion of the course. Prerequisite: WD 4.152 or 9.152 Welding II or instructor approval.

9.151 WELDING I

(4 class hrs/wk 2 cr) F/W/Sp
Stresses safety and equipment familiarization, with lab exercises in basic gas and electric arc welding. Includes technical information lectures in related subjects.

9.152 WELDING II

(4 class hrs/wk 2 cr) F/W/Sp
Provides the welding skill level expected in minor industrial applications. Includes more advanced electric-arc welding and an introduction to gas-shielded arc processes (MIG-TIG). Lab and technical information on related welding subjects included. Prerequisite: 9.151 Welding I.

9.218 FORK LIFT OPERATION

(10 class hrs/wk 1 cr)
Provides training needed to receive an operator's certification card. Meets OSHA safety training requirement. Note: One-week class.

9.320 BCLS-CPR INSTRUCTOR

(8 class hrs 1 cr) F/Sp
Reviews CPR skills and introduces or updates methods and techniques of CPR instruction. Includes writing lesson plans, using an instructor's manual, evaluating fellow students, and processing records and other forms for American Heart Association certification. Prerequisite: Current American Heart Association CPR Level C card.

9.414A MEDICATION AIDE

(80 class hrs/14 wks/5 cr)
This course fulfills the Oregon State Board of Nursing (OSBN) requirements for Medication Aide. Successful completors are eligible to sit for the OSBN certification exam. Covers basic pharmacology, drug distribution and administrative techniques for non-parenteral medications in both the classroom and clinical environments. Prerequisite: Certification and employment as a Nursing Assistant for 9 months prior to the first day of class.

9.419 MINI PHYSICAL ASSESSMENT WORKSHOP

(8 class hrs/wk 1 cr) W
Provides the practicing RN and other health care workers with skills necessary to assess the chest and abdomen. Includes a review of related anatomy and physiology, physical examination techniques used in assessing the thorax and abdomen, integration of common recurring pathophysiology of the thorax and abdomen, identification of heart sounds, adventitious breath sounds and abnormal bowel sounds. Appropriate nursing intervention also is included. Note: One-day workshop. Available only to RN or employee in related health field.

9.426 CORONARY CARE NURSING

(4 class hrs/wk 4 cr) F
Provides information for the RN in the coronary care unit. Emphasizes recognition and treatment of cardiac arrhythmia and emergency procedures, such as cardiopulmonary resuscitation, pharmacological interventions and electrical resuscitation. Reviews normal and abnormal anatomy, physiology of the heart, diagnostic methods and treatment of cardiovascular disease. Principles of cardiac monitoring and electrocardiography are applied. Prerequisite: RN or LPN.

9.428 CONTINUING EDUCATION FOR NURSES: NEUROLOGICAL ASSESSMENT

(8 hrs 1 cr) F/Sp
Covers basic skills in neuroassessment. Reviews neuroanatomy and physiology, physical exam and intervention in the neurological patient. Note: One-day class.

9.428M ALZHEIMERS: BASIC CAREGIVING

(10 class hrs 1 cr)
Fundamental information on disease process of dementia and effective interventions of caregivers are presented in an interactive learning environment. Includes successful methods and how-to strategies for resolving caregiving problems. Class schedule varies.

9.428N ADULT FOSTER CARE

(20-24 class hrs/1 wk 0 cr)
This course is required by the State of Oregon for all adult foster care providers. The participant will need to successfully complete the testing materials to be awarded a certificate of completion..

9.428Z INTRODUCTION TO PARISH NURSING

(36 hrs /1wk 3 cr) Sp
This course examines the components necessary for developing an effective parish nursing practice. It is designed to provide experienced RNs with an overview of practice issues and approaches of individuals and groups within a faith community. Strategies for health management and promotion of wellness emphasize the interrelationship of spiritual, emotional and physical health. Prerequisite: Registered Nurse with at least two years experience.

9.4280 ACTIVITIES DIRECTOR

(36 hrs/5 wk 4 cr)
Fulfills state and federal regulations for activities director certification course for long-term care. Covers role of the activity director in adapting, modifying and implementing activities for various cognitive levels, volunteer recruitment and preparing for the state survey team. Prerequisite: High school diploma or equivalent.

9.428P RESTORATIVE AIDE

(50 class hrs 3 cr)
Prepares the Nursing Assistant with the theory and skills to safely perform restorative functions in long-term care facilities. Prerequisite: CNA for six months; recommendation by employing LTC facility; hepatitis B and measles immunizations.

9.449 ADVANCED CARDIAC LIFE SUPPORT

(18 class hrs 0 cr) F/Sp
American Heart Association approved curriculum in continuing education for health care providers. Covers evaluation and treatment of cardiac emergencies.

9.449I PERIOPERATIVE NURSING

(4 class hrs/wk 4 cr) W
The overview of fundamentals of nursing practice in the operating room. The roles of circulating and scrubbing will be a primary focus as well as the concepts of aseptic techniques and sterilization. The nurse will be introduced to the basics of the working of the operating room with practice as a member of the perioperative team. Prerequisite: Registered Nurse.

9.449I-B PERIOPERATIVE NURSING: CLINICAL

(4 class hrs/wk 4 cr) Sp
This course is designed to allow the nurse to apply theory and skills learned in Perioperative Nursing 9.499I. Upon completion of this clinical practicum, the nurse should be prepared to begin the hospital's orientation program as a practitioner new to the operating room environment. Prerequisite: Completion of 9.499I.

9.464 FIRST RESPONDER

This 51-56 hour course is designed for firefighters, quick response teams and law enforcement personnel who may be the first on the scene of life-threatening accidents and emergencies. Provides practical skills for the at-the-scene treatment of airway problems, cardiac emergencies (CPR), automatic external defibrillation, bleeding and shock, and selected medical emergencies. Successful completion of course will allow student eligibility to sit at the state test. Offered as needed throughout the year.

9.672 DIGITAL PRINCIPLES I

(6 class hrs/wk 3 cr)
Fundamental course in digital concepts and circuits. Includes practical theory of gates, registers, counters and similar digital circuits.

9.673 BASIC SEMICONDUCTORS I

(6 class hrs/wk 3 cr)
Fundamental course in semiconductors. Includes practical theory of semiconductor diodes, zener diodes, special application and bipolar transistor operations.

9.673A BASIC SEMICONDUCTORS II

(6 class hrs/wk 3 cr)
Continues Semiconductors I. Includes practical theory of bipolar transistors, field effect transistors, thyristors, integrated circuits and opto-electronic devices.

9.691 DIGITAL PRINCIPLES II

(6 class hrs/wk 3 cr)
Continues Digital Principles I. Includes practical theory of sequential logic circuits, combination logic circuits and their applications.

9.813 AGRICULTURAL CHEMICALS

(3 class hrs/wk 3 cr) W
Covers the use and chemistry of herbicides, insecticides, fungicides and nematocides. Emphasizes types of material, safety in handling and storing, and methods of application. Students learn to interpret and explain to customers the directions and precautions for various agricultural chemicals. Also covers keeping current with new product development.

9.828 TRACTOR SAFETY

(12 class hrs/wk 1 cr)
Qualifies under-age farm workers for certification in tractor safety and operation skills in accordance with federal regulations. Note: One-week class.

9.930 PROFESSIONAL ISSUES IN CHILD AND FAMILY STUDIES

(1 class hr /wk 1 cr)
Focuses on the legal and ethical issues in working with children and families, e.g. licensing, health and safety standards, adult:child ratios and child abuse reporting. Emphasizes the position of being family focused. Includes professional organizations, advocacy training and accreditation preparation.

9.931 OREGON CHILD-CARE BASICS

(1 class hr/wk 0 cr)
Provides basic information about health and safety issues and the social/emotional development of young children. Designed for practicing child care providers.

9.932 CHILD DEVELOPMENT

(1 class hr/wk 1 cr)
An interactive presentation of information on child development for practicing child care providers. Care givers focus on the development of children ages birth through 13 years and the implications for practice in a child care setting.

9.934 ORGANIZATION AND ADMINISTRATION

(1 class hr/wk 1 cr)
An interactive presentation of information on enhancing family child care as a business through developing skills in professional planning, building relationships, marketing, tax reporting, contracts and basic record keeping.

9.936 CURRICULUM DEVELOPMENT

(1 class hr/wk 1 cr)
Family and center care providers learn the components of high-quality programming for children. Enhances the child care provider's ability to plan appropriate activities, equip the environment and obtain resources to meet the special needs of children ages birth to 13 years.

9.938 INFANT AND TODDLER CARE

(1-3 class hrs/wk 1-3 cr)
Family and center providers learn the elements of quality care for infants and toddlers. Emphasizes all areas of development: physical, social, emotional, cognitive and language. Includes group-care techniques, family/provider relationships and cultural diversity.

9.939 SCHOOL AGE CARE

(1 class hr/wk 1 cr)
A comprehensive overview of school age care and education for those caring for children ages 5 to 15. Focuses on child and adolescent development, curriculum design, school age care center business practices, marketing and staff development.

9.945 LIVING AND LEARNING WITH YOUR CHILD WITH SPECIAL NEEDS

(3 class hrs/wk 2 cr)
A course for parents of children with special needs. Parents and their preschool children participate in a lab specifically designed to meet the needs of children with speech, hearing and other handicapping conditions. Through seminar and lab participation, parents increase their knowledge and awareness of the child's development and social needs.

9.946 LIVING AND LEARNING WITH YOUR CHILDREN

(2-4 class hrs/wk 1-2 cr)
An active participation class for parents and their children (walking stage to age 4). Provides an opportunity for parents to discuss parenting topics and to help plan and join in activities with their children.

9.947 LIVING AND LEARNING WITH YOUR BABY

(2 class hrs/wk 1 cr)
An active participation class for parents and their infants (birth to the beginning walking stage). Provides parents an opportunity to discuss parenting topics and to join in activities with their baby.

9.948 LIVING AND LEARNING WITH YOUR TODDLER

(2 class hrs/wk 1 cr)
An active participation class for parents and their toddlers (walking stage to age 2 1/2). Provides an opportunity for parents to discuss parenting topics and to help plan and join in activities with their toddler.

9.949 LIVING AND LEARNING WITH YOUR TWO-YEAR OLD

(2-4 class hrs/wk 2 cr)
An active participation class designed to meet the needs of parents and their two-year-olds. In a lab situation, parents have an opportunity to practice guidance and communication techniques, create appropriate activities and design environments that foster growth and development. In seminars, parents have an opportunity to increase their knowledge of parenting topics.

9.950 LIVING AND LEARNING WITH YOUR THREE-YEAR-OLD

(2-4 class hrs/wk 2 cr)
An active participation class designed to meet the needs of parents and their young three-year-olds. In a lab situation, parents have an opportunity to practice guidance and communication techniques, create appropriate activities and designenvironments that foster growth and development. In seminars, parents have an opportunity to increase their knowledge of child development and share parenting tips and skills.

9.951 LIVING AND LEARNING WITH YOUR PRESCHOOLER

(4-10 class hrs/wk 2-3 cr)
A preschool cooperative designed to meet the needs of parents and their three-, four- and five-year-old children. In the lab situation, parents have an opportunity to practice guidance and communication techniques, create appropriate activities and design environments that foster growth and development. In seminars, parents have an opportunity to increase their knowledge of parenting topics and to collaborate on creating a good classroom environment for their children.

9.952 EFFECTIVE PARENTING

(2 class hrs/wk 1 cr)
Designed for parents of children of various ages. Emphasizes effective communication skills, mutual problem solving, child development and guidance. Based on a family-strengthening philosophy.

9.953 EFFECTIVE PARENTING OF TEENS

(2 class hrs/wk 1 cr)
Helps parents of teenagers improve their relationships with their children. Emphasizes effective communication skills, mutual problem solving and assuming responsible behavior. Recognizes the strengths that families have and the means of increasing personal growth for both parents and adolescents. Note: Eight-week class.

9.962 PARENT-TOT GYM

(1 class hr/wk 0 cr)
A gym class for parents and their toddlers. Provides a chance to sing, dance, march and pretend with your child while directing and participating in his or her active exploration of the gym and apparatus.

9.965 FOSTER PARENTING

(2.5 class hrs/wk 1 cr)
Provides basic orientation to individuals about the foster care program, including regulations. Other topics may include sexual abuse and behavior management.

9.968 ADOPTION ISSUES

(3 class hrs/wk 1 cr)
Enables prospective parents to explore adoption. Cosponsored with Planned Adoption Agency. Note: Five-week class.

9.971 FAMILY RESOURCE FAIR

(7 class hrs/wk 1 cr)
A one-day conference offering parents a wide selection of workshops for today's parents. Area schools and agencies cosponsor the conference.

9.980 BALANCING WORK AND FAMILY

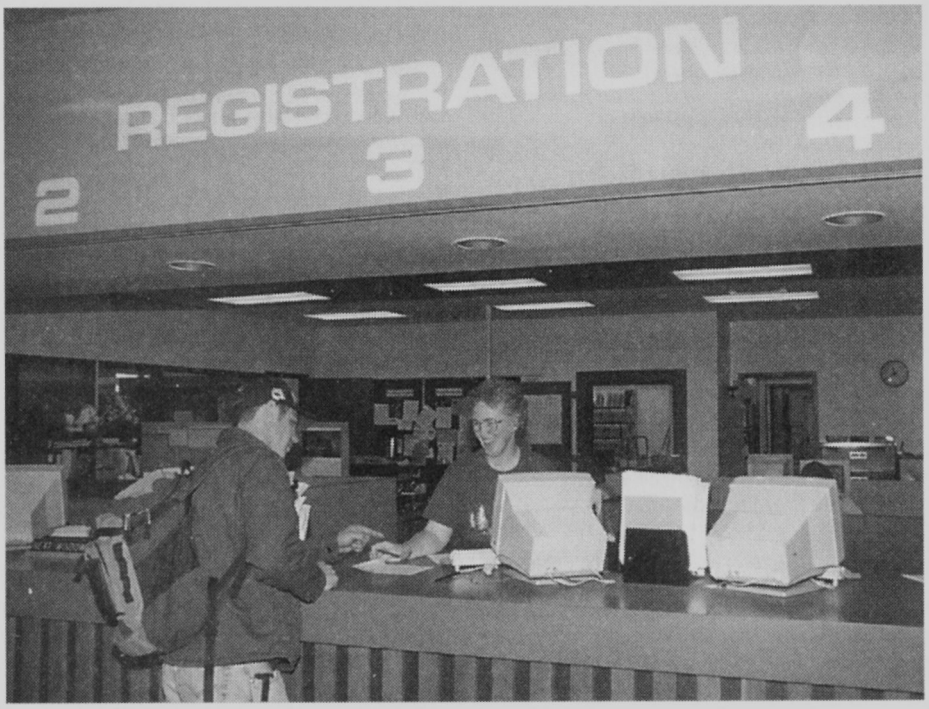
(1 class hr/wk 0 cr)
Classes for family members who maintain a household and also work, or desire to work, outside the home. Covers skills that help balance the work-family lifestyle, general parenting skills and home management. Note: Six-week class.

9.985 COUPLES COMMUNICATION

(2 class hrs/wk 1 cr)
Friendship, fun and fighting fair. Offers skills and strategies for communication, problem solving and constructive conflict. Note: Six-week class.

9.985 DIVORCE ADJUSTMENT

(2 class hrs/wk 1 cr)
Learn the process of divorce adjustment: Current theory, statistics, common emotional and behavioral reactions, and outline methods of recovery from this life transition. Note: Eight-week class.



FACULTY AND ADMINISTRATIVE STAFF

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Ann Smart, Dean, Extension Services
Diane Watson, Dean, Student Services
Gwen Chandler, Confidential Secretary to the President/Board of Education

Abernathy, Dick
Faculty, Refrigeration, Heating and Air Conditioning. AS, Linn-Benton Community College; BS, MS, University of Oklahoma. At Linn-Benton since 1991.

Abernathy, Sharon
Confidential Secretary to the Vice President for Administrative and Student Services. AAS, Linn-Benton Community College. At Linn-Benton since 1990.

Adams, Ann
Director, Computer Services and Institutional Research. BS, Colorado State University. At Linn-Benton since 1987.

Aikman, John
Faculty, Graphic Design. BS, Oregon State University; MFA, University of Wyoming. At Linn-Benton since 1980.

Allender, Lori
Director, Human Resources/Payroll and Affirmative Action. AA, Miles Community College; BA, Carroll College; MBA, University of Colorado. At Linn-Benton since 1991.

Anselm, Scott
Faculty, Culinary Arts/Hospitality Services. AOS, Culinary Institute of America; Certified Environmental Sanitor; member, American Culinary Federation. At Linn-Benton since 1986.

Apter, Joanne
Faculty, Turning Point. BA, University of Wisconsin; MEd, Oregon State University. At Linn-Benton since 1995.

Ayers, Marti
Staff and Organizational Development. BA, MA, Western Michigan University. At Linn-Benton 1970–79 and since1986.

Bailey, Joseph
Faculty, Training and Business Development Center. BS, Western Washington University; MA, Antioch University. At Linn-Benton since 1996.

Bain, Lynn
Counselor, BS, University of Hawaii; MS, Western Oregon University. At Linn-Benton since 1998.

Bechtel, Dennis
Faculty, Digital Imaging/Prepress Technology. AA, Southwestern Community College; BA, San Diego State University; MAIS, Oregon State University. At Linn-Benton since 1994.

Beck, Vicki
Faculty, Nursing. RN, BSN, MN, Oregon Health Sciences University. At Linn-Benton since 1988.

Bell, James W.
Faculty, Anthropology, Geography. BS, Western Oregon State University; MS, MAIS, Oregon State University. At Linn-Benton since 1990.

Bennett, Rosemary
Counselor, BS, Oregon State University; MS, University of Oregon. At Linn-Benton since 1971.

Benson, David
Faculty, Physical Science. BS, University of the Pacific, Stockton. At Linn-Benton since 1977.

Berg, John C.
Director, Engineering and Industrial Technology. BS, George Williams College, Chicago; MS, Northern Illinois University; PhD, University of Oklahoma Health Sciences Center. At Linn-Benton since 1996.

Bergeman, Richard
Faculty, Journalism/Photography. BS, Bowling Green State University; MAI, Oregon State University. At Linn-Benton 1976–79 and since 1981.

Bergstrom, Evon
Faculty, Health Occupations. BSN, MSN, University of Oregon School of Nursing. At Linn-Benton since 1979.

Bervin, Arthur
Faculty, English/Foreign Languages. BA, Portland State University; MA, University of Redlands. At Linn-Benton since 1970.

Bewley, Larry
Faculty, Farrier Science. Certificate, OSU Farrier School. Related job experience. At Linn-Benton since 1980.

Billetter, Sharon
Faculty, Dental Assistant. CDA, EFDA AGS, Linn-Benton Community College; BS, Green Mountain College. At Linn-Benton since 1996.

Bober, Pete
Director, Employment Services. BS, MAIS, Oregon State University. At Linn-Benton since 1990.

Brittsan, Virginia
Faculty, Nursing. RN, BSN, Texas Women's University; MSN, Oregon Health Sciences University. At Linn-Benton since 1996.

Brown, Brian H.
Dean, College Services. BS, University of Oregon; MA, San Jose State University; PhD, Oregon State University. At Linn-Benton since 1976.

Brown, Joyce
Faculty, Even Start. BS, MEd, Oregon State University. At Linn-Benton 1992-95 and since 1998.

Burchard, Russ
Faculty, ABSD/GED. BA, University of Colorado; MAT, Oregon State University. At Linn-Benton since 1995.

Camp, Beth
Faculty, English/Foreign Languages. BS, University of the State of New York; MA, University of Oregon. At Linn-Benton since 1985.

Campbell, Mary
Faculty, Mathematics. BS, Willamette University; MS, University of Massachusetts at Amherst. At Linn-Benton since 1991.

Carman, Brad
Faculty, Health and Physical Education. BS, Oregon State University; MS, University of Oregon. At Linn-Benton since 1993.

Carnahan, Jon
President. BA, MEd, Central Washington University. At Linn-Benton since 1973.

Cazort, Doug
Counselor. BA, Vanderbilt University; MA, San Diego State University; MA, MS, University of Southern California. At Linn-Benton since 1996.

Chambers, Maynard
Faculty, Business Management. BS, MBA, Oregon State University. At Linn-Benton since 1971.

Chandler, Gwen
Confidential Secretary to the President. AS, Linn-Benton Community College. At Linn-Benton since 1985.

Chase, Thomas
Faculty, English/Foreign Languages. BA, University of Colorado, Boulder; MA, California State University. At Linn-Benton since 1971.

Chester, Patsy
Dean, Academic and Administrative Services. BS, Idaho State University; MEd, Oregon State University. At Linn-Benton since 1967.

Christensen, Marthajane
Counselor. BA, University of Maryland; MS, Oregon State University. At Linn-Benton since 1989.

Clark, Douglas
Faculty, Political Science, History. BA, MA, University of Oregon. At Linn-Benton since 1972.

Clark, Katherine
Faculty, Developmental Studies. BA, University of California, Santa Cruz; MA, Stanford University. At Linn-Benton since 1975.

Connard, Christie
Faculty, Healthy Start Program. BA, Boston University; MA, Oregon State University. At Linn-Benton since 1995.

Conner, Gerald H.
Faculty, Business Management and Economics. BA, Park College; MBA, University of Oregon; MST, Portland State University. At Linn-Benton since 1974.

Cowles, Susan K.
Faculty, JOBS Program. BA, University of Southern California; MA, Stanford University. At Linn-Benton since 1991.

Curwen, Diana (Dee)
Faculty, English to Speakers of Other Languages. BA, College of William and Mary; MS, University of Oregon. At Linn-Benton since 1994.

Daley, Natalie
Faculty, English. BA, CCNY; MA, University of California, Riverside. At Linn-Benton since 1996.

Dameworth, P. Gail
Faculty, Business Technology. AA, Riverside City College; BS, Lewis-Clark State College; MEd, University of Idaho. At Linn-Benton since 1994.

deSzoeke, Judith J.
Faculty, Mathematics. BS, Finders University of South Australia; MS, Oregon State University. At Linn-Benton since 1994.

DeVore, Victoria
Manager, Systems and Application Support. BS, University of California, Riverside. At Linn-Benton since 1996.

Diehm Hudson, Lani
Counselor. BA, University of California at Davis; MS, Oregon State University. At Linn-Benton since 1996.

Dixon, Dael
Counselor. BA, University of Arizona; MS, Oregon State University. At Linn-Benton 1987-88 and since 1991.

Doescher, Sue
Faculty, Family Resources. BS, Purdue University; MA, Michigan State University; PhD, Oregon State University. At Linn-Benton 1980–82 and since 1996.

Donald, Linda
Faculty, Family Resources. BA, Florida State University; MA, University of West Florida. At Linn-Benton since 1991.

Donovan, Jane
Faculty, Performing Arts/Speech-Theatre. BA, Illinois State University; MA, PhD, University of Illinois. At Linn-Benton since 1979.

Dowless, Dean
Faculty, Welding Technology. AS, Linn-Benton Community College. Journeyman welder. AWS and state certifications. At Linn-Benton since 1994.

Dunn, Pam
Faculty, Family Resources. BS, Indiana University; MEd, Oregon State University. At Linn-Benton 1987-89 and since 1992.

Dutson, Margaret (Missy)
Faculty, Continuing and Related Health Occupations. RN, BSN, MN, Oregon Health Sciences University. At Linn-Benton since 1983.

Eastburn, Hal
Faculty, Performing Arts/Music. BS, Minot State University; MM, Colorado State University. At Linn-Benton since 1979.

Erickson, Carol
Faculty, JOBS Program. BS, Oklahoma State University; MSW, Portland State University. At Linn-Benton since 1991.

Esbenshade, Kelly
Supervisor, Printing Services. In printing profession since 1982. At Linn-Benton since 1987.

Etheridge, Ann Marie
Counselor. BA, MS, California State University. At Linn-Benton since 1974.

Etringer, Stephen
Faculty, Manufacturing Technology. BA, Northern Iowa; MFA, University of Iowa. Journeyman Machinist. At Linn-Benton since 1989.

Falk, Randy
Faculty, Physical Education. BS, Rocky Mountain College; MEd, University of Idaho. At Linn-Benton since 1991.

Franzone, Jeff
Faculty, Electronics Engineering Technology. MSET, Arizona State University. At Linn-Benton 1995.

Fraser-Hevlin, Janice
Counselor. BA, University of Alberta; Diploma in Ed., University of Victoria; MS, Oregon State University. At Linn-Benton since 1989.

Frisch, Nickie
Faculty, JOBS Program. BA, Boise State University; MSW, Portland State University. At Linn-Benton since 1992.

Gardner, Carolyn
Faculty, ABSD/GED. BS, University of Illinois; MS, University of Pennsylvania. At Linn-Benton since 1985.

Garland, May
Faculty, Learning Center/Education. BA, Millsaps College; MA, Appalachian State University. At Linn-Benton since 1989.

Gibbs, Richard
Wellness Coordinator; Faculty, Health and Human Performance. BS, MS, CHES, Brigham Young University. At Linn-Benton 1995.

Gregory, Russell
Faculty, Developmental Studies. BA, MEd, Colorado State University. At Linn-Benton since 1975.

Griffith, John
Faculty, Physical Sciences. BS, East Texas State University; MS, Oregon State University. At Linn-Benton since 1993.

Gusdorf, Myrna
Faculty, Business Management. BS, MSM, MBA, Marylhurst College. At Linn-Benton since 1993.

Hagfeldt, Rachel
Faculty, Nursing. RN, BSN, MSEd, University of Oregon; MS, Oregon State University. At Linn-Benton since 1981.

Hagood, Paul
Faculty, English/Foreign Languages. BA, Whitworth College; MA, Eastern Washington University. At Linn-Benton since 1985.

Hawk, Gregory
Faculty, Physical Education and Health. BS, Northwest Missouri State University; MA, Eastern Washington University. At Linn-Benton since 1983.

Henich, Michael
Faculty, Auto Mechanics/Diesel. BGS, University of Nebraska; MSE, University of Southern California; PhD, Oregon State University. At Linn-Benton since 1979.

Hogeland, Elizabeth (Beth)
Faculty, Family Resources. BA, MS, PhD, Florida State University; MA, Northeast Missouri State University. At Linn-Benton since 1990.

Holland, Michael
Vice President, Administrative and Student Affairs. BS, MS, Western Oregon State University; JD, Willamette University. At Linn Benton since 1995.

Hopkins, Glenda
Faculty, ABSD/GED. BA, Northwest Christian College; MEd, University of Oregon. At Linn-Benton since 1990.

Hopkins, Greg
Faculty, Training and Business Development Center. BS, MSEd, Boise State University. At Linn-Benton since 1995.

Horton, Richard
Faculty/Coordinator, Cooperative Work Experience. BS, Fort Hays University; MS, Kansas State University; MBA, Oregon State University. At Linn-Benton since 1979.

Hoskinson, Samuel
Faculty, Electronics Engineering Technology. BS, MS, Oregon State University. At Linn-Benton 1995.

Hosterman, Craig
Director, Secondary Wood Products Consortium. BS, University of Washington. At Linn-Benton since 1997.

Huckestein, Jim
Director, Financial Information Systems and Planning. BS, Oregon State University. At Linn-Benton since 1992.

Jackson, Allan
Faculty, Heavy Equipment Mechanics/Diesel. AS, Oregon Institute of Technology; Master ASE Certificate (Diesel/Heavy Equipment); related field experience. At Linn-Benton since 1978.

Jackson, Jo Ann
Faculty, Business Management. BS, MS, Illinois State University. At Linn-Benton since 1996.

James, Donna
Assistant Director, Admissions and Student Records. BA, Seattle Pacific University. At Linn-Benton since 1973.

Johnson, Candice (Candy)
Director, Adult Basic Skills Development. BS, Southern Oregon College. At Linn-Benton since 1977.

Johnson, Dagmar
Faculty, Training and Business Development Center. BA, San Jose State University. At Linn-Benton 1993.

Keiser, Joy
Faculty, Family Resources. BA, California State University, Los Angeles. At Linn-Benton since 1992.

Ketler, David
Faculty, Welding Technology. BS, Western Baptist College. Journeyman welder. More than 20 years experience as industrial welder/fabricator. At Linn-Benton since 1998.

Kidd, David
Faculty, Engineering/Wastewater. BS, Northern Arizona University; MS, University of Alaska. At Linn-Benton since 1990.

Kihs, Linda
Faculty, Dental Assistant. At Linn-Benton since 1997.

King, Harold
Director, Benefits and Payroll. Certified Payroll Professional. BA, Oregon State University. At Linn-Benton since 1988.

Klampe, Angelina
Counselor. BS, MS, Oregon State University. At Linn-Benton since 1997.

Klampe, Rick
Faculty, Animal Technology. AS, Linn-Benton Community College; BS, MS, California State University at Fresno. At Linn-Benton since 1989.

Knapp, Susan
Faculty, Training and Business Development Center. BS, MA, University of Oregon. At Linn-Benton since 1997.

Knudson, Ed
Faculty, Business Management. BS, MBA, Oregon State University. At Linn-Benton since 1993.

Kraft, John R.
Faculty, Physical Science. BA, Willamette University; MS, Oregon State University. At Linn-Benton since 1973.

Kraft, Judy
Faculty, Nursing. RN, BSN, MN, Oregon Health Sciences University. At Linn-Benton since 1987.

Krefft, Kevin
Faculty, Environmental Technology. AA, College of DuPage; BS, University of Georgia; MS, MAT, Oregon State University. At Linn-Benton since 1995.

Krislen, Wendy
Faculty, Business Management. CPA. BS, MBA, Oregon State University. At Linn-Benton since 1990.

Krueger, Peggy
Faculty, Business Technology. BS, Humboldt State University; MEd, Oregon State University. At Linn-Benton since 1997.

Lacey, Kevin
Associate Director, Plant and Facilities. Attended Iowa State University. At Linn-Benton since 1989.

Lammers, Mary Ann
Faculty, Business Technology. BS, Montana State University; MS, Utah State University. At Linn-Benton since 1985.

Lanctot, Gary
Manager, Regional Workforce Quality Committee. BS, Portland State University. At Linn-Benton since 1996.

Laper, Marie
Faculty, Life and Employment Development. BS, Ithaca College; MSW, University of North Carolina. At Linn-Benton since 1994.

Lauris, George S.
Faculty, Speech/Theatre. BS, University of Oregon; MA, University of Northern Iowa. At Linn-Benton since 1988.

Lawson, Barb
Faculty, Family Resources. BS, Skidmore; MS, University of Washington. At Linn-Benton since 1998.

Leahey, Dory
Faculty, Developmental Studies. BA, MEd, Westminster College. At Linn-Benton since 1996.

Lebsack, Carolyn J.
Faculty, Biology. BS, MS, Oregon State University. At Linn-Benton since 1975.

Lebsack, Stephen
Faculty, Biology. BS, MS, Oregon State University. At Linn-Benton since 1979.

Lewis, Robert
Faculty, Mathematics. BA, MAT, Duke University; MS, Montana State University; PhD, Oregon State University. At Linn-Benton since 1994.

Liebaert, Richard M.
Faculty, Biology. BS, Michigan State University; MA, University of California, Davis. At Linn-Benton since 1978.

Lind, Peggy
Faculty, Business Technology. BS, MS, Southern Oregon College. At Linn-Benton since 1978.

Litzer, Doris
Faculty, Fine Art. BS, University of Wisconsin–Stevens Point; MA, Northern Illinois University; MFA, University of Wisconsin–Madison. At Linn-Benton since 1989.

Lucas, James
Faculty, Agriculture/Animal Technology. BS, University of California, Davis; MS, California State University, Fresno. At Linn-Benton since 1978.

Lundy, Elizabeth
Faculty, Mathematics. BS, University of Nebraska at Kearney; MS, Oregon State University. At Linn-Benton since 1990.

Magnuson, Karin
Faculty, Training and Business Development Center. BS, MEd, Oregon State University. At Linn-Benton since 1996.

Malosh, Ann
Faculty, JOBS Program, Lebanon. BA, MEd, University of Toledo–Ohio. At Linn-Benton since 1991.

Mann, Charles
Faculty, Developmental Studies. BS, MA, Oregon State University. At Linn-Benton since 1969.

Mason, Ronald
Faculty, Mathematics. BA, MA, University of Southern Florida. At Linn-Benton since 1979.

Maurer, Roger
Faculty, Mathematics. BS, MS, Oregon State University. At Linn-Benton since 1988.

McLennan, Seaton
Faculty, Metallurgy Technology. BS, Oregon State University. Journeyman welder. At Linn-Benton since 1985.

Melius, Faye
Faculty, Nursing. RN, BSN, Montana State University; MS, University of Portland. At Linn-Benton since 1994.

Miller, Robert A.
Director, College Services Division. BS, Southern Oregon State University; MS, PhD, Oregon State University. At Linn-Benton since 1969.

Mills, Ann
Faculty, Mathematics, Benton Center. BS, College of William and Mary; MS, Oregon State University. At Linn-Benton since 1978.

Miyakawa, Mary
Faculty, Even Start. BA, University of Minnesota; MSW, UC Berkeley. At Linn-Benton since 1998.

Moreira, Joyce L.
Faculty, Business Technology; Benton Center. BS, MEd, Oregon State University. At Linn-Benton since 1972.

Mulder, Greg
Faculty, Physical Science. BA, Oregon State University; MS, University of Irvine. At Linn-Benton since 1997.

Mundt, Carla
Faculty, Business Technology, East Linn-LBCC. BS, Oregon State University. At Linn-Benton since 1986.

Muscato, Louise
Faculty, Health and Human Performance. BS, James Madison University; MED, CHES, Oregon State University. At Linn-Benton 1994.

Nelson, Doris Helen (Dorie)
Director, Extended Learning and Benton Center. BA, Stanford University; MFA, University of Oregon. At Linn-Benton since 1984.

Neville, Gene
Manager, Food Services. BS, University of Nevada. At Linn-Benton since 1981.

Newton, Janet
Confidential Secretary to the Vice President for Academic Affairs. AAS, Linn-Benton Community College; Certified Professional Secretary. At Linn-Benton since 1990.

Nicholson, Kevin D.
Director, Maintenance. Maintenance electrical license. At Linn-Benton since 1976.

Noone, Lucy Himelreich
Assistant Director, Extended Learning and Benton Center. BA., Purdue University; MEd, Oregon State University. At Linn-Benton since 1996.

North, Vicki
Faculty, Family Resources. BS, MS, Texas Women's University. At Linn-Benton since 1997.

Olsen, Linda
Faculty, ABSD/GED, Student Development. BA, Oregon State University. At Linn-Benton since 1988.

Pascone, John
Faculty, Business Advocate; Business Counselor/Instructor, Training and Business Development Center. BS, University of San Francisco; MBA, University of Santa Clara. At Linn-Benton since 1986.

Paul Bryant, Tammi
Director, Student Life and Leadership. BS, Oregon State University; MA, Antioch University. At Linn-Benton since 1989.

Paulson, Gregory F.
Faculty, Agriculture/Horticulture. BS, Colorado State University; MSEd, Oregon State University. At Linn-Benton since 1976.

Paulson, Jacqueline
Faculty, Nursing. RN, BS, MA, University of Washington; EdD, Brigham Young University. At Linn-Benton since 1972.

Pearce-Smith, Liz
Faculty, Family Resources. BA, Tufts University; EdM, Harvard Graduate School of Education. At Linn-Benton since 1989.

Peterson, John Bruce
Manager, Takena Theatre. BA, MFA, San Diego State. At Linn-Benton since 1992.

Phillips, Jerald
BS, MPA, Portland State University. At Linn-Benton since 1981.

Ploetz, Holly
Faculty, Water/Wastewater Technology. Attended two years, Water/Wastewater Program. At Linn-Benton since 1990.

Popoff, Lance
Director, Financial Aid/Veterans Affairs. BS, Pacific University. At Linn-Benton since 1986.

Propst, Marlene
Director, Marketing and Public Relations. AS, Linn-Benton Community College; BS, MS, NBCC, Oregon State University. At Linn-Benton since 1976.

Rinker, Russell
Manager, Networking and Systems Support. BS, University of Oregon. At Linn-Benton since 1981.

Rodecap, Sharon
Faculty, Mathematics. BS, Idaho State University; MS, Oregon State University. At Linn-Benton since 1996.

Rogers, Judith A.
Faculty, Fine Art. BFA, MFA, University of California, Santa Barbara. At Linn-Benton since 1977.

Rolfe, Jorry
Faculty, Library. BA, Pennsylvania State University; MLS, University of Pittsburgh. At Linn-Benton since 1986.

Rosen, Sherry
Counselor, JOBS Volunteer Work Experience. BA, Sonoma State University; MA, Goddard College. At Linn-Benton since 1996.

Ruppert, Gary
Faculty, Performing Arts/Music, Speech. BA, California State University, Sacramento; MM, University of Oregon. At Linn-Benton since 1975.

Salter, Christina
Counselor. BA, New College; MS, University of Oregon. At Linn-Benton since 1992.

Sargent, Dennis
Faculty/Business Counselor, Training and Business Development Center. CPA. BS, MS, Oregon State University. At Linn-Benton since 1983.

Schaafsma, Carol
Director, Contracted Training, Training and Business Development Center. BA, Ashland College; MSIR, University of Oregon. At Linn-Benton since 1994.

Schiedler, Bryan
Faculty, Automotive Technology. AAS, Linn-Benton Community College; BA, Northern Montana College. At Linn-Benton 1994.

Schuetz, L. Jamison
Faculty, Business Management. BS, Southern Oregon State University; MS, Willamette University; PhD, Oregon State University. At Linn-Benton since 1980.

Schukart, Terry
Faculty, JOBS Program. BS, MS, Oregon State University. At Linn-Benton since 1991.

Schulz, Martin
Faculty, Training and Business Development Center. BS, MBA, Oregon State University. At Linn-Benton since 1992.

Sharman, Ronald
Faculty, Water/Wastewater Technology. AS, Linn-Benton Community College; BS, Oregon State University. At Linn-Benton since 1979.

Sherlock, Joseph
Manager, Marketing and Publications/Public Information Officer. BFA, Oregon State University. At Linn-Benton since 1989.

Shires, Tony
Faculty, Engineering Graphics. BS, Oregon State University. At Linn-Benton 1995.

Shute, Patti
Faculty, Even Start. BA, University of Oregon. At Linn-Benton since 1997.

Smart, Ann
Dean, Extension Services. BSEd, Ball State University; MHEc, PhD, Oregon State University. At Linn-Benton since 1975.

Smith, Sharyn
Faculty, Training and Business Development Center. BA, Lawrence University, Wisconsin; MS, Northwestern University, Illinois. At Linn-Benton since 1993.

Smithburg, Tom
Faculty, Collision Repair. AAS, Linn-Benton Community College; General Motors Training; I-CAR Training; ASE Certified. At Linn-Benton since 1996.

Snyder, John
Coordinator, Financial Aid. BS, MEd, Oregon State University. At Linn-Benton since 1991.

Snyder, Paul K.
Faculty, Media Specialist. BS, Portland State University; MS, Western Oregon State University. At Linn-Benton since 1974.

Spain, Linda
Faculty, English/Foreign Languages. BS, Minot State University; MEd, Colorado State University. At Linn-Benton since 1985.

Stark, Cathy
Faculty, Mathematics. BS, MS, Texas A&M University. At Linn-Benton since 1996.

Stordahl, Linn
Faculty, Physical Education and Health. BS, Montana State University; MS, Colorado State University; ABD, University of Wisconsin; MS, University of Montana. At Linn-Benton since 1997.

Stouder, Sally
Faculty, Business Technology. BS, MS, Oregon State University. At Linn-Benton since 1991.

Sweet, John
Faculty, Engineering/Electronics Engineering Technology. BS, MS, Oregon State University. At Linn-Benton since 1988.

Tepper, Glenda
Director, Admissions and Records. BS, Oregon Institute of Technology; MBA, Southern Oregon State University. At Linn-Benton since 1994.

Thorson, Wendy
Faculty, JOBS. BA, Western Washington University, Fairhaven; MAIS, Oregon State University. At Linn-Benton since 1996.

Trautwein, W. Sue
Faculty, Business Technology. BS, Oregon State University; MS, University of Oregon. At Linn-Benton since 1978.

Trimpe, Lynn
Faculty, Mathematics. BS, MST, University of Missouri. At Linn-Benton since 1979.

Trombley, Laurie
Director, Contract Management. AS, AA, Linn-Benton Community College; BS, Oregon State University. At Linn-Benton since 1984.

Turle, Jackie
Faculty, Criminal Justice. BS, Bowling Green State University; MEd, Oregon State University. At Linn-Benton since 1998.

Turner, Judith E.
Faculty, Library. BA, Central Washington University; MLS, University of Washington. At Linn-Benton since 1989.

Ulrich, Robert
Faculty, Mathematics. BS, MAT, PhD, University of Washington. At Linn-Benton since 1978.

VanLaere, Margaret Susan (Sue)
Faculty, ABSD/GED. BA, MA, University of Wisconsin. At Linn-Benton since 1983.

Vee, Regina (Gina)
Faculty, Psychology and Sociology. BA, Northern Illinois University; MAIS, Oregon State University. At Linn-Benton since 1973.

Walker, Julie
Controller, Accounting Services. AS, Linn-Benton Community College; BA, George Fox University. At Linn-Benton since 1987.

Watson, Diane
Dean, Student Services. BAE, University of Florida; MA, EdD, University of Northern Colorado. At Linn-Benton since 1985.

Watson, Edwin R.
Vice President for Academic Affairs. BS, MS University of Oregon; Ph.D, Oregon State University. At Linn-Benton since 1993.

Weber, Bobbie
Faculty, Family Resources. BA, Seattle University; MS, University of Wisconsin, Madison. At Linn-Benton since 1977.

Weems, Peggy
Faculty, Computer Science. BS, MS, Oregon State University. At Linn-Benton since 1981.

Weiss, Mark
Counselor, BA, California State University at Long Beach; MEd, LPC, Oregon State University. At Linn-Benton since 1990.

Weiss, Michael
Faculty, History. BA, Hunter College; MA, Michigan State University; MA, University of Oregon. At Linn-Benton since 1990.

Wert, Charles
Faculty, Biology. BS, MS, Cal Polytechnic State University, San Luis Obispo; MA, San Diego State University; PhD, Idaho State University. At Linn-Benton since 1994.

Westfall, Betty
Faculty, Mathematics. BS, Idaho State University, MEd, University of California at Santa Barbara. At Linn-Benton since 1986.

Weyant, Charles E.
Faculty, Library. BA, The American University; MA, Wayne State University; MSLS, Simmons College. At Linn-Benton since 1984.

White, Jane
Faculty, English/Foreign Languages. BA, MA, Michigan State University. At Linn-Benton since 1978.

Whitehead, Mark
Faculty, Culinary Arts/Hospitality Services. Western Culinary Institute. At Linn-Benton since 1992.

Wibbens, Beth
Faculty, JOBS Program. BS, Southern Oregon State University; MS, Oregon State University. At Linn-Benton since 1990.

Widmer, Jay
Faculty, Ceramics, Benton Center. BA, Oregon State University. At Linn-Benton since 1979.

Wisecaver, Laura
Educational Assessment and Research. BA, California State University Sacramento; MA, San Diego State University; PhD, Oregon State University. At Linn-Benton since 1997.

Withrow, Kathy
Employment Services Manager, Human Resources/Payroll. BA, George Fox University. At Linn-Benton since 1985.

Wright, Carolyn
Faculty, Psychology. BS, Brigham Young University; MS, Portland State University. At Linn-Benton since 1991.

Yee, Cynthia
Director, Research. BS, Oregon State University. At Linn-Benton since 1991.

Alcohol- and Drug-Free Program In Place at Linn-Benton

As one part of its Alcohol- and Drug-free (Workplace/School) Program, Linn-Benton Community College recently published a pamphlet to inform students and staff about the health risks of using drugs and to outline counseling and treatment resources available in the area. The pamphlet, which is repeated here, includes standards of conduct required of students and staff, a description of the health risks associated with using illicit drugs and abusing alcohol plus an overview of the applicable local, state and federal legal sanctions for the unlawful possesion, use or distribution of illicit drugs and alcohol. Anyone wanting additional information should contact LBCC's Human Resources Office, 967-6502.

I. Introduction

Linn-Benton Community College is legally required and morally committed to the prevention of illicit drug use and the abuse of alcohol by both students and employees. Drug and alcohol abuse is a significant public health problem which has spread throughout our society, affecting performance and productivity, as well as our level of general health. In addition, the use of drugs can adversely affect an organization's level of safety as well as its public confidence and trust. And lastly, with reference to "The Drug-Free Schools and Communities Act Amendment of 1989 (Public Law 101-226),"

"...no institution of higher education shall be eligible to receive funds or any other form of financial assistance under any Federal program, including participation in any federally funded or guaranteed student loan program, unless it certifies to the Secretary that it has adopted and has implemented a program to prevent the use of illicit drugs and the abuse of alcohol by students and employees..."

In brief, this section has been developed by LBCC to comply with the recently enacted federal law and to educate and inform its students and employees of the health risks, counseling and treatment resources, and sanctions for noncompliance. Linn-Benton will biennially review this program to determine its effectiveness and implement changes if needed and to ensure that the sanctions required are consistently enforced.

II. Standards of Conduct

Students:

The LBCC *Student Rights, Freedoms, Responsibilities & Due Process* document (page 11, number 7) defines the following behaviors as violations of the standards of student conduct: "use, possession, or distribution on campus of alcoholic beverages, narcotics, or dangerous drugs as described by the Bureau of Narcotics and Dangerous Drugs, except as expressly permitted by law."

Employees:

In compliance with the Drug-Free Workplace Act of 1988 and the Drug-Free Schools and Communities Act Amendment of 1989 (Public Law 101-226), it shall be the policy of Linn-Benton Community College to maintain an alcohol and drug-free workplace for all employees of the District. The unlawful manufacture, distribution, dispension, possession or use of alcohol or a controlled substance, except by physician's prescription, is strictly prohibited in the workplace(s) of the Linn-Benton Community College District.

III. A Description of the Health Risks Associated with the Use of Illicit Drugs and the Abuse of Alcohol

Illicit Drugs:

Marijuana is addictive and can cause: impaired short-term memory, visual tracking, heart rate, slowed reaction time/poor coordination, lung disease and damage to reproductive functions.

Cocaine and Crack are highly addictive and may cause: impaired judgment, short attention span, irritability, depression, mood swings, malnutrition, severe weight loss and liver damage, seizures, coma, seizure and heart attack.

PCP, LSD, Heroin, Mescaline and Morphine have a wide variety of negative health effects which may include: hallucinations, mental confusion and/or permanent loss of mental function, addiction, convulsions, coma, death.

Prescription Drugs are too often used to reduce stress and are not safe unless they are taken as prescribed. If abused, they can lead to: malnutrition, sluggishness or hyperactivity, impaired reflexes, addiction and brain damage, coma, death.

Alcohol:

Alcohol is the most commonly abused drug and can cause: loss of concentration, poor judgment and coordination, impaired memory, drowsiness and mood swings, liver damage/cirrhosis of the liver, high blood pressure and heart attack, pancreatitis, various cancers, heart disease

V. LBCC Sanctions

Students:

Sanctions which may be imposed on students for violations of the code include: *disciplinary probation* (a verbal or written warning by the college president or other administrator), *temporary exclusion* (removal for the duration of a class period), *suspension* (exclusion from classes, privileges, or activities for a specified period), *expulsion* (termination of student status).

Employees

The college will impose sanctions or require satisfactory completion of a drug abuse assistance or rehabilitation program. Sanctions imposed may include *disciplinary probation* (the suspension of a more severe penalty for a specific time period, based upon good behavior), *suspension* (the temporary barring from employment for a specific time period, without pay), and/or *termination* (the severance of employment with the college).

VI. Assistance Programs Available to Students and Employees

Community Resources:

Substance Abuse:

Benton County Alcohol and Drug Treatment Program 757-6850
Linn County Alcohol and Drug Treatment Program 967- 3819
Alcoholics Anonymous, Albany and Corvallis 967-6243
Alcoholics Anonymous, Lebanon 258-5205
Alcoholics Anonymous, Sweet Home . 367-5744
Ala-Non/Ala-Teen: Corvallis and Albany 967-6243
Ala-Non/Ala-Teen, Lebanon 451-5849
*Ala-Non/Ala-Teen, Sweet Home 367-5396
Narcotics Anonymous, Albany and Corvallis 967-6262
Cocaine Abuse Hotline 1-800-COCAINE
Community Outreach, Inc. 758-3000
White Oaks Outpatient and Youth Treatment, Salem 585-6278

** Sweet Home is coordinated through the Albany Ala-Non/Ala-Teen office.*

Residential Treatment:

Milestones Family Recovery Program, Corvallis 753-2230
Serenity Lane, Eugene 687-1110

College Resources:

Students:

Counseling Center, Takena Hall 917-4780

Employees:

LBCC provides an Employee Assistance Program (EAP), available to all employees with .50 or greater contracts. Through this program, each employee and his or her dependents are allowed five visits per year at no cost for appraisal, limited counseling and/or referral. All employee contact with EAP is **strictly confidential**. Telephone numbers for EAP include: Corvallis (757-3013), Albany (928-8613), Salem (588-0777), Tigard (639-3009)

12-Step Program:

LBCC acknowledges the value of this 12-step, anonymous program in attaining and maintaining an alcohol-free lifestyle. Information can be found in room 207, College Center Building.

Federal Trafficking Penalties — Appendix A

CSA	Penalty: 2nd Offense	Penalty: 1st Offense	Quantity	Drug	Quantity	Penalty: 1st Offense	Penalty: 2nd Offense
I and II	Not less than 10 years. Not more than life. If death or serious injury, not less than life. Fine of not more than $4 million indfvidual, $10 million other than individual.	Not less than 5 years. Not more than 40 years. If death or serious injury, not less than 20 years. Not more than life. Fine of not more than $2 million individual, $5 million other than individual.	10-99 gm or 100-999 gm mixture	Methamphetamin	100 gm or more or 1 kg* or more mixture	Not less than 10 years. Not more than life. If death or serious injury, not less than 20 years. Not more than life. Fine of not more than $4 million individual, $10 million other than individual.	Not less than 20 years. Not more than life. If death or serious injury, not less than life. Fine of not more than $8 million individual, $20 million other than individual.
			100-999 gm mixture	Heroin	1 kg or more mixture		
			500-4,000 gm mixture	Cocaine	5 kg or more mixture		
			5-40 gm mixture	Cocaine Base	50 gm or more mixture		
			10-90 gm or 100-999 mixture	PCP	100 gm or more or 1 kg or more mixture		
			1-10 gm mixture	LSD	10 gm or more mixture		
			40-399 gm mixture	Fentanyl	400 gm or more mixture		
			10-99 gm mixture	Fentanyl Analogue	100 gm or more mixture		

	Drug	Quantity	First Offense	Second Offense
	Others**	Any	Not more than 20 years. If death or serious injury, not less than 20 years, not more than life. Fine $1 million individual, $5 million not individual.	Not more than 30 years. If death or serious injury, life. Fine $2 million individual, $10 million not individual.
III	All	Any	Not more than 5 years. Fine not more than $250,000 individual. $1 million not individual.	Not more than 10 years. Fine not more than $500,000 individual, $2 million not individual.
IV	All	Any	Not more than 3 years. Fine not more than $250,000 individual, $1 million not individual.	Not more than 6 years. Fine not more than $500,000 individual, $2 million not individual.
V	All	Any	Not more than 1 year. Fine not more than $100,000 individual, $250,000 not individual.	Not more than 2 years. Fine not more than $200,000 individual, $500,000 not individual.

*Law as originally enacted states 100 gm. Congress requested to make technical correction to 1 kg. **Does not include Marijuana, hashish or hash oil (see separate chart).

Federal Trafficking Penalties – Marijuana

As of November 18, 1988

Quantity	Description	First Offense	Second Offense
1000 kg or more or 1000 or more plants.	Marijuana Mixture containing detectable quantity.*	Not less than 10 years, not more than life. If death or serious injury, not less than 20 years, not more than life. Fine not more than $4 million individual, $10 million other than individual.	Not less than 20 years, not more than life. If death or serious injury, not less than life. Fine not more than $8 million individual, $20 million other than individual.
100 kg. to 1000 kg. or 100-999 plants.	Marijuana Mixture containing detectable quantity.*	Not less than 5 years, not more than 40 years. If death or serious injury, not less than 20 years, not more than life. Fine not more than $2 million-individual, $5 million other than individual.	Not less than 10 years, not more than life. If death or serious injury, not less than life. Fine not more than $4 individual, $10 million other than individual.
50 to 100 kg.	Marijuana	Not more than 20 years. If death or serious injury, not less than 20 years, not more than life. Fine $1 million individual, $5 million other than individual.	Not more than 30 years. If death or serious injury, life. Fine $2 million individual, $10 million other than individual.
10-100 kg.	Hashish		
1 to 100 kg.	Hashish Oil		
50-99 plants	Marijuana		
Less than 50 kg.	Marijuana	Not more than 5 years. Fine not more than $250,000 individual, $1 million other than individual.	Not more than 10 years. Fine $500,000 individual, $2 million other than individual.
Less than 10 kg.	Hashish		
Less than 1 kg.	Hashish Oil		

*Includes Hashish and Hashish Oil.
From the Federal Register, Vol. 55, No. 159, 8-16-90.

(Marijuana is a Schedule I Controlled Substance.)

IV. A Description of the Applicable Legal Sanctions Under Local, State, and Federal Law for Unlawful Possession, Use, or Distribution of Illicit Drugs and Alcohol

The following chart describes the penalties in general for **possession** of key **drugs** according to the Federal Drug Schedules:

	Maximum Prison Time	Maximum Fine
Schedule I - Class B Felony Heroin, LSD, other hallucinogens, marijuana, others	10 years	$100,000
Schedule II - Class C Felony Methadone, morphine, amphetamine, cocaine, PCP	5 years	$100,000
Schedule III - Class A Misdemeanor Non-amphetamine stimulants, some depressants	1 year	$2,500
Schedule IV - Class C Misdemeanor Valium-type tranquilizers, some less potent depressants	30 days	$500
Schedule V - Violation Dilute mixtures, compounds with small amounts of controlled drugs	none	$1,000

Delivery of less than five grams or possession of less than one ounce of marijuana is a violation. HB 2479 established mandatory evaluation, education and treatment services for those under 18 years of age. If services are successfully completed, the charge will be dropped. Oregon has strong new laws allowing cars, boats, etc. that transport illegal drugs to be seized and forfeited.

Alcohol is an illegal drug for those under 21 years of age. For drivers under 18 ANY detectable amount of alcohol (above .00 BAC) is grounds for losing their license until they are 18. There are many more laws pertaining to alcohol and other drugs. This is a sample to demonstrate that most drugs are VERY illegal, and a criminal conviction may bar a student from their chosen career path or an employee from successful employment with the college.

MAJOR CODES

DEGREES AND MAJORS OFFERED AT LINN-BENTON COMMUNITY COLLEGE

Professional Technical Programs

(Major code numbers listed in **bold** print have special admission requirements. Admission for entry into these programs must be arranged in advance through the Admissions Office. See Catalog for details or contact the Admissions/First Stop Center at 917-4811. Programs without degree codes are non-degree/certificate programs.)

Degree Code	Major Code	
C1	5050	Accounting Clerk
AAS	5002	Accounting Technology
AAS	5109	Computer User Support
AAS	5014	Administrative Assistant
AAS	5214	Administrative Medical Assistant
	5650	Adult High School Diploma
C1	5010	Advanced Supervisory Management
AAS	5401	Agriculture
C1	5401	Agriculture
AAS	5206	Animal Technology
AAS	5204	Animal Technology/Horse Management
AGS	5600	Associate of General Studies
AGS	5601	Associate of General Studies/Technology Option
AAS	5306	Automotive Technology
C2	5306	Automotive Technology
C	5011	Basic Supervisory Management
AAS	5106	Business Computer Systems
C1	5383	Collision Repair Technology
AAS	5596	Child and Family Studies
C1	5596	Child and Family Studies
C1	5301	Civil Engineering Technology
AAS	5109	Computer User Support
AAS	5320	Crafts and Trades (Apprenticeship)
AAS	5500	Criminal Justice
		Culinary Arts and Hospitality Services Areas of Concentration:
AAS	8401	Chef Training
AAS	8403	Restaurant and Catering Management
C1	**7202**	**Dental Assistant**
	5200	Pre-Dental Assistant
C1	5075	Educational Assistant
AAS	5701	Digital Imaging and Prepress Technology
AAS	7310	Engineering Systems Technology
	5311	Pre-Electronics
C1	7298	Emergency Medical Technician
AAS	5302	Engineering Graphics Technology
C	**5498**	**Farrier Science**
AAS	5112	Graphic Design
C1	5316	Heating
AAS	5307	Heavy Equipment Mechanics/Diesel
C2	5307	Heavy Equipment Mechanics/Diesel
AAS	5402	Horticulture
C1	5402	Horticulture
C1	5501	Juvenile Corrections
AAS	5097	Legal Secretary
C1	5309	Machine Tool Technology
AAS	5212	Medical Assistant
C1	5215	Medical Office Specialist
C1	5213	Medical Transcriptionist
AAS	5395	Metallurgy and Materials Technology
C1	5400	Nondestructive Testing
AAS	**7208**	**Nursing**
	5210	Pre-nursing
C	5209	Nursing Assistant
C1	5326	Occupational Skills Training
C1	5087	Office Specialist
AAS	5317	Refrigeration, Heating and Air Conditioning
C2	5317	Refrigeration, Heating and Air Conditioning
AAS	5015	Business and Supervisory Management
AAS	**7408**	**Water/Wastewater Technology**
C1	**5410**	**Water/Wastewater Plant Operation**
	5411	Pre-Water/wastewater
AAS	5308	Welding Technology
C2	5308	Welding Technology
C1	5308	Welding Technology

Lower-Division Transfer Interest Areas

LBCC offers an Associate of Arts (AA) degree Oregon Transfer with an interest in any subject area listed below. An Associate of Science (AS) degree is offered in any area of concentration marked with an asterisk (*). See an advisor or counselor to determine which degree is most appropriate.

0604	Advertising and Promotion	
* 4997	Agricultural Education	
* 4999	Agriculture Business Management	
* 4996	Animal Science	
2202	Anthropology	
4998	Architecture	
1003	Art	
* 4987	Biological Sciences	
* 0506	Business Administration	
4953	Chemistry	
* 2210	Child and Family Studies	
* 0550	Computer Science	
8003	Creative Writing/Technical Writing	
2100	Criminal Justice	
* 0510	Economics	
* 0800	Education	
1501	English	
* 1012	Fine Art	
4954	Fisheries and Wildlife	
1101	Foreign Language	
4988	General Science	
2206	Geography	
2205	History	
* 4986	Home Economics	
* 4969	Exercise and Sport Science	
2212	Human Services	
2211	International Studies	
* 0600	Journalism/Mass Communications	
* 4900	Liberal Studies	
8002	Literature	
* 4984	Mathematics	
8004	Music	
8005	Philosophy/Religion	
1920	Physics	
2207	Political Science	
4979	Pre-Dental/Dental Hygiene	
* 4975	Pre-Engineering	
2110	Pre-Law	
4980	Pre-Medicine	
4972	Pre-Occupational Therapy	
4973	Pre-Pharmacy	
4974	Pre-Physical Therapy	
4978	Pre-Veterinary Medicine	
2001	Psychology	
* 4968	Health Promotion and Education	
2204	Social Science	
2208	Sociology	
8006	Spanish	
1014	Speech Communications	
4989	Technology Education	
1007	Theatre	

After Four Programs

These programs can be completed by attending classes in the evening; however, it generally takes longer to complete a program. It is possible to complete some transfer programs in the evening by working closely with an advisor.

Degree Code	Major Code	
C1	5050	Accounting Clerk
AGS	5600	Associate of General Studies
AGS	5601	Associate of General Studies/Technical Option
AS	0506	Business Administration
AS	4900	Liberal Studies
AAS	5004	Business and Supervisory Management
C1	5010	Advanced Supervisory Management
C	5011	Basic Supervisory Management

COMMON COLLEGE TERMS

ASLBCC
Refers to the general LBCC student body known as the Associated Students of Linn-Benton Community College. The ASLBCC annually elect representatives to serve on the Student Government which attempts to identify issues and resolve concerns of students.

Audit
Means to register for a course without having to meet any academic requirements and without earning credit. You may request to audit a course at the Registration Office within the registration period only. The audit grade is based solely on attendance. The instructor can require 100 percent attendance. Based on attendance, a grade of AU or Y may be given by the instructor.

Catalog
A booklet, usually published yearly, that describes all of the courses taught at LBCC. The catalog provides general information about the college and the programs available.

Cooperative Work Experience (CWE)
Cooperative Work Experience is an instructional program designed to provide an opportunity for students enrolled in programs at LBCC to earn up to 14 hours of degree credit for what they learn on the job.

Corequisite
A related course in which you must be simultaneously enrolled in order to take the primary course.

Course Reference Number (CRN)
This is the series of numbers that identify each course for purposes of registering. The CRN may change from term-to-term whereas the course number remains the same.

Credit Evaluation
A formal audit of credits showing how many courses have been completed toward a particular degree or certificate. An application for graduation automatically generates a credit evaluation. A credit evaluation may be requested at the Admissions Office without applying for graduation. An informal credit evaluation may be done by your advisor or counselor.

Credit Load
Credit load is the number of credits you register for each term. LBCC considers you a full-time student if you take 12 or more credits in a term. To finish a 90-credit degree program in two years (or six terms), you must average 15 credits per term. For lecture courses, generally one hour of credit is granted at the end of the term for each hour of class attendance per week. For laboratory classes, one credit is granted for spending 2-3 hours in class per week.

Elective
An optional course or subject.

Footnote Key
The key is located in the quarterly and year-long schedules of classes and refers to additional information the student should know when registering for classes.

Fully Admitted
See "Matriculation."

Full Time
Carrying a credit load of at least 12 credits.

GPA
Grade Point Average, based on the number of credits earned and the grades received.

Honor Roll
Students are placed on the academic honor roll if they have taken a minimum of 12 graded credits in a quarter, received at least 3.50 GPA and have no incompletes.

Humanities Courses
A grouping of courses that include literature, art, speech, creative writing, music, drama, philosophy, religion, journalism and foreign languages. The college catalog indicates which courses fulfill humanities general education requirements.

Learning Center
The Learning Center serves all students who want to improve their skills in reading, writing, math and study skills. Also available are courses in spelling, English for Speakers of Other Languages and additional services such as tutors. The center provides a relaxed, friendly study area.

Major
A major implies that a specific field of study has been chosen, such as accounting, nursing or culinary arts.

Math/Science Courses
A grouping of courses that includes algebra, calculus, biology, chemistry, trigonometry, geometry, astronomy, oceanography and physics. The college catalog indicates which courses fulfill Math/Science general education requirements.

Matriculation
Completing the admission process (a bulletin is available at the Admissions Office listing the requirements). Matriculation is required for students receiving financial aid and veterans benefits. Matriculation is required before a student can attend full time or receive a certificate or degree. You must be matriculated before you can receive an early registration appointment.

Part of Term
The part-of-term code is important to know for last day of registration, refund and withdrawal dates and when selecting Pass/No Pass grading. The part-of-term code enables you to determine those dates using the part-of-term table in the quarterly Schedule of Classes.

Pell Grant
The primary federal financial aid grant which is based on need. Students must complete an application for federal aid (FAFSA) and may not have earned a baccalaureate degree. Annual full-time awards range from $400 to $3,000.

Prerequisite
A requirement that must be satisfied before a student may enroll in a particular course. The schedule of classes indicates whether a course has a prerequisite by the footnote "P," and the catalog tells what the prerequisite is in the course description section located at the back of the catalog.

Probation
Students are placed on academic probation if they are taking a minimum of 12 credits and do not complete 50 percent of the credits they have registered for or if they did not earn a 2.0 cumulative GPA ("C" average). Financial aid recipients are subject to Financial Aid probation if they complete fewer than 12 credit hours in a term or earn below a 2.0 GPA. Please consult the Financial Aid Office for further information.

Quarter
See "Term."

Schedule of Classes
A booklet published each term that tells which courses are being offered, where they meet, what time they meet and who teaches them. A year-long schedule also is published, generally in May.

Sequence
Many times courses are offered in a two- or three-course sequence. For example, "Principles of Accounting" is a three-course sequence consisting of BA 211, BA 212 and BA 213 and extends across three terms of the academic year. Each course in the sequence is often a prerequisite to the next course and therefore must be taken in order or sequence. See "Prerequisite."

Social Science Courses
A grouping of courses that includes anthropology, economics, history, political science, psychology, sociology and criminal justice. The college catalog indicates which courses fulfill Social Sciences general education requirements.

Special Admission Programs
Some programs of study, such as nursing and electronics technology, require a special admissions procedure. A listing of these programs and admissions requirements are listed in the "Entering College" section of the catalog and are available in the Admissions Office/First Stop Center.

Stafford Student Loan
A federal financial aid program that is a bank loan. Students must first apply for the Pell Grant by completing the free federal application which will be used to determine eligibility. A loan of up to $2625 for first year students is available, increasing to $3500 for second-year students. Some students may be eligible for additional unsubsidized amounts.

State Need Grant
Grants awarded to Oregon residents who have applied for the Federal Pell Grant, are enrolled as full-time students and have not earned a baccalaureate degree. The award amount is $905 for the year.

Student Employment
The Student Employment Office assists students and alumni in obtaining full-time and seasonal employment on- and off-campus. In addition, help is offered in resume writing, interviewing skills and job search strategies.

Term
LBCC is on a quarter calendar with each quarter being referred to as a term. The college year is divided into four terms or quarters, summer, fall, winter and spring.

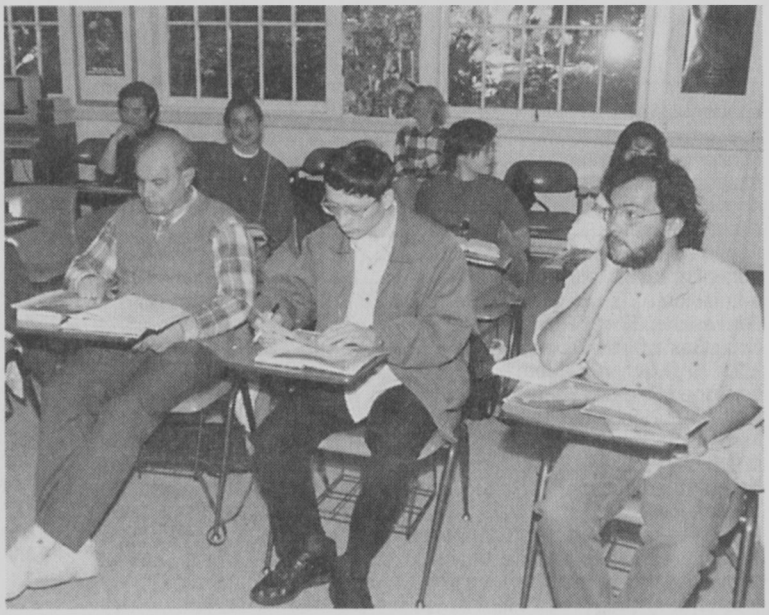
Transcript
A copy of a student's permanent academic record lists the courses taken and the grades received by the student. An **official** transcript is mailed in a sealed envelope directly from the school where the courses were taken. The transcript is official **only** to the person who opens the envelope.

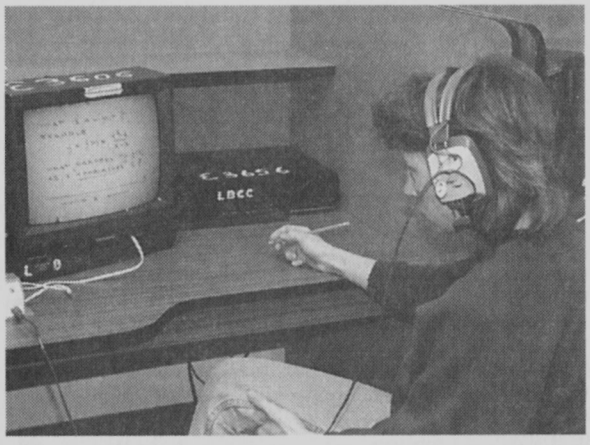
Transfer Courses
Those courses that will transfer to a four-year college or university. See the Course Description section of this catalog or the quarterly Schedule of Classes for course number definitions or see your advisor for transferability of professional technical courses.

Tutor
A tutor is a student who has the necessary skills or understanding of a subject and who provides additional needed assistance to another student outside of the formal classroom environment. Tutoring is free to LBCC students through the Learning Center.

Work Study Program
A federal financial aid program that is based on need, providing for part-time on-campus employment, not to exceed 20 hours per week, during the school terms.


Roland

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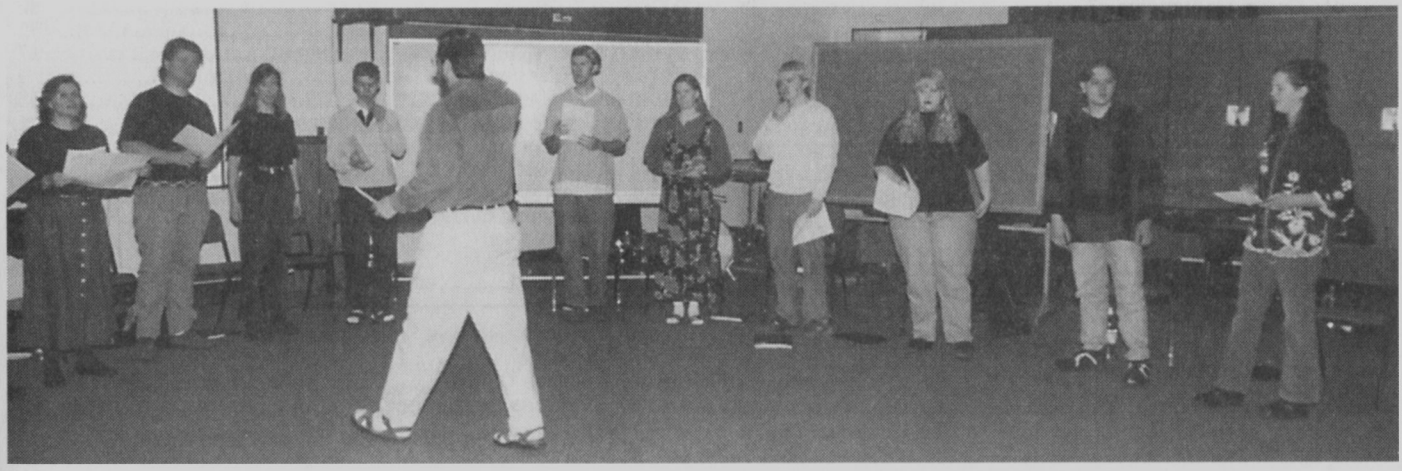


A

Academic Advising 17
Academic Calendar ..... Inside front cover, 2
Academic Probation 7
Academic Regulations 6-7
Accounting Technology 28
Accreditation 2
Administrative Assistant 28
Administrative Medical Assistant 29
Admission 3
Admissions/First Stop Center 3
Adult Basic Skills Development 17
Adult High School Diploma 22
Advanced Degree Program Opportunities 22
Advanced Placement Tests 6
Aerospace Studies 22, 69
After Four Program 21
Agricultural Education 50
Agriculture 29, 50, 67
Agriculture and Resource Economics 68
Agriculture Business Management 50
Albany Extended Learning Center 62
Alcohol- and Drug-Free Program 119
Allied Health/HOSEC 64, 67
Animal Science 50
Animal Technology 30, 69
Animal Technology: Horse Management 30
Anthropology 51, 68
Apprenticeship Program 30
Army ROTC 22
Art (Fine) 56, 68
Art (Graphic Design) 39, 66
Articulation Agreements 3
Assessment Center 17
Associate of Applied Science Degree 21, 23
Associate of Arts Degree 21, 24
Associate of General Studies 21, 25
Associate of General Studies: Technology Option 25
Associate of Science Degree 21, 25-26
Associated Student Government 20
Auditing Classes 5
Automotive Technology 31, 51

B

Benton Extended Learning Center 62
Biological Sciences 51, 72
Bookstore 17
Business 38-39, 70
Business and Supervisory Management 32
Business Administration 51
Business Computer Systems 31
Business Development Center 65
Business Technology 32, 97

C

Campus (LBCC) 1
Campus Map ..... (inside back cover)
Career and Counseling Center 3, 17
Catalog Information 2
Certificates 21
Changes in Course Scheduling 5
Chef Training 32
Chemistry 74
Child and Family Studies 33, 52
Child Care 17
Civil Engineering 74
Civil Engineering Technology 34, 74
College Level Examination Program (CLEP) 6
Collision Repair 76
Collision Repair Technology 34
Common College Terms 122-123
Community Outreach 62-65
Computer Assisted Instruction 18
Computer Lab 17
Computer Online Internet Courses 18
Computer Programming 34
Computer Science 53, 76
Computer User Support 34
Contracted Training 65
Cooperative Work Experience 19, 22, 109
Counseling Center 17
Course Descriptions 66-113
Course Number Change 6
Crafts and Trades 35
Credit by Examination 6
Credit Hours 2
Credit Load 6
Criminal Justice 35, 53, 75
Crop Science 77
Culinary Arts 35, 73

D

Dance 77
Data Processing 35
Degree Requirements 23-26
Degrees, Certificates and Diplomas 21-22
Dental Assistant 4, 35, 77
Developmental English 82
Development English Assistance 18
Digital Imaging and Prepress Technology 36
Diplomas 22
Disability Services 18
Distance Education 18
Drafting (See Engineering Graphics Technology)

E

East Linn-LBCC Extended Learning Centers 62
Economics 53, 54, 78
Education 54, 79
Educational Assistant 36
Emergency Medical Technician 37, 81
Engineering 82
Engineering Graphics Technology 37, 80
Engineering Systems Technology 4, 38, 79
Engineering Technology 83
Engineering Transfer 55
English (Developmental) 82
English (Literature) 82
English/Foreign Language 55
English for Speakers of Other Languages 17
Enrollment Standards 3
Environmental Health 55
Evening Degree (See After Four Program) 21
Evening Services 18, 62
Exercise and Sport Science 56
Extended Learning Centers 62-63
Extended Learning Classes 5

F

Faculty and Administrative Staff 114-118
Family Connections 17, 63
Family Resource Center 17
Family Resources Department 63
Farrier Science 38, 83

Financial Aid 8
Financial Aid Programs and Sources 10-16
Fine Art 56
Fire Science 64
First Aid Station 18
First Stop Center 3
Food Service 18
Foods and Nutrition 83
Full-Time Status 6

G

General Education Development (GED) 17, 22
General Science 85
Geography 56, 84
Geology 83
Grade Point Average 6, 7, 9
Grading System 6
Graduation Requirements 23-26
Graphic Design 39

H

Handicapped Student Services (See Disability Services) 18
Health 86
Health Insurance 2
Health Occupations/Services Education Center (HOSEC) 64
Health Promotion and Education 57
Heavy Equipment Diesel Technology 57
Heavy Equipment Mechanics/Diesel 39
History 88
History (of LBCC) 1
History of Science 88
Home Economics 57
Honor Roll 7
Horticulture 40, 88
Hospitality Services 19
Housing 2
Human Development 85
Human Development and Family Studies 85
Human Resources Learning Community 61
Human Services 87
Humanities 89

I

ID Card 5
Incomplete Rule 7
Industrial Technical 89
Intercollegiate Athletics 20
International Education 20
International Student Admission 4, 5
Internet Courses 18
Intramural Sports 20

J

JOBS Program 64
Journalism and Mass Communications 57, 89

L

Learning Center 19
Lebanon Extended Learning Center (See East Linn LBCC) 62
Legal Secretary 40
Liberal Studies 58
Library 19
Life/Employment Development Department 64
Limitation Policy 23
Linfield College 22
Literature (See English) 82
Lost and Found 19

M

Machine Tool Technology 41
Major Codes 120
Manufacturing Technology 90
Mathematics 59, 94
Mathematics Assistance (See Learning Center) 19
Medical Office 92
Medical Assistant 41
Medical Office Specialist 42
Medical Transcriptionist 42
Metallurgy Technology 42, 91
Mission (of LBCC) 1
Music 59, 95
Musical Performance 93

N

Non-Certificate/Non-Degree Courses 111
Non-Credit and Extended Learning Classes 5
Non-Discrimination Policy 2
Nondestructive Testing 43
Nursing 4, 43, 96
Nursing Assistant 44, 96

O

Occupational Skills Training 44
Office of Disability Services 18
Office Specialist 44
Office Technology 44
Online Internet Courses 18
Open-Enrollment 3
Oregon Advanced Technology Consortium 64
Oregon State University 22
Oregon Transfer Degree 24
Overview (of LBCC) 1

P

Parent Education 45, 63
Parent Educator/Child Care Provider Training 45, 63
Parking 2
Pass/No Pass Option 7
Philosophy 59, 102
Philosophy (of LBCC) 1
Photography 102
Physical Education 99
Physical Education and Health (See Exercise and Sport Science) . 56
Physical Sciences 59
Physics 102
Pledge to Quality Education 2
Political Science 59, 102
Portland State University 22
Prerequisites 6
Printing Services 19
Probation (Academic) 7
Professional Development 65
Professional Technical Courses 66
Professional Technical Programs 27
Program Completion 3
Program Eligibility/Financial Aid 8
Programs of Study 21
Psychology 59, 103
Public Health (See Health Promotion and Education) 57
Publications (Student) 20

R

Reading 104
Reading Assistance 18
Records Information 7
Refrigeration/Heating/Air Conditioning 45, 104
Refunds 6, 8
Regional Programs 22
Registration
  For Credit Classes 5
  For Extended Learning Classes 5
Reinstatement 9
Religion 59, 104
Repeating a Class 6
Requirements for the Associate of Applied Science degree 23
Requirements for the Associate of Arts (Oregon Transfer) degree 24
Requirements for the Associate of General Studies degree 25
Requirements for the Associate of General Studies: Technology Option degree 25
Requirements for the Associate of Science Degree 25
Requirements for Certificates 26
Requirements for Diplomas 26
Reserve Officer Training Corps (ROTC) 22
Residency (Classification of) 4
Restaurant and Catering Management 46
Retired and Senior Volunteer Program (RSVP) 65
Room Reservations/Hospitality Services 19

S

Schedule Changes 5
Science and Technology 108
Security and Safety Services 19
Services for Students 17-20
Short-Term Training 65
Social Sciences 59
Social Security Number (Use of) 7
Sociology 60, 105
Spanish 55, 106
Special Admission Programs 4
Special Fees 5
Special Training Programs 22
Speech 106
Speech Communications 60
Standards of Progress for Graduation 6
Student Ambassador Program 20
Student Costs 8
Student Credit Load and Full-time Status 6
Student Employment Center 19
Student Fees 5
Student Government 20
Student Health Insurance 2
Student ID Card 5
Student Loans 8-16
Student-Owed Repayments 8
Student Life and Leadership 20
Student Programming Board 20
Student Publications 20
Student Right to Know 2
Student Rights and Responsibilities 2
Study Skills 107
Supervisory Management (See Business and Supervisory Management) 32
Supplemental Instruction (SI) 20
Sweet Home Center (See East Linn LBCC) 62

T

Telecourses 18
Testing (See Assessment Center and Learning Center) 17, 19
Theatre 20, 60, 108
Training/Business Development Center 65
Transcripts and Records 7
Transfer Courses 66
Transfer Credits 6
Transfer Opportunities 22
Transfer Programs 49
Transferring LBCC Credits 6
Tuition and Fees 5
Tuition Refunds 6, 8
Tuition Schedule 5
Turning Point Transitions Program 64
Tutoring (See Learning Center 18

V

Variable Credit Classes 9
Veterans Affairs 8

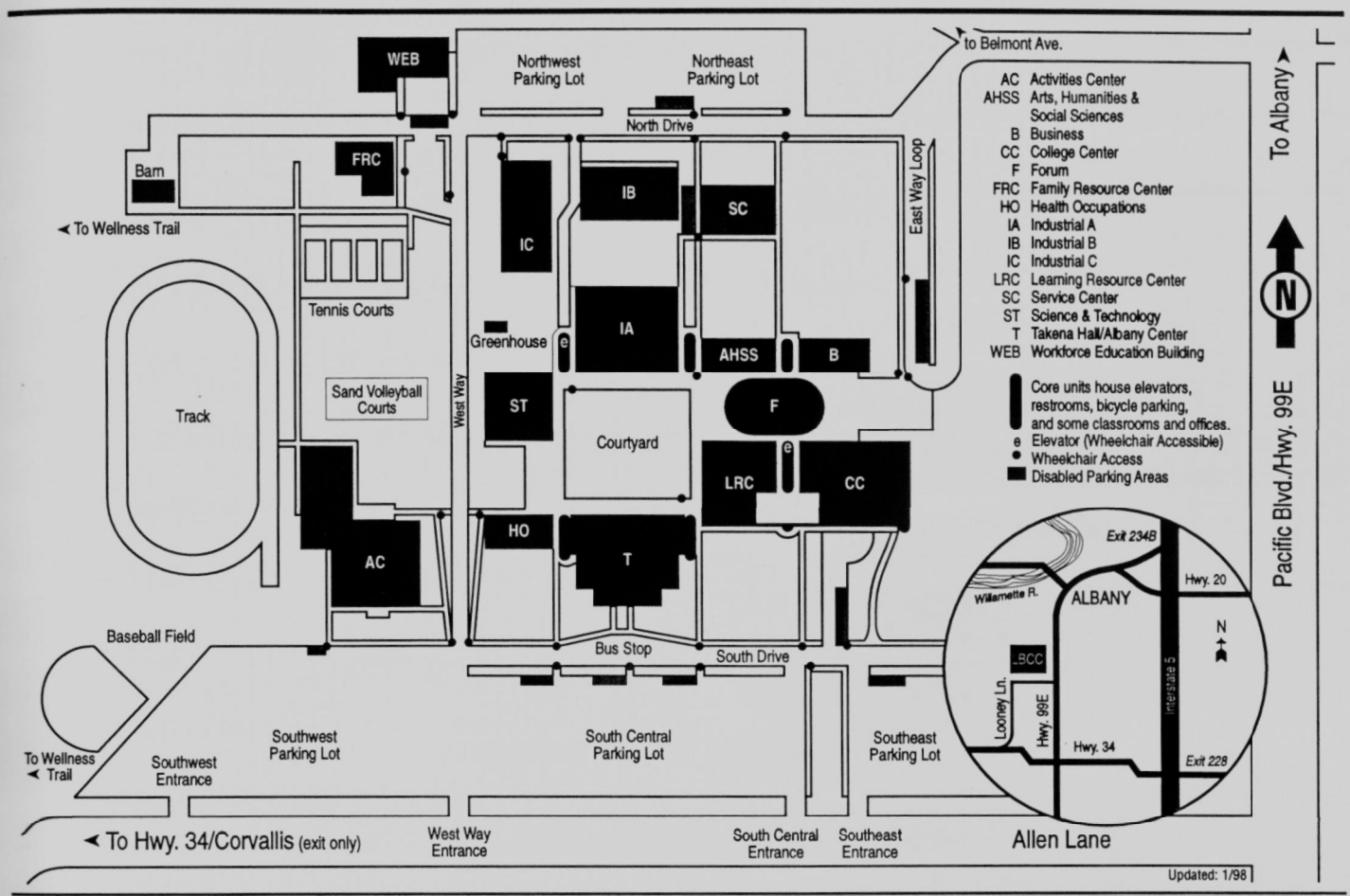
U

Unsatisfactory Progress 9

W

Waiting Lists 5
Water/Wastewater Technology 4, 46
Welding 108
Welding Technology 47
Withdrawal From School 7
Work and Family 45, 63
Writing 109
Writing Assistance (See Learning Center) 18

LINN-BENTON COMMUNITY COLLEGE MAP



OFFICE	ROOM NUMBER
ABE/GED	WEB-116
Academic Affairs	CC-101
Admissions	T-115
Affirmative Action	CC-108
Albany Extended Learning	T-105
Apprenticeship	ST-121B
Athletics	AC-102
Bookstore	College Center first floor
Business Affairs Office	CC-130
Business Development Center	LRC-105
Business, Training and Health Occupations Division	B-111
Camas Room (Snack Bar)	Takena first floor
Career Center	T-101
Child Care Resource & Referral	WEB
College President	CC-101
College Services Division	SC-101
Commuter (The) [Student Newspaper]	CC-210
Computer Lab	F-204
Cooperative Work Experience	T-101
Counseling/Advising	T-101
Culinary Arts	CC-214
Devlopmental Studies	LRC-200
Disabled Student Services	LRC-201
Evening Services	T-105
Extended Learning and Information Services Division	CC-121
Family Resource Center	FRC
Family Resources Department	WEB-106
Financial Aid	T-119

OFFICE	ROOM NUMBER
First Aid (Security and Safety Services)	CC-123
Food Services	CC-214
Health Occupations	HO-121
Hospitality Services	CC-214
Human Performance	AC-102
Human Resources (Personnel)	CC-108
Learning Center	LRC-212
Liberal Arts/Human Performance Division	AHSS-108
Library	LRC-102
Literacy Program	WEB-117
Marketing and Publications	CC-107
Physical Education	AC-102
Physical Plant	SC-102
President's Office	CC-101
Registration	T-115
Room Reservations	CC-214
RSVP	CC-121
Santiam Room Restaurant	CC-201
Science and Industry Division	ST-121
Security and Safety Services	CC-123
Service Center	SC-102
Student Assessment Center (Testing)	T-227
Student Programs	CC-213
Student Services	T-107
Telecourses	LRC-106
Telephone Registration	T-115
Training and Business Development Center	LRC-105
Veterans' Affairs	T-119

Linn-Benton Community College
6500 Pacific Boulevard SW
Albany, OR 97321-3755

General
541 917-4999

Admissions
541 917-4811

Registration
541 917-4812