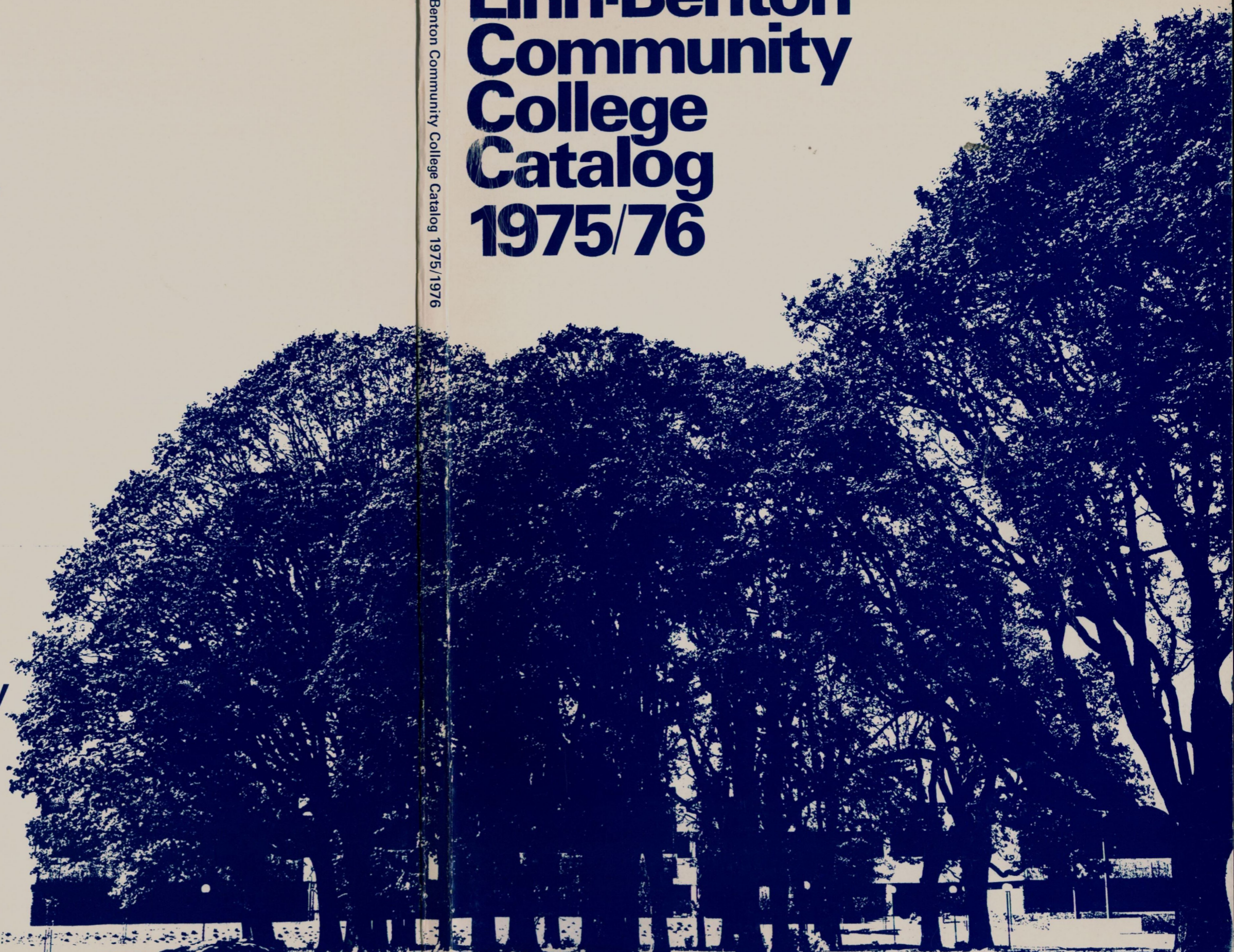


**calendar**  
**table of contents**  
**history and philosophy  
of college**  
**student personnel  
services**  
**allied health and  
physical education  
division**  
**business and  
industrial division**  
**humanities and social  
services division**  
**learning services  
division**  
**science and technology  
division**  
**community education  
division**  
**administration and  
staff**  
**index**

Linn-Benton Community College Catalog 1975/1976

# **Linn-Benton Community College Catalog 1975/76**



# calendar

## FALL TERM, 1975

Registration Begins	August 25
Classes Begin	September 29
Last Day to Register Full-Time	October 3
Veteran's Day Holiday	November 11
Thanksgiving Holiday	Nov. 27-Nov. 30
Last Day to Drop with Automatic 'W'	December 12
Final Exams	Dec. 15-17
Last Day of Fall Term	December 19
Christmas Recess	Dec. 22-Jan. 4

## WINTER TERM, 1976

Registration Begins	December 1
Classes Begin	January 5
Last Day to Register Full-Time	January 9
Last Day to Drop with Automatic 'W'	March 12
Final Exams	March 15-17
Last Day of Winter Term	March 19
Spring Recess	March 20-28

## SPRING TERM, 1976

Registration Begins	March 1
Classes Begin	March 29
Last Day to Register Full-Time	April 2
Memorial Day Holiday	May 31
Last Day to Drop with Automatic 'W'	June 4
Final Exams	June 7-9
Graduation	June 11
Last Day of Spring Term	June 11

## SUMMER TERM, 1976

Registration Begins	May 24
Classes Begin	June 21
Last Day to Register Full-Time	June 25
Independence Day	July 4
Last Day to Drop with Automatic 'W'	August 20
Final Exams—Ten week session	August 23-25
Last Day of Summer Term	August 27

---

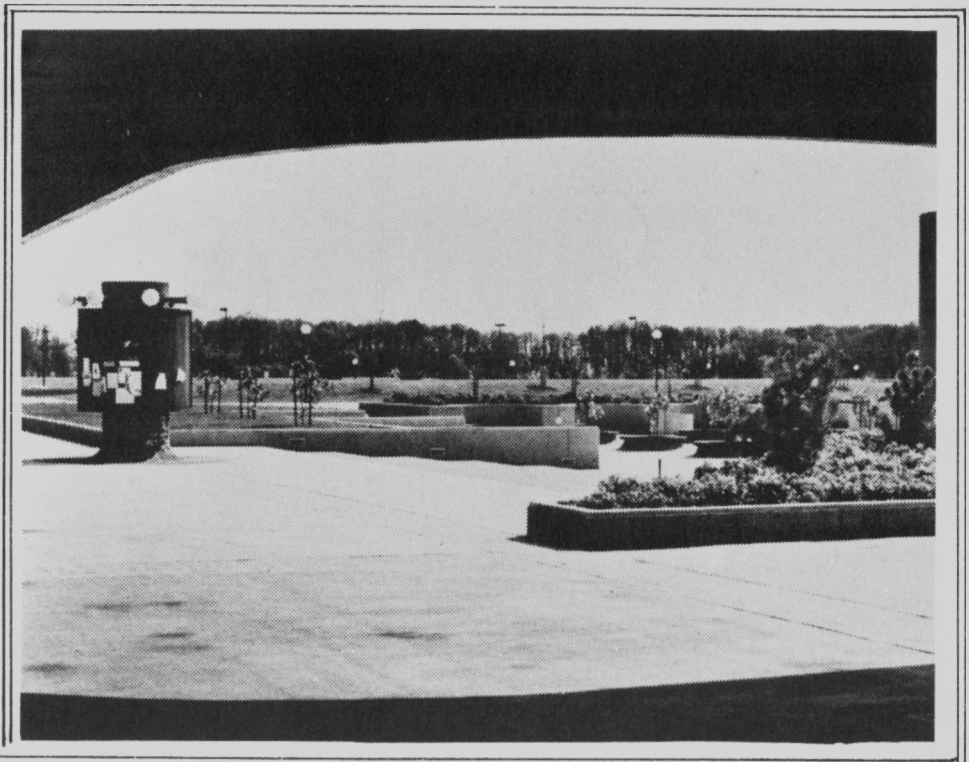
# **Linn-Benton Community College**

6500 SW Pacific Boulevard Albany, Oregon 97321 (503) 928-2361

---

## 2 Table of Contents

History and Philosophy of College . . . . .	3
Student Personnel Services . . . . .	4
Admission Regulations . . . . .	5
Registration Procedures . . . . .	7
Academic Regulations . . . . .	8
Graduation Requirements . . . . .	9
Guidance Services . . . . .	11
Financial Aid and Placement . . . . .	14
Student Activities . . . . .	14
Programs of Study . . . . .	16
Transfer Program . . . . .	17
Occupational and Technical Programs . . . . .	17
Cooperative Work Experience . . . . .	17
Cosmetology . . . . .	17
ROTC . . . . .	18
Lower Division College Transfer Curricula Guides . . . . .	18
Allied Health and Physical Education Division . . . . .	22
Business and Industrial Division . . . . .	30
Humanities and Social Services Division . . . . .	60
Learning Services Division . . . . .	76
Science and Technology Division . . . . .	78
Community Education Division . . . . .	96
Administration and Staff . . . . .	100
Index . . . . .	104



## THE PHILOSOPHY & DEVELOPMENT OF THE COLLEGE

The following statement of beliefs is essential to understanding the commitment the community has made in Linn-Benton Community College.

### BELIEFS:

1. Individuals have different potentials for growth and different needs for self-fulfillment.
2. Learning should provide the individual with an understanding of the relationship between his freedom and his responsibility to society.
3. Through learning, individuals tend to grow from self-centeredness toward social consciousness.
4. Life and learning are dynamic processes, therefore, the individual, and society and its institutions must be free to change goals and aspirations.

### IMPLEMENTATIONS:

The following three criteria constitute the base upon which the college philosophy is implemented.

1. The college program will be comprehensive, offering opportunities consistent with individual needs, abilities, interests and potential.
2. The college program will be consistent with local, state and national needs, responding to these needs with flexibility.
3. Learning opportunities will be available to the greatest number of people, with the minimum number of restrictions.

Educational opportunities will be provided through a wide variety of occupational, academic and independent learning programs with additional learning opportunities provided through counseling services, student activities, and adult and continuing education.

### GUIDELINES:

These guidelines are used in evaluating the operation of LBCC:

1. LBCC is and will continue to be an open-door institution.
2. It is understood that resources are limited, that priorities must be established and the open-door policy therefore is affected by such priorities.
3. Student tuition is to be maintained at a reasonable cost.
4. The instructional staff will be competent in their subject matter area and student-and-learning oriented.
5. The college membership will be sensitive to each other and cooperative action shall be taken by the Students, the Staff and the Board.

## THE HISTORY & DEVELOPMENT OF THE COLLEGE

The Linn County Chamber of Commerce, and its committee on State and National Affairs, spearheaded a drive to obtain a community college in 1963. Their enthusiasm soon led to support and equal leadership within Benton County. Funds were raised to finance a feasibility study by the Bureau of Educational Research at the University of Oregon. The report, "A Study of the Need for a Community College in the Linn-Benton Area of Oregon" was submitted to the Linn County Chamber of Commerce in November, 1964.

Voters in the two counties approved the organization of Linn-Benton Community College Area Education District on December 6, 1966. The college serves the high school districts of Albany, Alsea, Corvallis, Central Linn, Lebanon, a portion of Monroe, Philomath, Sweet Home, and Scio.

On July 31, 1967, the college assumed assets of the former Capital Business College and moved from temporary quarters in the Linn County I.E.D. office, to the building at 203 W. First Avenue, Albany.

On September 25, 1967, Linn-Benton Community College offered its first classes in temporary quarters throughout the district.

On February 25, 1970, the voters of Linn and Benton Counties passed a \$6.1 million bond issue to construct a campus for Linn-Benton Community College.

In September of 1970, classes were offered at the permanent college site, using modular buildings.

Ground-breaking ceremonies for preparation of the college site were held on September 17, 1970. Bids for construction of the first phase of the permanent campus buildings were awarded in the summer of 1971. Occupancy of the first ten buildings was completed in the spring of 1973 and the first phase construction was completed in the fall of 1974.

## ACCREDITATION

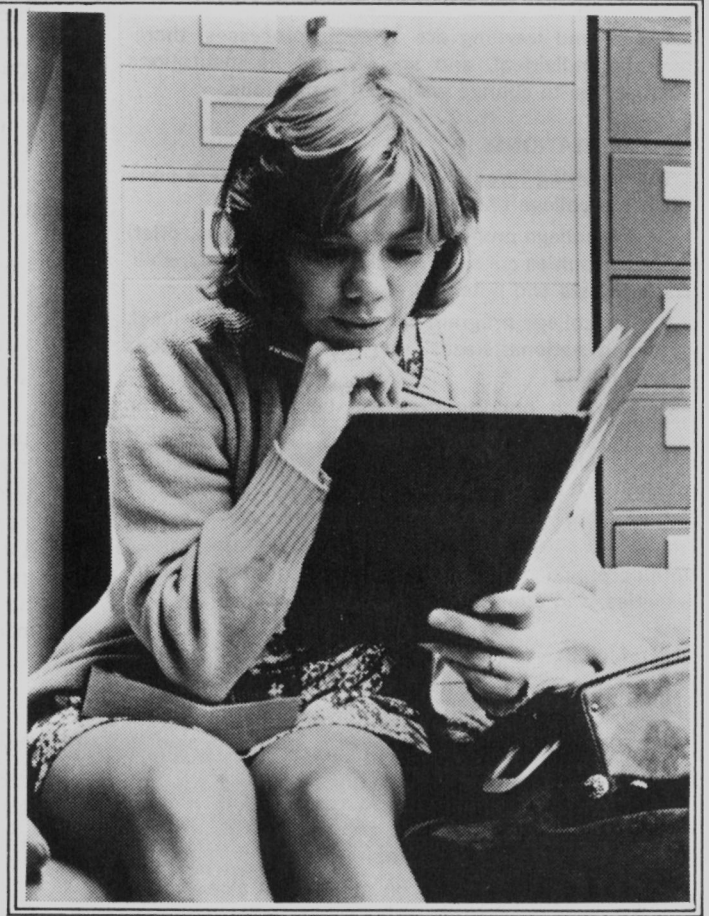
Linn-Benton Community College is accredited by the Northwest Association of Schools and Colleges. Accreditation by this organization indicates that the college's programs are meeting standards and performance levels equal to other accredited institutions.

Linn-Benton Community College is fully accredited by the Oregon State System of Higher Education and Oregon State Board of Education, and offers a variety of programs approved by the Veterans Administration.

## NONDISCRIMINATION

Linn-Benton Community College adheres to the principles embodied in the Oregon and Federal "Fair Employment Practice" legislation and to affirmative action to ensure equal admission opportunities. Persons applying for enrollment at Linn-Benton Community College will be considered for admission without regard to sex, race, color, religion, creed, national antecedents, economic need or age.

# student personnel services



**DEAN OF STUDENTS**

Lee Archibald

**ADMISSIONS AND REGISTRATION**

Jon Carnahan, Director

Sue Cripe, Assistant Registrar

**FINANCIAL AIDS AND PLACEMENT**

Mike Patrick, Director

Dave Haugen, Coordinator Office of Veterans Affairs

Rita Lambert, Financial Aids Counselor

**GUIDANCE SERVICES**

Robert Talbott, Director

Janet Brem, Guidance Counselor

Joyce Easton, Health Counselor

Raymond Miller, Guidance Counselor

Blair Osterlund, Guidance Counselor

Richard Otto, Guidance Counselor

Ann Marie Walker, Guidance Counselor

**STUDENT ACTIVITIES**

Robert Miller, Director

Judy Green, Coordinator Clubs and Organizations

Doug Hurst, Manager Food Services

Information concerning admissions procedures, programs and career exploring is just part of what you can expect in this center. The center is staffed with an admissions and program information specialist and a career information specialist who will assist you.

**Full-Time (Matriculated) Admission**

Students who register for 8 or more credits must file with the Admissions Office:

1. Application for Admission.
2. Official copy of high school transcript if applying for admission directly from high school, or official copy of previous college transcripts.
3. \*Comparative Guidance and Placement Examination is required of all students.

\* *EXCEPTIONS TO #3: Transfer students who have passed 15 college credits or individuals who have taken the S.A.T. with standard scores of 450 on each part or individuals who have taken the A.C.T. with standard scores of 19 on each part.*

When a student has provided the College with the required application, transcript and test scores, the applicant will receive a letter of acceptance. (See specific major for special admissions requirements.)

*NOTE: LBCC will allow early admission of high school students planning to graduate in June on the basis of a 7-semester transcript.*

**Part-Time Admission**

Students enrolling for 7 or fewer credits or enrolling on a non-credit basis may apply at the time of registration, and are not required to secure transcripts of college work unless they plan to graduate from LBCC. Part-time students are unclassified for admission purposes. Admission of unclassified students to selected credit programs and classes is on a space available basis.

**Readmission**

Matriculated students who have discontinued attendance for one quarter or more, not counting summer term, may apply for reenrollment in the Admissions Office by completing a Reenrollment Application. Students who have attended another college or university during the interim are to also submit an official transcript from that school.

**Special Admission**

Persons qualified by maturity and ability, but who fail in some respect to meet the requirements for regular standing, may apply for admission as a special student until such entrance deficiencies are removed. Students must file a "Special Student Agreement" form with the Admissions Office. The form is available from the Director of Admissions.

**Admission of Non-High School Graduates (Special Students)**

\*LBCC will admit non-graduates as special students. Those applying as special students must complete a Special Student Agreement, available from the Director of Admissions.

\*See Special Admission for limitations.



# admissions

**General Policy**

The only entrance requirement is that applicants be beyond high school age (18 years) or have completed high school or its equivalent.

Students applying to enter an occupational program must be 18 years of age and must, in the judgement of the administration, be able to benefit from the instruction offered. Admission to occupational programs varies slightly, but is generally first-come, first-served. Date of application is an important consideration. (Admission requirements for health occupations and vocational programs are outlined below.) The College reserves the right to give priority to district residents in specific occupational and vocational programs.

The Admissions and Career Information Center was designed to be the "front door" of Linn-Benton Community College, and is available to you for assistance.

**Admission of High School Students****Part-Time Simultaneous:**

Enrollment of high school students is allowed without special permission if:

1. The class(es) meet after normal high school hours.
2. Enrollment is for 7 or fewer credits.
3. Enrollment is limited to classes which require no special admission clearance.

Admission to specific classes and programs is on a space available basis.

**Full-Time or Non-Simultaneous**

High school age students who have been released from compulsory attendance under ORS 339.030 may wish to attend the community college for one of a variety of reasons. These individuals may be accepted for enrollment subject to review by the Director of Admissions. Enrollment is on a space available basis.

**Foreign Student Admission**

Foreign student admission is on a selective basis. Those desiring to enroll in classes at Linn-Benton Community College should contact the Director of Admissions for specific admissions requirements. Applications should be on file at least one month prior to the preferred quarter of entry.

**Admission of Transfer Students**

LBCC freely admits students who are transferring from another collegiate institution. Transfer students (as all new full-time students), must have counselor approval of the first quarter schedule. Transfer students may be accepted as "Special Students" while waiting to receive transcripts from prior collegiate enrollment.\*

\*See Special Admission.

**Admission to Health Occupation and Vocational Programs**

Since the admission of new classes each year is limited by the present college staff and facilities, it is necessary for the college to select individuals based on date of application and in selected programs on the basis of their academic and personal qualifications.

In addition to the general college requirements for admission, each individual applying to health occupations programs must satisfy program admission requirements.

**Associate Degree Nursing (RN Two Years)\***

ADN applicants must: (1) have application and transcripts on file by March 1. (2) complete the National League for Nursing, Pre-Nursing and Guidance Examination. The dates for the administration of this examination are available through the Admissions and Counseling Offices. (3) have total application file reviewed by the Admissions Committee. (4) be available for admission interview if recommended by the committee. (5) if accepted, file a complete physical exam form. Specific admissions criteria for the ADN program is available in the Admissions Office.

ADN applicants will be notified of the disposition of their application by June 1. Individuals are required to apply no later than March 1 in order to be considered for the fall class. For further information regarding the admission of Associate Degree Nursing applicants, students should contact the Admissions Office.

**Dental Assistant (Four Quarters)\***

Two classes are offered each year, one beginning winter term, in January, and one beginning summer term, in June. Dental Assistant applicants must: (1) have application and transcripts on file by November 1 for the winter term class, or May 1 for the summer term class. (2) complete all regular admission steps. (3) complete the Comparative Guidance and Placement (CGP) Examination. (4) file a completed physical examination form with the Admissions Office.

The total application will be reviewed by the Admissions Committee. Individuals who wish to seek admission should apply no later than November 1, or May 1.

Applicants will be notified of the disposition of their application by December 15, or June 1. The Dental Assistant Program begins each summer and winter quarter and continues for four quarters. For further information students should contact the Admissions Office.

**Nursing Assistant (Three Months)\***

Individuals wishing admission to the Nursing Assistant program must: (1) provide evidence of past educational achievement. (2) arrange for an interview with a member of the Admissions Committee.

The individual's total application file will be reviewed by the Admissions Committee. Individuals are encouraged to apply at least one month prior to the beginning of the quarter for which they wish to attend. Notification will be at least two weeks prior to the beginning of each quarter. Students who are accepted for the Nursing Assistant program are required to complete the standard physical examination form and questionnaire available through the Admissions Office. For further information students should contact the Admissions Office.

\*See General Policy, page 5.

**Classification of Residency**

A resident student, for tuition and fee paying purposes, is a student whose parents are bona fide residents of the Linn-Benton Community College District. A student who is 18 years of age, or who is married, and who is entirely self-supporting, may qualify as a resident if he or she can satisfactorily present evidence that permanent residence has been established in the Linn-Benton Community College District at least three months prior to registration for the term. Veterans who register for classes at Linn-Benton Community College within 90 days of discharge from active duty will be considered a student for tuition and fee paying purposes. All other students are required to pay either an out-of-district or out-of-state non-resident fee as outlined in the tuition schedules.



**REGISTRATION PROCEDURES**

**Credit Classes**

1. Complete all admission requirements (see page 5).
2. Pre-registration advisor conferences are required for:
  - a. all new students registering for 8 or more credit hours.
  - b. students being sponsored by a special program, such as CETA, DVR, etc.
  - c. students on probation or in danger of failure.
  - d. students changing their major or those who have questions regarding their major.
  - e. students enrolling for courses which require counselor approval as specified in the schedule of classes.

In addition, any student who wishes counseling assistance in planning his or her program is encouraged to contact the Guidance Center.

3. All continuing students in the following special programs will be required to register prior to the last day of the preceding term. Students returning Fall Term must register two weeks prior to the first day of class.

- Auto Body Repair
- Automotive Technology
- Machine Tool Technology
- Recreational Vehicle & Small Engine Repair
- Welding
- Construction Technology — Carpentry
- Drafting Technology
- Electricity & Electronic Technology
- Refrigeration, Heating & Air Conditioning Technology
- Wastewater Technology

4. Full tuition payment is required at the time of registration, plus insurance premium if insurance is desired. Contact the Financial Aids Office for assistance in tuition payment. Students sponsored by one of the special programs or attending under a grant or scholarship must process an authorization form at the Financial Aids Office prior to registering.

5. Packets of registration materials are available in the Registration Office lobby. When all forms are completed, they are to be presented at the Registration Office windows with full tuition payment or payment authorization from the Financial Aids Office.

Social Security Number is required to positively identify your records. An alternate assigned number is available upon request to the Registrar.

**Community Education Classes**

Registration materials are available in class during the first and second class meetings, or students may pre-register in the campus Registration Office, the Benton Center, Corvallis; East Linn Center, Lebanon; or Santiam Center, Sweet Home.

**TUITION SCHEDULE**

(Service Fee Included — See Below)

Regular Classes	District	Out-of-District	Out-of-State
Per Credit	\$ 8.75	\$ 16.00	\$ 43.00
Minimum Charge	17.50	32.00	43.00
*Maximum Charge	105.00	192.00	516.00
**Per Credit over 20 Credits	8.75	16.00	43.00

\*12 to 20 credits  
\*\*Non-refundable

Tuition for Community Education classes which are non-credit will be charged on a per hour basis. (See Community Education schedule for individual class tuition.) Community Education classes which are credit will be charged at the rate of \$8.75 per credit hour.

**Special Fees & Expenses**

- Add fee per quarter—first add ..... No Charge
- All others (each transaction) .....\$ 2.00
- Drop fee ..... No Charge
- Credit by Examination (per credit) .....\$ 8.00
- Career Guidance and Placement Examination ....\$ 5.00
- \*Student Medical Insurance (12 months starting Fall Term) .....\$40.50
- Late Registration Fee
  - Eight credit hours or more, beginning first week .....per day \$ 2.00
  - Maximum charges .....\$10.00
  - Seven credits or fewer, beginning third week .....\$ 1.00
- Official copy of LBCC transcripts .....\$ 1.50
- Unofficial copy of transcripts .....\$ .50
- Special fees for some physical education classes, such as bowling and golf, may be charged.

\*Rates shown are subject to change for 1975-76 school year. Please check with the Registrar's Office for current expenses.

**LBCC Service Fee**

A student who enrolls for 12 credits will pay a \$13.80 fee. Of the \$13.80, \$3.80 is returned to the General Fund for instructional supplies. The remaining \$10.00 is allocated to the Activities and Co-Curricular Fund (ACCF) to provide services and activities for the students of LBCC. Included are college center and food services, sports programs, student publications and student activities. The budget for the ACCF is a product of the Student-Faculty ACCF Committee and has received approval from the Administration and the Board. A copy of the ACCF budget is available for review in the College Center Office.

**Golden Age Club**

Senior citizens (65 years and older) may wish to acquire an LBCC Golden Age Card. The bearer of the card is granted tuition and fee waivers to most college classes and all college activities. The cards are available at the Registration counter.

**Unique Programs**

Students from the Chemeketa Area Education District are allowed to enroll in LBCC unique programs (Agriculture Technology; Environmental Studies; Met-

allurgical Technology; Auto Body Repair; Cosmetology; Heating, Air Conditioning and Refrigeration; Graphic Communications; and Recreational Vehicle Repair) at resident tuition rates. Priority in these programs may be given to resident students when applications exceed available openings.

#### **Change of Program**

**Adding a course:** Students taking 8 or more credits may add a course only during the first week of class. Students taking fewer than 8 credits may add a course during the first week or, with the instructor's written permission, during the second or third week.

**Withdrawal:** A student may officially withdraw from a class up to the last regular day of class each term.

Students changing to another section of a course due to cancellation of a class or for other reasons must officially add the new section. No add charge will be assessed in this case.

#### **Auditing Classes**

Students may enroll as an auditor on a space available basis after the first day of classes. Charges for auditing will be the same as for regular credit enrollment.

#### **Refunds**

A full-time student withdrawing from school by the end of the fifth week will receive a full refund of tuition less \$15. Part-time students with seven or fewer credits will receive a full refund less \$5. Withdrawals after that date will receive no refund.

Students officially reducing their credit load to a lower tuition level during the first five weeks of class will receive a refund of the difference in tuition amounts, to the \$15 minimum charge.

A student officially withdrawing from a non-credit class during the first half of the course will receive a full refund of tuition less \$2.50.

Students who withdraw without giving written notice to the Registration Office forfeit all claims to refund of tuition or fees.

Classes cancelled by the College entitle the student to a 100 per cent refund or re-enrollment without additional cost.

### **ACADEMIC REGULATIONS**

#### **Occupational-Technical and Lower Division Credits**

In general, a class which 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.

Courses which have been approved for transfer to four-year colleges and universities are, generally, those numbered from 50 to 299. It should be emphasized that there may be exceptions. Those courses which are generally non-transferable have course numbers below 50. Some technical courses and curriculum are acceptable for transfer to selected four-year institutions.

Questions regarding transferability of courses should be referred to the Director of Admissions.

#### **Transferring LBCC Credits**

Lower division students may transfer up to 108 credit hours to Oregon State System Schools. Even though D grades are passing, many schools will not accept credits for which a D has been given. This is especially true if the course is in the student's major field. P credits may be limited or recalculated for GPA purposes upon transfer.

We encourage students who are planning to transfer to work with an advisor in planning an appropriate transfer program. Several schools will accept the Associate of Arts degree as meeting junior standing.

#### **Student Credit Load**

Students are considered a full-time student if they register for 12 or more credit hours. Students may mix their schedule by registering for some general studies courses and some vocational-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. Working students should adjust their work schedules accordingly or register for fewer class hours. In most areas, there are suggested curricula to cover one or two years of study. Students who are employed may schedule a two-year equivalent curriculum over an extended period of time.

Lower division studies students should plan to schedule an average of 15 credits per term in order to accumulate 90 credits in a six quarter (two year) period. No more than 20 credits may be taken in any single term without the additional charge of tuition for each credit. This additional charge is non-refundable.

#### **Credit Limit Rule**

It is the rule of four-year Oregon State institutions that after a student has completed \*108 credit hours, regardless of where the work was taken, the remaining credit requirements must be completed at a four-year institution.

\*This is equal to full-time attendance for seven quarters.

#### **Credit by Examination**

If presently enrolled students believe they have mastered the material presented in a certain course, or have had equivalent work experience, they may request credit by examination ("challenge"). This may be accomplished by: (1) enrolling in the class and presenting a request directly to the instructor (without additional cost if a full-time student), or (2) apply at the Guidance Center if not enrolled.

Students may challenge no more than 15 credits in one quarter without special approval from the Registrar. The instructor will have the option to grade or give a pass/no pass mark.

#### **College Level Examination Program (CLEP)**

LBCC is an approved "Open Center" for administration of the CLEP Examination. In addition, LBCC now accepts CLEP scores for college credit which may be posted to an LBCC transcript. The examinations are administered through the Guidance Center at LBCC.

For information regarding specific amounts of credit and test scores required, contact the Admissions Office or Guidance Center. For testing information, contact the Guidance Center.

### 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) in examinations administered by the Board may, on admission to LBCC, be granted credit toward an Associate in Arts Degree in comparable courses. All examinations are subject to review and approval by the appropriate College division. Acceptable credit will be recorded as pass grades (P) on the LBCC transcript. Advanced Placement Scores should be forwarded to the LBCC Admissions Office.

### Grading System

- A — Exceptional and Outstanding Work
- B — Above Average College Work
- C — Average Work
- D — Barely Passing Work
- F — Failing Work, No Credit Given
- I — Incomplete Work
- W — Withdrawal
- P — Pass
- N — No Pass
- NE — No Entry
- AU — Audit

**Incomplete Rule:** Incompleted work must be completed by the end of the following term with the exception of Summer, or it is automatically considered a "W".

**Grade Points:** Quarter term grades are assigned points as follows:

- A — 4 Grade Points Per Credit
- B — 3 Grade Points Per Credit
- C — 2 Grade Points Per Credit
- D — 1 Grade Point Per Credit
- F — 0 Grade Points Per Credit, No Hours Attempted
- \*W — 0 Grade Points Per Credit, No Hours Attempted
- P — Credit Earned, Not Computed in GPA
- N — 0 Grade Points Per Credit, No Hours Attempted
- NE — 0 Grade Points Per Credit
- AU — 0 Grade Points Per Credit

\*A "W" is not recorded for individuals who withdraw prior to and during the first two weeks of the quarter.

### Pass (P) Option

Certain courses listed in the schedule have an "OPT" designation indicating that each student in that class has the option of taking the course for the usual letter grade or taking it on a pass (P) basis. The maximum number of "P" credits allowed toward an LBCC degree will be 16 hours, not including those with mandatory pass (P) grading. Students should consult with a counselor before deciding to choose the pass (P) grade. It is not advisable for a student to choose the "P" grade in a course that is considered a major course in his field of study. Students process requests for pass (P) through the instructor of the class. Students planning

to transfer to a four-year institution should check that institution's requirements regarding "P" grades.

### Probation

Probation applies to those students who are registered for 8 or more credits at the beginning of the third week of the term.

New students will be placed on probation if during their first quarter of attendance their grade point average drops below 1.7 or during their second and subsequent quarters their accumulative grade point average drops below 2.00.

Transfer students who are on probation or who have been suspended from another institution of higher education will automatically be admitted to Linn-Benton Community College on probation. At the completion of one quarter carrying 8 or more credits a transfer student's probation status will be based only on the grade point average earned at Linn-Benton Community College and will be consistent with the above.

Students are also expected to complete those courses for which they have registered. A student may be subject to probation upon non-completion of 50 per cent of the credit registered for at the beginning of the third week of the term.

A student who has been on probation for three consecutive terms will be subject to suspension.

### Honor Roll

Those students who obtain a grade point average of 3.33 or better and have carried an 8 credit hour load or more of graded work, will be placed on the Honor Roll List for that quarter.

### Transcripts & Records

Student LBCC official transcripts may be secured through the Records Office at a cost of \$1.50 each. Unofficial copies are available for \$.50 per copy. Students have access to transcripts and records as outlined in the "Policy on Student Rights, Freedoms, Responsibilities and Due Process".

### Class Attendance

Students are expected to attend each class meeting for which they have registered.

When absence for some unavoidable reason does occur, it is the obligation of the student to contact the instructor to determine if make-up work is possible and the amount.

### Withdrawal from School

Individuals who find they can no longer attend should officially withdraw from school. The first step in withdrawal from full-time attendance is a counseling appointment. Students who withdraw on or before Friday of the fifth week may expect a tuition refund.\*

\*See Refunds, Page 8.

## DEGREES, DIPLOMAS, CERTIFICATES, GRADUATION REQUIREMENTS

LBCC offers the Associate of Science, Associate of Arts and Associate of General Studies degrees. The requirements for these degrees, which are presented below, are subject to approval of the Board of Educa-

tion, as well as the State Department of Education, Division of Community Colleges.

**Associate in Science:** This degree is awarded to those students who complete the requirements of a departmental curriculum, when such requirements represent the completion of an organized two-year program.

**Associate in Arts:** This degree is awarded to students who complete the requirements of the lower division Liberal Arts program.

**Associate in General Studies:** This degree is awarded to students who complete the requirements outlined below.

Associate qualified students seeking a second or third degree must pay a \$5.00 fee for each additional degree awarded.

#### **General Requirements for Associate of Science Degree (AS)**

1. The degree will be awarded to those who complete the required courses and credit hours prescribed by any structured occupation program of at least 90 credits.

2. Earn at least 24 credits at LBCC and be enrolled during the term degree requirements are completed.

3. Maintain a grade point average of at least 2.00.

4. Earn a minimum of eighteen (18) credits in general education courses as follows:

a. Six credits in communications.

\*b. Three credits in Physical Education activity courses.

c. A credit course in Health or First Aid.

\*\*d. Additional credits to bring total to 18. These are to be selected from the following areas: Social Sciences, Science and Math and Humanities, with a minimum of three credits in each of two areas.

\*See Waivers and Exceptions.

\*\*The Humanities group includes such courses as Art, Drama, Foreign Language, Literature, Music Philosophy and Speech.

The Social Sciences include such courses as History, Psychology, Sociology, Political Science, Anthropology, Economics and Geography.

The Science and Math group includes such courses as Mathematics, Biology, Geology, Physics, Botany and Physical Science.

#### **General Requirements for Associate of Arts Degree (AA)**

1. Completion of 90 quarter hours with a cumulative grade point average of 2.00 or higher.

2. Include in the program the following:

a. Language Arts, six credits (WR121 plus WR122 or WR123).

\*b. Physical Education activity courses (three credits recommended, but need only meet requirements of transfer college of choice).

c. A credit course in Health.

\*\*d. A minimum of nine credits in each of two areas: Humanities, Social Science, Science and Math; plus another 18 credits from among these three areas.

3. Earn at least 24 credits at LBCC and be enrolled during the term degree requirements are completed.

#### **Requirements for Associate of General Studies Degree (AGS)**

1. Complete a minimum of 90 credit hours of vocational or college transfer courses with a cumulative grade point average of not less than 2.00.

2. Include in the program the following:

a. Six credit hours of English.

b. Two credit hours of Health.

\*c. Three credit hours of Physical Education.

d. Two or three credit hours of Group Relations.

\*\*e. Nine credit hours of Humanities.

\*\*\*f. Nine credit hours of Social Science.

\*\*\*\*g. Nine credit hours of Math and/or Science.

3. Earn at least 24 credits at LBCC and be enrolled during the term degree requirements are completed.

4. Complete the above requirements plus courses of your choice to total 90 credits.

\* See Waivers and Exceptions.

\*\* The Humanities group includes such courses as Art, Drama, Foreign Language, Literature, Music, Philosophy and Speech.

\*\*\* The Social Sciences include such courses as History, Psychology, Sociology, Political Science, Anthropology, Economics and Geography.

\*\*\*\* The Science and Math group includes such courses as Mathematics, Biology, Geology, Physics, Botany and Physical Science.

#### **Community Education Classes**

Individuals who enroll for a Community Education class may use the class for graduation purposes in the Associate of General Studies or Associate of Science Degrees: 1) If it is a credit class. 2) If it is listed in the catalog it may be used in the fulfillment of elective or specified graduation requirements. 3) If it is not listed in the catalog it may be used in the fulfillment of elective requirements.

#### **Certificates**

Certificates are awarded to those individuals who have completed specific requirements within a vocational major. They are awarded by a division of the college on the recommendation of the instructional staff within that field. Business, nursing assistance, welding, dental assistance and sewage treatment plant operators are commonly awarded certificates. Generally, students must complete a minimum of 36 credits to qualify for the one year certificate. Individuals should refer to specific sections of the catalog to determine requirements.

#### **Adult High School Diploma**

Students may complete the "Adult High School Diploma" through LBCC. The diploma should not be confused with the GED examination.

#### **GED Examination**

LBCC offers the GED high school certificate examination through the Guidance Center.

### Waivers and Exceptions

The Dean of Students Office, in cooperation with the Dean of Instruction, process waivers and exceptions to degree, diploma and certificate requirements.

Waivers of the Physical Education requirements will be allowed under the following conditions:

1. Health—a physician may recommend a student be exempt from the physical education requirement. It is suggested, where possible, that the physician recommend some form of adapted or corrective physical activity.

2. Full-time students who are age 30 at the time of matriculation are not required to take physical education.

3. All P.E. requirements will be waived for veterans with two or more years of service.

A waiver may be granted for other reasons. Specific requests for a waiver should be directed to the Dean of Students.



## financial aids and placement

It is the intent of Linn-Benton Community College to permit college attendance by students who cannot pay the full cost of college education. Financial need is defined as the difference between the cost of education, and the amount a student and family can afford. This is the primary criteria in determining financial awards.

The concept of financial aids at LBCC is based on the belief that parents and individuals have the primary responsibility of meeting educational costs. LBCC financial aids are intended only to supplement family and student resources. When the resources of a student and his family are not sufficient to cover the full cost of education, the Financial Aids Service attempts to meet the remaining financial need through loans, grants, and/or part-time employment. To determine the amount a family and student can be expected to contribute LBCC relies on the College Scholarship Need Analysis Service. The use of this service assures every student equal treatment.

However, six weeks is required by College Scholarship Service for processing of Need Analysis Applications.

### Application Procedures for 1975-76

**Entering freshman:** file a State of Oregon Financial Aid Application for the 1975-76 academic year and a Parent Confidential Statement following filing instructions on the application form.

**Returning and transfer students:** file a State of Oregon Financial Aid Application with the Financial Aids Office and a Parent Confidential Statement according to instructions on the form.

Students claiming status as independent students file a Student Financial Statement instead of a Parent Confidential Statement.

Applications are available at the LBCC Financial Aids Services. High school seniors can obtain forms through their high school counselor.

Applications will be accepted when received. However, applications received by LBCC four or more weeks prior to the start of each term shall receive first priority for financial aid and entering fall term freshmen should file applications prior to March 15 for maximum consideration. Six weeks should be allowed for College Scholarship Service to process a Parent or Student Confidential Statement.

### ACADEMIC ELIGIBILITY

Once enrolled in Linn-Benton Community College and receiving financial aid, students can remain eligible through the school year only by completing 12 credit hours per term. At the conclusion of any term for which a student receiving aid fails to meet this minimum criteria, the Financial Aids Office will review the student's progress and at its option terminate financial aid or allow the student not more than one additional term to correct the credit hour deficiency. Additionally, any student placed on probation for two consecutive terms by the college shall be ineligible for further financial aid until the student has been returned to good standing.

#### Important

When **should** you file your Parent Confidential Statement (P.C.S.) or Student Financial Statement (S.F.S.) for early consideration? Check the following chart:

Date to send PCS or SFS to College Scholarship Service  
Students Entering Summer Term, 1975

... On or before March 15, 1975

Students Entering Fall Term, 1975

... On or before March 15, 1975

Students Entering Winter Term, 1976

... On or before November 1, 1975

Students Entering Spring Term, 1976

... On or before January 15, 1976

Financial aid awards for applications received after May 1, 1975 are contingent upon the availability of funds.

#### College Costs

Individual costs may vary according to differences in

course of study, transportation, housing, and many other factors. The college Financial Aids Service will attempt to assist students in meeting the difference between their resources and reasonable education-related costs. Listed below are some typical student budgets which provide for direct and indirect educational costs.

#### College Budgets

	Single at Home	Single away from Home	Married
Tuition & Fees .....	315	315	315
Books & Supplies .....	180	180	180
Rent & Food .....	800	1700	2850
Personal Expenses .....	450	450	900
Transportation (estimate) ....	500	500	500
	\$2245	\$3145	\$4745

Although transportation costs may vary according to a student's place of residence, commuting cost can be estimated at \$180 per year plus 10 cents per mile for daily home-to-school car expense.

Students in some vocational programs will incur additional costs. These costs should be added to the student budget:

Freshman Heating, Air Conditioning and Refrigeration Technology	\$220 Tools
Freshman Automotive Technology	\$165 Tools
Dental Assistant	\$150 Uniforms & Supplies
Freshman Drafting Technology	\$100 Supplies
Freshman Associate Degree Nursing	\$170 Books & Uniforms
	\$150 Mileage
Sophomore Associate Degree Nursing	\$300 Mileage
*Graphic Arts	\$400 Minimum Supplies

**Unless otherwise indicated, applications for all programs are available in the Financial Aid Office located on the first floor of the College Center.**

#### College Work Study

This federally supported plan provides on and off campus employment for fulltime students with financial need. Employment under this program during the school term may not exceed 15 hours per week. Student pay is a minimum of \$2.00 per hour. Higher wages will be paid to returning work-study students and for jobs requiring specialization. Whenever possible, students are placed in jobs compatible with their career goals. Work-study employees must complete a minimum of 12 credits each term and remain in good academic standing.

#### Educational Opportunity Grants

The Higher Education Act of 1965 established this federally funded cash grant program for students with exceptional financial need. These grants vary from \$200 to \$1,000 per year, depending on the need of the applicant and cannot exceed fifty percent of a student's total financial aid award.

\* Financial Aid funds are not adequate to assist students in meeting all expenses of this program. Graphic students who are unable to pay full cost of supplies for this program are advised to consider other programs.

#### National Direct Student Loans

Full-time students in good standing who have financial need may qualify for these long term, low-interest loans. Loans may be made for up to \$1500 per academic year, although the average loan is about \$600.

No interest is charged while the borrower is in college or in deferred repayment status (active military or serving in Peace Corps or Vista). Interest of three percent per year is charged during repayment period. The borrower's first payment is normally due ten months after leaving college, except when deferment status is obtained.

Teachers of handicapped children and teachers in certain low-income schools may have a percentage of the loan cancelled for every year of service not to exceed fifty percent of the loan.

#### Guaranteed Student Loans

Loans of up to \$1500 per academic year are available to students through their own bank. Loan repayments do not begin until ten months after the borrower leaves college. Annual interest on Guaranteed Student Loans is seven percent. If the borrower's adjusted gross family income is \$15,000 or less, the federal government will pay the interest until the repayment period begins. The loan may be prepaid to reduce or eliminate interest charges.

The student obtains the application form from the LBCC Financial Aids Service and takes it to the lending institution of his or her choice, after the College certifies:

- that the applicant is accepted or enrolled and in good standing;
- that the applicant's estimated educational expenses are reasonable;
- the amount and types of financial aid and income the student received from other sources.

#### Emergency Loans

Short-term emergency loans of up to \$65.00 are available to any full-time student who has been in attendance at LBCC four or more weeks. Loans will be approved for any reasonable education-related costs except tuition. Loans are normally repayable within five weeks of issue date. Ten percent simple annual interest is charged (54 cents per month on \$65.00). Emergency loans may be denied to students who have failed to pay previous emergency loans or deferred payments on due dates.

Emergency loan checks are normally ready the day following receipt of the student application.

Loans are repaid at the College Business Office.

#### Law Enforcement Education Program (LEEP)

Financial assistance to pay tuition and book costs is available to law enforcement personnel and pre-service law enforcement students in the form of loans and grants. Proof of financial need is not required for LEEP grants or loans.

#### Eligibility:

- Presently employed law enforcement officers (in-service) are eligible for both grants and loans.

2. Law Enforcement officers on leave of absence who wish to attend full-time are eligible for loans only.
3. Pre-service law enforcement students are eligible for loans only.

**Application:**

Students may apply by using the standard Law Enforcement Education Program form, available from the Financial Aids Service.

**Nursing Grants**

Students enrolled full-time or accepted for enrollment in the LBCC Associate Degree Nursing program may apply for this cash award. Nursing grant awards are provided to students with exceptional financial need. It is possible this program will not be funded for the 1975-76 school year.

**Nursing Loans**

Students with financial need who are full-time or accepted for enrollment in the LBCC Associate Degree Nursing program may apply for Nursing Loans repayable commencing nine months after the student leaves school. A borrower who later becomes employed as a full-time nurse can apply to have up to 85% of the loan obligation cancelled. Contact the Financial Aids Service for details.

**State Need Grant**

The Oregon State Scholarship Commission provides cash awards to students with exceptional financial need. The total award does not exceed \$600 per year per student. These awards are normally renewable for four years if the student remains in good academic standing.

**Basic Opportunity Grant (BEOG)**

Grants are available to full-time students with exceptional financial need. Amounts for the grants range from \$50 to over \$1000 each year. Exceptional financial need normally refers to those families whose gross income is less than \$9000. A separate application is required.

**College Board Grants**

Twenty-five full year tuition-free grants to Linn-Benton Community College are awarded annually. Presently enrolled high school students should apply through their high school principal or counseling office. Grants are also available through the LBCC Financial Aids Service. Apply before May 4 or as specified by your high school.

**Scholarships**

Several community service organizations and business establishments have offered scholarship assistance for LBCC students. It is recommended that interested individuals contact the Financial Aids Coordinator or high school principal or counselors for additional information.

**Deferred Tuition Loans**

Entering and returning full-time students may apply to have up to two-thirds of their tuition deferred. Under the deferred tuition plan students who are temporarily unable to pay the full amount of their tuition can pay

one-third down at the time of registration, with the balance payable before the end of the fifth week of the school term. Ten percent simple annual interest (50 cents per month on \$60) is charged borrowers.

**BankAmericard and Master Charge Cards**

These two credit card charge plans may be used to charge tuition and fees or purchase books and supplies and other merchandise in the College bookstore. All transactions are made in accordance with the terms and limitations of the credit card plans.

**Veterans' Assistance Office**

The staff of the V-A-O helps veterans and their dependents in making application for most veterans' benefits, and will follow up on their applications when necessary. A full-time member of the staff is the Veterans' Representative on campus, an employee of the Veterans Administration. The VROC is the veteran-student's basic resource for communications with the V.A. and should be consulted freely about payment problems, as well as the full range of veterans' benefits.

The office, as a whole, works to expedite and facilitate any dealings veterans have with the V.A.

**G.I. Bill (Veterans' Benefits)**

Prospective students who are eligible for veterans' benefits should contact the college Veterans' Affairs Office for information on V.A. approved programs of instruction, prior to making application for benefits.

Upon receipt of the veteran's application with necessary supporting documents, the LBCC veterans' clerk will certify enrollment and forward the complete application package to the Veterans Administration regional office in Portland. In most cases this will complete the application process for educational allowance. It should be noted that this application procedure is separate from application for admission to the college.

**Part-Time Employment**

The LBCC Placement Service will assist students seeking part-time and summer employment. Students who have made application for work are referred to job listings obtained from local employers.

**Placement Service**

A full-time job placement service is available to the graduates and alumni of LBCC. Available service includes referral to job openings, assisting students in preparing resumes and job search techniques. Students who desire to use this service may also establish a permanent credentials file in the Placement Service Office. For further information on the LBCC Placement Center, contact the Director of Placement.

**Alumni**

LBCC publishes an alumni newsletter to keep its former students informed about campus activities. Students who wish to participate in an alumni organization should contact the Director of Placement.



## guidance services

Brochures, catalogs and class schedules are available to assist students in becoming acquainted with LBCC. All matriculated students and prospective students have the opportunity to talk with a counselor about programs, goals, and classes. During the first week of classes the Student Government offers assistance to new students through information booths, maps and programs.

### Advising

All new matriculated students will have an appointment with a professional counselor who will assist students in evaluating their academic records and in selecting courses that are appropriate for a chosen major. LBCC provides advising assistance for matriculated students throughout the school year through the cooperation of counselors and teachers. Students are provided group sessions pertaining to their major where teachers and counselors are available. For further information contact the Guidance Director.

### Counseling

Professional counselors are available to assist students in dealing with academic, vocational, or personal problems. The Guidance Center is open from 8 a.m. to 5 p.m. weekdays, including the noon hour. During the first week of class there are counselors available from 6:30 to 8:30 p.m.

### Testing

LBCC requires the Comparative Guidance and Placement Test (CGP) for all students taking 8 or more credits. This test battery is administered by the Guidance Center and costs the student \$5.00. The CGP takes between 3½ to 4 hours and the results are used for **counseling and placement purposes**. Call or visit the Guidance Center for further information including test dates.

The Guidance Center also administers the high school equivalency test (GED), and the College Level Examination Program (CLEP). For further information and testing fees, contact the Guidance Center.

### Health Services

A Health Center staffed by a registered nurse, is located in the College Center to provide emergency first

aid and counseling on health problems. The Health Center is open from 8 a.m. to 5 p.m. weekdays.

### Health Insurance

LBCC makes available to students a comprehensive sickness, hospitalization and accident insurance program at reasonable rates. If students are not covered by their parent's insurance, they should certainly consider this health insurance. Coverage is also available for dependents of married students.



## student activities

Through the combined efforts of students, faculty, and administration, student activities at LBCC provide a balanced campus and community-wide program of events and associations which offer opportunities for the personal, social and cultural development of the individual and the enjoyment of leisure activities.

The College encourages those student activities which will complement the academic program by providing opportunities for constructive leadership, cooperative planning, and development of social and cultural interests.

All student activities, organizations and sports are open to all students without regard to sex or minority status. Students are encouraged to participate in those activities which are compatible with their interests.

Among the activities planned by AS/LBCC in the coming year are convocation speeches, film series, dances, performing artists, automotive events, art exhibits, symposiums, and special seminars, etc.

### Student Government

The voice of students organized to participate in campus government is the Associated Students of Linn-Benton Community College (ASLBCC). Its function is to coordinate all student activities, ideas, and legislation; to represent the students of LBCC; and to act as a liaison with the faculty and administration. In addition, ASLBCC represents the students of LBCC on a state and national level.

The ASLBCC Programming Council serves as a body which plans and implements special convocations, performing artists, and film series which are held at LBCC.

The participation of the students of LBCC is essential in the Student Government and Programming Council



if they and the College are to act in the best interests of the students of LBCC. Students desiring to become involved in ASLBCC activities should contact the Student Government office in the College Center.

#### **Student Rights, Freedoms, Responsibilities and Due Process**

The LBCC Board of Directors on December 9, 1971 approved as policy the document, **Student Rights, Freedoms, Responsibilities and Due Process**.

As the title implies, policy is set forth regarding student rights, conduct and procedural fairness. This document was developed by a committee of students, staff and Board members.

#### **Clubs and Organizations**

A number of clubs and organizations have been established at the College and opportunities for affiliation range from a professional business club to the Ecology Club. Students desiring information concerning present clubs and organizations or the establishment of new clubs should contact the College Center Office.

#### **Recreational Sports**

A comprehensive recreational sports program is available to LBCC students during the academic school year. Interested students should contact the Coordinator of Recreational Programs through the Office in the Activities Center.

#### **Sports Clubs**

The sports club program provides the student with opportunities for inter-city and inter-county competition as well as an opportunity for the development of leisure activity. Sports clubs presently established are skiing, flag football, basketball, volleyball, slow-pitch softball, rodeo and handball. Individuals interested in participation in present sports clubs or in the establishment of new sports clubs should inquire at the Office in the Activities Center.

#### **Intercollegiate Athletics**

Linn-Benton Community College has developed a comprehensive program of intercollegiate athletics with affiliation with the Oregon Community College Athletic Association. Present competitive sports offered at LBCC are in baseball, basketball, golf, cross country, women's gymnastics, rodeo, track, tennis, and women's volleyball. Students interested in participation should contact the Coordinator of Intercollegiate Athletics at the Activities Center.

#### **Music**

The college offers several opportunities in the vocal and instrumental musical performing arts, among them the well known **Tomorrow's People**. Individuals interested in participation should contact the Music Department located in the Humanities Building.

#### **Drama**

In years past, LBCC has provided opportunity for students to participate in drama productions for the student body and community. Previous performances included Tom Thumb the Great and Spoon River Anthology. Individuals who are interested in theater, acting, or production, should contact the College Center Office.

#### **Publications**

A number of publications are produced by the students of LBCC. The College newspaper, **The Commuter**, has received acclaim throughout the state. Students interested in participation should contact the Journalism Department through the Humanities and Social Services Division Office in the Humanities Building.

#### **College Center**

The College Center serves as the gathering place for all members of the College community—students, faculty, administrators, alumni and guests. The College Center provides for the services, conveniences and amenities that the members of the College community desire for getting to know and understand one another through informal association outside the classroom. Among the services presently provided in the College Center are: snack bar, food and drink dispensaries, lost and found, ticket sales and distribution, recreational and game equipment, meeting rooms, bulletin boards, public telephones, housing listings, Frelock lockers and a fireside lounge. The College Center is open from 7:30 a.m. until 10 p.m. Monday through Thursday, and from 7:30 a.m. until 5 p.m. on Fridays.

#### **Food Service**

Located on the second level of the College Center the food service provides a variety of menu offerings for students, staff, and the community. In addition to its normal operation the food service also periodically caters within the facilities for special activities sponsored by College or community organizations. The normal hours of operation are from 8:30 a.m. until 3:30 p.m. Monday through Friday with the hours being extended for special occasions. Profits, if any, derived from the food service are transferred into the Activities and Co-Curricular Fund to further support extra-curricular programs at the College.

#### **Housing**

Though the college does not provide institutional housing for its students living away from home, it does provide a current list of available housing in private homes and commercial dwellings. The listing of available housing (which is available in the College Center Office) is updated each quarter in order to facilitate locating accommodations with minimum delay.

#### **Bookstore**

The Bookstore provides all the required textbooks and miscellaneous supplies and materials which a student will require while attending LBCC. Profits from the Bookstore help support the extra-curricular activities and programs at LBCC. The Bookstore is located in the College Center and is open from 8 a.m. to 5 p.m. Monday through Friday, and 6:30 p.m. to 8:30 p.m. Tuesday and Wednesday, unless otherwise posted.

#### **Parking**

Linn-Benton Community College provides free parking for students and staff on a first-come, first-serve basis. Certain areas are designated for specific uses.

**Handicapped parking permits are available through the Dean of Students Office.** Parking and traffic rules are available through the Dean of Students Office. Cars improperly parked will be ticketed and subject to fines.

# programs of study



All offerings of the college, either academic transfer or occupational, are taught as college classes; however, not all courses may be transferred to four-year colleges and universities. Generally, courses numbered 50-299 have been approved for transfer and are survey or foundation courses. These courses satisfy group requirements in the language and literature, science and social science groups. Courses numbered 100-199 are considered freshman level courses and those numbered 200-299 are considered sophomore courses. Non-transfer vocational-technical occupational courses are numbered below 50; for example, 1.253, 6.024, etc. Some courses in the technical area may be transferable to four-year colleges but students are advised to check with a counselor for the transferability of courses and other information regarding their programs.

## TRANSFER PROGRAM AT LINN-BENTON COMMUNITY COLLEGE

Many students are interested in building a broad base of knowledge and working toward a baccalaureate degree. For these students, Linn-Benton Community College offers a wide choice of general studies and liberal arts courses with credits transferable to four-year institutions.

All transfer courses in Oregon community colleges are, by law, approved by the Oregon Board of Education and all instructors in such courses are also approved.

A manual titled **Transfer Curricula** published by the Oregon State System of Higher Education, lists all transfer program requirements. This manual is available through every LBCC counselor, in the LBCC library, and in the offices of many high school counselors.

Students are responsible for familiarizing themselves with the requirements of the program in the institution to which they plan to transfer. Transfer plans should be discussed with a counselor to make sure students take the required coursework program at LBCC. Students should also contact the four-year school to which they plan to transfer, for approval of their plans.

## COSMETOLOGY

The Cosmetology program at Linn-Benton Community College is a cooperative program between LBCC and state approved beauty schools. The students will complete 40 credits of general course studies at LBCC and 2500 clock hours—or 53 credits at a beauty school licensed by the State Board of Cosmetology. At the completion of course work, the student must pass the Oregon Board of Cosmetology examination before being given a license to practice.

## OCCUPATIONAL & TECHNICAL EDUCATIONAL PROGRAMS

The various and constantly expanding curriculums of the Occupational and Technical Programs represent organized experiences designed to prepare students for effective employment and advancement in their chosen vocation. All curriculums are periodically reviewed and updated to provide sufficient skills and training broad enough to be applicable to a number of positions having similar occupational requirements.

The needs of the students, industry and the community are considered in providing not only for full-time preparatory study, but evening course offerings for those already employed who seek additional study enabling them to enlarge their competency.

## COOPERATIVE WORK EXPERIENCE

**Program Coordinator: Marv Clemons**

This program is intended as an extension of the regular college curriculum. It is designed to provide opportunity for students enrolled in programs at LBCC that have a specific career goal with the opportunity to earn up to 16 hours of the credit required for the degree through supervised field experience. It is also possible for students not committed to a major at LBCC to enroll

in the program for the purpose of career exploration. The credit received for the exploration experience is treated as open elective credit and is designated as career exploration.

**1.200/WE201 Supervised Field Experience** is a course designed to give the students actual work experience which closely parallels their field of study. The student is supervised and evaluated by the Instructor/Coordinator from the college and his employer. The student is required to attend a one-hour seminar each week in addition to hours on the job.

If you are not presently employed and wish to participate in supervised field experience, you should contact the Cooperative Work Experience Coordinator in the CWE office and indicate your interest. The coordinator will visit with you and discuss your occupational interests and career plans and explain how supervised field experience works and why you should participate. If you decide to participate, you will be told how a suitable training station is located. You must understand that the coordinator does not get you your job, but rather finds employers who wish to participate in the program and sets up the interview for you, and it is then up to you to get your own job. Until you are actually placed, you may not register for the course.

For students on new jobs, the time you spend on assignments required for the course will be during your regular work hours as agreed upon by your employer.

Students presently employed and who wish to use their present job as their field experience training station, must understand that the credit earned through supervised field experience is given for time spent in new learning activities on the job during the current term of registration, and not for time spent previously. For those students, most of the time spent on assignments required for supervised field experience will be completed during the student's non-working hours. However, if training time is considered part of the regular job, class assignments may become a part of the regular job if it is approved by the student's employer. The job activities must parallel or closely relate to the student's major area of study at the college.

**1.201 Field Experience Seminar** is a course designed to provide opportunity for students 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 career planning and preparation, how to write behavioral learning objectives, and job search techniques. This course is required for all students enrolled in 1.200/WE201 Supervised Field Experience and is open to any other students who wish to participate. The seminar meets one hour per week and offers one hour of credit.

Students interested in building Supervised Field Experience into their program at LBCC should discuss it with their counselor, major area instructors and the Work Experience Coordinator to plan the best term for registration and allow ample time for training station identification.

**RESERVE OFFICERS TRAINING CORPS**

Linn-Benton Community College students, in cooperation with Oregon State University, may enroll in the Army Reserve Officers Training Corps. Students who wish to enroll in this program may apply and attend classes at Linn-Benton Community College or at OSU depending upon class size. Instruction in the Military Science Department is designed to produce junior officers for the United States Army in both the regular and reserve components. Registration will be processed through LBCC and the student will be registered in the Army R.O.T.C. program as a Special Student.

**Missions & Objectives.** The Army ROTC selects and prepares young men and women through a program of Army instruction coordinated with the students' normal academic curriculum, to serve as officers in the Regular and Reserve components of the Army, Navy, Air Force, and Marine Corps. Each of the units 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. Students in each of the units receive uniforms to be worn at drill periods and on special occasions.

The Basic Course consists of freshman classes each term for which the student receives one credit hour each, and classes each term of the sophomore year for which he receives 2 credit hours per term. (Students who have not taken the Basic Course may attend a six-week Basic Summer Camp at the end of their sophomore year and also be eligible for the Advanced Course. This provision allows students transferring from junior colleges, graduate students, or students who for other reasons have not taken the Basic Course, to get into the commissioning program.)

For further information please contact Director of Admissions.

**TRANSFER CURRICULA**

The curricula outlined below are intended to help students determine which transfer courses they should take at LBCC based on the four-year degree program being considered and the four-year college to which the courses will be transferred. Before students enroll for any transfer courses they intend to apply towards a bachelor's degree they should talk with a counselor.

**Agriculture and Science (OSU)**

The two-year curriculum listed below, if successfully completed, will permit a student to transfer to Oregon State University into most major curricula offered by the School of Agriculture at the junior level. Students may complete the baccalaureate degree programs in an additional two years of study at that institution.

Freshman Year		F	W	Sp
Course No.	Course Title			
Wr 121-3	English Composition	3	(3)	(3)
Ch 104-6	General Chemistry	5	5	5
Mth 95	Intermediate Algebra		4	
Mth 101	College Algebra			4
Bot 201-3	General Botany or			
Bi 101-3	General Biology or			
Z 201-3	General Zoology I	3-4	3-4	3-4
PE 190	Physical Education	1	1	1
HE 250	Personal Health		3	
	Electives	3	0-3	2
		15-16	15-18	15-19

Sophomore Year		F	W	Sp
Course No.	Course Title			
Ec 201-3	Physical Science electives	3-4	3-4	3-4
Sp 111-3	Principles of Economics	3	3	3
Mth 102	Fundamentals of Speech	3	3	3
Mth 110	Trigonometry	4		
Mth 200	Analytic Geometry		4	
	Calculus (Mth 201, 202, 203 available)			4
	Electives	3	3	6
		16-17	16-17	16-17

Maximum acceptable credit: 108 hours

**Business Administration (UO, OSU, PSU, SOC) and Business and Economics (EOSC)**

The program outlined below, if successfully completed, will permit a student to transfer into any of the major programs in business administration offered by institutions of the Oregon State System of Higher Education, or the program in business and economics at EOSC, at the junior level. Students may complete requirements for the baccalaureate degree with two additional years of work at the four-year institutions.

**Freshman Year**

	F	W	Sp
Wr 121 or 121, 122 123 English Comp.	3	(3)	(3)
BA 101 Introduction to Business	4		
Sp 111 Fundamentals of Speech		3	
Mathematics*	4	4	4
Science sequence (OSU)*			
Humanities 3 (UO, PSU, SOC, EOSC)	3-4	3-4	3-4
Physical Education*	1	1	
Personal Health			3
Electives	3-4	3-6	3-6
<hr/>			
	15-17	15-17	16-17

**Sophomore Year**

	F	W	Sp
Ec 201, 202, 203 Prin. of Economics*	3	3	3
BA 211, 212, 213 Prin. of Accounting*	3	3	3
BA 226, Bus. Law (UO, PSU, OSU, EOSC)			3
BA 232, Intro. to Bus. Statistics		3	
Mth 233, Intro. to Num. Computation*	4		
Social Science*	3	3	3
WR 122, English Comp. or Elective		3	
Physical Education*	1	1	1
Electives*	2-3		3
<hr/>			
	16-17	16	16

Maximum Acceptable Credit: 108 hours

\*Prior to taking any of these courses, contact Counseling.

**Business Education (OSU, PSU, SOC, EOSC) Distributive Education (OSU)**

The programs outlined below are recommended for students who plan to transfer to a major program in Business Education at Oregon State University, Portland State University, Southern Oregon College, and Eastern Oregon State College or to a program in Distributive Education at Oregon State University.

Oregon State University  
Southern Oregon College  
Eastern Oregon State College

**Freshman Year**

Course	F	W	Sp
BA 101 Intro. to Business (OSU, SOC)	4		
Wr 121 (OSU), Wr 121, 122 (SOC), Wr 121, 211, 123 (EOSC)	3	(3)	(3)
English Composition			3
Data Processing (if available) (OSU)*			3
Speech (SOC, EOSC)	4	4	4
Mathematics*	1	1	1
Physical Education*	3	3	3
SS 111, 112, 113 Stenography*	2	2	2
SS 121, 122, 123 Typewriting*			
Humanities sequence (EOSC)			
Natural Science or social science electives (OSU, SOC)	0-3	3-7	0-4
	16-17	16-17	16-17

**Sophomore Year**

Course	F	W	Sp
Ec 201, 202, 203 Principles of Economics*	3	3	3
BA 211, 212, 213 Prin. of Accounting*	3	3	3
SS 211, 212, 213 Applied Sten.*	3	3	3
Psy 201, 202 Gen. Psychology	3	3	
Personal Health			3
BA 214 Business Comm. (SOC)			
BA 226 Business Law (OSU)			
BA 232 Intro. to Business Statistics (OSU, SOC)	3	(3)	3
Hst 201, 202, 203 History of the United States or			
PS 201, 202, 203 American Government (EOSC)			
Electives		0-3	0-3
	15	15	16-18

Maximum Acceptable Credit: 108 hours

\*Prior to taking any of these courses, contact Counseling.

**Criminal Justice**

By special agreement between LBCC and Oregon College of Education, Law Enforcement and Corrections students may transfer as elective, lower-division credit up to twenty-one hours of the occupational courses (5. numbers) listed in the curriculum following toward graduation requirement at OCE in the fields of social science, corrections, and law enforcement.

Course No.	Course Title	F	W	Sp
CJA 111-3	Intro. to Criminal Justice	3	3	3
Wr 121-122	English Composition	3	3	
Soc 204-6	General Sociology	3	3	3
HE 252 or 250	First Aid or Personal Health	3		
SP 111	Oral Communication		3	
SP 112 or 113	Oral Communication			3
	P.E. Activity	1	1	
	Electives	3	3	6
		16	16	15

Course No.	Course Title	F	W	Sp
CJA 211	Criminal Law I	3		
CJA 212	Criminal Law II		3	
CJA 213	Legal Aspects of Evidence			3
CJA 214	Criminal Investigation	3	3	3
Psy 201-3	General Psychology	3	3	3
	Mathematics or Science sequence	4	4	4
	P.E. Activity	1	1	
Psy 111	Personality & Development or elective			3
	Humanities sequence	3	3	3
		17	14	16

**Dental Hygiene**

The curriculum listed below has been approved by the University of Oregon Health Science Center Dental School as suitable for Oregon Community College students interested in seeking admission to a professional program in Dental Hygiene.

**Freshman Year**

Course No.	Course Title	F	W	Sp
Wr 121-122	English Composition		3	3
Bi 101-3	General Biology or			
Z 201-3	General Zoology	4	4	4
Ch 104-6	General Chemistry	5	5	5
Soc 204-6	General Sociology	3	3	3
Mth 101	College Algebra	4		
PE 190	Physical Education	1	1	1
		17	16	16

**Dentistry**

Students interested in enrolling in a dentistry program should be informed that admission to a professional school of Dentistry is highly competitive. It is recommended that a student contact the four-year institutions dental school where they wish to enroll early in their first two years at a community college.

**Freshman Year**

Course No.	Course Title	F	W	Sp
Wr 121	English Composition	3		
Ch 104-6	General Chemistry	5	5	5
Mth 101	College Algebra	4		
Mth 102	Trigonometry		4	
Mth 110	Analytic Geometry			4
Z 201-3	Zoology	3	3	3
PE 190	Physical Education	1	1	1
	Electives			3
		16	16	16

**Education**

Accomplishment of the following curriculum guide will satisfy all LBCC requirements for an Associate of Arts degree. Moreover, it will transfer fully and conveniently into four-year college of education programs throughout the state.

**Elementary Education**

**Freshman Year**

Course No.	Course Title	F	W	Sp
Wr 121, 122, 123	English Composition	3	3	3
Sp 111	Oral Communication	3		
Hst 101-3 or Hst 201-3*	History	3	3	3
Eng 104-6 or Eng 101-3 or Eng 107-9 or Eng 201-3 or Eng 253-5	English	3	3	3
PE Activity**	Physical Education	1	1	1
Geog 105 and either Geog 106 or 107	Geography	1	3	3
Bi 101-3	Biology	4	4	4
		17	17	17

**Sophomore Year**

Course No.	Course Title	F	W	Sp
HE 250	Personal Health			3
GS 104-5	General Science	4	4	
Soc 204, 205, 206	Sociology	3	3	3
Psy 201, 202, 203***	Psychology	3	3	(3)
PE Activity**	Physical Education	(1)	(1)	(1)
Mth 121, 122, 123	Mathematics	3	3	3
Art 201, 202, 203 or Art 204, 205, 206	Art	3	3	3
		17	17	16

\*OCE prefers Hst 101, 102, 103  
OSU prefers Hst 201, 202, 203

\*\*OCE requires special activity groupings. Refer to OCE catalog.  
OSU requires only 3 hours of PE activity.  
U of O requires only 5 hours of PE activity.

\*\*\*Psy 203 will transfer as elective credit only at OCE.

**Secondary Education**

Freshman Year		F	W	Sp
Course No.	Course Title			
Wr 121, 122, 123		3	3	3
Sp III		3		
HE 250			3	
P.E. Activity*		1	1	1
Bi 101, 102, 103		4	4	4
Eng 104, 105, 106, or Eng 101, 102, 103 or Eng 107, 108, 109, or Eng 201, 202, 203, or Eng 253, 254, 255		3	3	3
Electives from major/minor area***		3	3	6
		17	17	17

Sophomore Year		F	W	Sp
Course No.	Course Title			
Soc 204, 205, 206		3	3	3
Hst 101, 102, 103, or Hst 201, 202, 203**		3	3	3
P.E. Activity		(1)	(1)	(1)
Psy 201, 202, 203		3	3	3
Electives from major/minor area***		6	6	6
		16	16	16

\*OCE requires special activities groupings. Refer to OCE catalog.  
OSU requires only 3 hours of P.E. activity.  
U of O requires only 5 hours of P.E. activity.

\*\*OCE prefers Hst 101, 102, 103  
OSU prefers Hst 201, 202, 203

- \*\*\*Art  
Business  
Humanities  
Speech/Drama  
English  
Physical Education  
Music  
Natural Sciences-Mathematics  
Biological Science  
Physical Science-General Science-Chemistry  
Mathematics  
Social Sciences

**Engineering or Engineering Technology Engineering (OSU)**

Students may complete a one-year program in Pre-Engineering-Engineering Tech at LBCC. The remaining three years to complete a degree would be taken at Oregon State University.

Freshman Year		F	W	Sp
Course No.	Course Title			
Mth 101-2	College Algebra, Trigonometry	4	4	
Mth 110	Analytic Geometry			4
Ch 201-3	General Chemistry	4	4	4
Wr 121	English Composition	3		
PE 190	Physical Education	1	1	1
	Electives			
	Social Sciences & Humanities	1-3	4-7	4-7
		13-15	13-16	13-16

**Fine Arts**

Accomplishment of the following curriculum guide will satisfy all LBCC requirements for an Associate of Arts degree. Moreover, it will transfer fully and conveniently into four-year liberal arts colleges throughout the state.

**Freshman Year**

Course No.	Course Title	F	W	Sp
PE Activity		1	1	1
HE 250		3		
Wr 121		3		
Bi 101, 102, 103, or Ch 104, 105, 106 or GS 104, 105, 106		4	4	4
Eng 104, 105, 106, or Eng 101, 102, 103 or Eng 107, 108, 109, or Eng 201, 202, 203, or Eng 253, 254, 255		3	3	3
Art 204, 205, 206		3	3	3
Art 195			3	
Art 291			3	3
Art 282			3	
Art 281				3
		17	17	17

**Sophomore Year**

Course No.	Course Title	F	W	Sp
Soc 204, 205, 206, or Psy 201, 202, 203		3	3	3
Hst 101, 102, 103, or Hst 201, 202, 203		3	3	3
Wr 122 or 123		3		
Electives*		6	9	9
		15	15	15

\*Painting, Water Color, Design, Sculpture, Ceramics-Pottery, Jewelry Making.

**Forestry Forestry (OSU)**

The one-year preforestry program outlined below, if successfully completed, will prepare students to enter professional curricula in forestry or the program in resource recreation management offered by the School of Forestry at Oregon State University at the sophomore level. Students planning to enter a professional program of forestry at OSU, or some other institution, should transfer immediately upon completion of the one-year preforestry program.

**Freshman Year**

Course No.	Course Title	F	W	Sp
Bot 201-2	General Botany or			
Bi 101-3	General Biology	4	4	(4)
Ch 104-6	General Chemistry	5	5	5
Mth 101-2	College Algebra, Trigonometry	4	4	
Mth 110	Analytic Geometry			4
Wr 121-3	English Composition	3	3	3
PE 190	Physical Education	1	1	1
HE 250	Personal Health			3
		17	17	16-19

**Humanities Major**

Accomplishment of the following curriculum guide will satisfy all LBCC requirements for an Associate of Arts degree. Moreover, it will transfer fully and conveniently into four-year liberal arts colleges throughout the state.

**Freshman Year**

Course No.	Course Title	F	W	Sp
PE Activity		1	1	1
Wr 121, 122, 123		3	3	3
HE 250			3	
Bi 101, 102, 103, or Ch 104, 105, 106 or GS 104, 105, 106		4	4	4
Electives*		9	6	9
		17	17	17

**Sophomore Year**

Course No.	Course Title	F	W	Sp
Soc 204, 205, 206 or Psy 201, 202, 203		3	3	3
Hst 101, 102, 103, or Hst 201, 202, 203		3	3	3
Electives*		9	9	9
		15	15	15

\*Eng 101, 102, 103  
Eng 107, 108, 109  
Eng 201, 202, 203  
Eng 253, 254, 255  
Eng 199  
Ph 201, 202, 203, 204  
Sp 111, 112, 113, 229, 248, 249, 250  
Wr 241, 242, 243  
Re 201, 202, 203

**Music Major**

Accomplishment of the following curriculum guide will satisfy all LBCC requirements for an Associate of Arts degree. Moreover, it will transfer fully and conveniently into four-year liberal arts colleges throughout the state.

Freshman Year				
Course No.	Course Title	F	W	Sp
PE Activity		1	1	1
Wr 121 and either Wr 122 or 123		3	3	
Eng 104, 105, 106, or Eng 101, 102, 103				
or Eng 107, 108, 109, or Eng 201, 202, 203,				
or Eng 253, 254, 255		3	3	3
Mu 201, 202, 203		3	3	3
Mu 111, 112, 113		4	4	4
HE 250				3
Choir or Band		1	1	1
Performance Studies		1	1	1
		16	16	16

Sophomore Year				
Course No.	Course Title	F	W	Sp
Bi 101, 102, 103, or Ch 104, 105, 106,		4	4	4
or GS 104, 105, 106				
Soc 204, 205, 206, or Psy 201, 202, 203		3	3	3
Hst 101, 102, 103, or Hst 201, 202, 203		3	3	3
Mu 211, 212, 213		3	3	3
Mu 214, 215, 216		1	1	1
Choir or Band		1	1	1
Performance Studies		1	1	1
		16	16	16

**Pharmacy**

Students enrolling in pharmacy should check with their counselor for details on admission to the four-year institution to which they plan to transfer.

Freshman Year				
Course No.	Course Title	F	W	Sp
Wr 121	English Composition		3	
Ch 104-6	General Chemistry	5	5	5
Ec 201-3	Principles of Economics	3	3	3
Soc 204-6	General Sociology	3	3	3
Mth 101-2	College Algebra, Trigonometry	4	4	
Mth 110	Analytic Geometry			4
PE 190	Physical Education	1	1	1
HE 250	Personal Health			3
		16	19	19

Sophomore Year				
Course No.	Course Title	F	W	Sp
Ch 226-8	Organic Chemistry	3	3	3
Ch 229	Organic Chemistry Lab			2
Ph 201-3	General Physics	4	4	4
Psy 201-3	General Psychology	3	3	3
Mth 200-2	Calculus	4	4	4
	Electives	3	3	(3)
		17	17	16-19

Maximum acceptable credit: 108 hours.

**Physical Education**

Students who wish to become physical education instructors must begin course work in professional activities (PE 194 and 195 Professional Activities) during the freshman year if they are to complete a baccalaureate degree program in four years. Service course work in physical education (PE 180 and 190 Physical Education) cannot be substituted for the professional activity courses.

The program outlined below, if offered by the community college, will permit transfer into professional physical education and/or teacher preparation programs offered by state system institutions, without loss of time, provided, of course, that course work is reasonably comparable to that offered on the four-year campuses. **If the community college does not offer professional activities courses** the student may enroll in a one-year preprofessional program recognizing that it may require more than an additional three years after transfer to complete the professional work required.

Freshman Year				
Course No.	Course Title	F	W	Sp
Wr 121 or 121, 122, 123 English				
Composition and Electives		3	(3)	(3)
Bi 101, 102, 103 General Biology				
Z 201, 202, 203 General Zoology		3-4	3-4	3-4
PE 194/195 Professional Activities		2	2	2
PE 131 Intro. to Health,				
Physical Education and Recreation				
(PSU, UO, EOSC)		3		
Sp 111 Intro. to Speech			3	3
HE 252 First Aid		3	3	3
Humanities		0-3	0-6	0-6
Electives		15-17	15-17	15-17

Sophomore Year				
Course No.	Course Title	F	W	Sp
Ch 101, 102, 103; 104, 105, 106; or				
201, 202, 203 General Chemistry				
(UO, SOC, PSU)		3-5	3-5	3-5
PE 294/295 Professional Activities		2	2	2
Psy 201, 202, 203 General Psychology		3	3	(3)
Social science sequence		3	3	3
HE 250 Personal Health		3		4
FN 225 Nutrition (UO, OSU, SOC)				0-10
Electives		0-6	3-7	0-10
		15-19	15-16	15-17

Maximum Acceptable Credit: 108 hours.

**Social Science**

Accomplishment of the following curriculum guide will satisfy all LBCC requirements for an Associate of Arts degree. Moreover, it will transfer fully and conveniently into four-year liberal arts colleges throughout the state.

Freshman Year				
Course No.	Course Title	F	W	Sp
PE Activity		1	1	1
HE 205				3
Wr 121, Wr 122, or Wr 123		3	3	
Bi 101, 102, 103, or Ch 104, 105, 106				
or GS 104, 105, 106		4	4	4
Eng 104, 105, 106, or Eng 101, 102, 103				
or Eng 107, 108, 109 or Eng 201, 202, 203				
or Eng 253, 254, 255		3	3	3
Electives*		6	6	6
		17	17	17

Sophomore Year				
Course No.	Course Title	F	W	Sp
Soc 204, 205, 206		3	3	3
Mth 161, 162, 163		4	4	4
Electives*		9	9	9
		16	16	16

\* Hst 101, 102, 103  
 Hst 201, 202, 203  
 Hst 199  
 Anth 101, 102, 103  
 Anth 201, 202, 203  
 Econ 201, 202, 203  
 Geog 105, 106, 107  
 Ps 201, 202, 203, 205  
 Fi 222, 223, 240  
 Psy 201, 202, 203  
 Soc 199

# allied health and physical educa- tion division



The Allied Health and Physical Education Division provides both career preparation programs in the allied health field and physical education service courses for students who desire to participate in physical activities. Personal health and first aid are also a part of the division's curriculum.

Vocational programs are offered in associate degree nursing, nursing assistant, dental assistant and related allied health areas. Students completing these programs are qualified to pursue varied occupations in the health services field in hospitals, nursing homes, clinics, or doctors' offices.

The physical education curriculum provides activity classes for students who must take physical education classes to meet graduation requirements and for students who merely desire to participate in individual or team activities.

Linn-Benton Community College encourages students to make career choices based on interests, needs, and abilities without regard to the traditional roles of men, women or minorities.

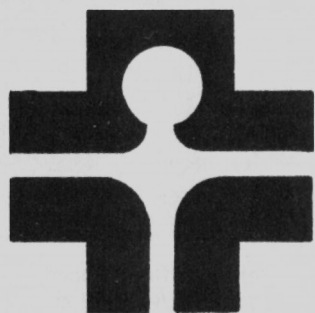


**DIRECTOR:**

H. Richard McClain

**FACULTY:**

David Bakely, Physical Education  
 Dr. Jack Arthur, Dental Assistant, Program Coordinator  
 Arlene Crosman, Physical Education  
 Gayle Greene, Associate Degree Nursing, Dept. Coordinator  
 Verlund "Butch" Kimpton, Physical Education  
 Virginia McCraw, Associate Degree Nursing  
 Ann Mills, Nursing Assistant, Program Coordinator  
 Gerald Morgan, Dental Assistant  
 Jacqueline Paulson, Associate Degree Nursing  
 Peggy Preston, Associate Degree Nursing  
 Adella Wood, Associate Degree Nursing



# associate degree nursing

This two academic year program is open to both men and women of all ages and is designed to prepare students to be highly skilled bedside nurses (R.N.) oriented to patient care. Students who complete the course receive an Associate of Science Degree in Nursing from the college and are eligible to take the Oregon State Board Test Pool Examination for Registered Nurse Licensure. Clinical facilities utilized are: Linn Care Center; Albany General Hospital; Good Samaritan Hospital, Corvallis; Corvallis Manor; Lebanon Community Hospital; Oregon State Hospital, Salem.

**ACCREDITATION**

The program is accredited by the Oregon Board of Education, Oregon Board of Nursing and is fully accredited by the National League of Nursing.

**STANDARDS OF PERFORMANCE**

Following acceptance into the nursing program, the student shall achieve an overall grade point average of 2.00 ("C") in all courses attempted. In addition, the student shall make a satisfactory grade ("C"

or above) in all courses required by the Nursing Department (see Program of Study for required courses). Courses must be taken in sequence. A student's enrollment in the nursing program may be recommended for discontinuance at any time, if in the judgment of the nursing faculty the student's performance demonstrates that he or she is unable to cope with the seriousness of nursing situations. A student who is dropped from the program shall not be readmitted to the program except in rare cases, and then only by special permission.

The nursing faculty reserves the right to recommend to the Dean of Students to drop from its rolls any student who has been absent from class more than three hours or absent from laboratory more than twice. A student fails in a nursing course ("F") if he cannot perform satisfactorily in the clinical laboratory regardless of academic performance.

All nursing courses shall be completed at Linn-Benton Community College, unless special permission for transfer credit is arranged with the Coordinator of the Nursing Department and Dean of Students.

Students who are admitted to the Nursing Department shall be required to hold student nurse liability insurance.

**Freshman Year**

Course No.	Course Title	F	W	Sp
5.711	Nursing I*	5		
5.712	Nursing II*		5	
5.713	Nursing III*			8
5.726-8	Nursing in Contemporary Society*	1	1	1
BI 221-3	Human Biology*	4	4	4
4-211-2	Nutrition I, II*	3	3	
Psy 201-2, 205	Psychology*	3	3	3
		16	16	16

**Sophomore Year**

Course No.	Course Title	F	W	Sp
5.721	Nursing IV*	9		
5.722	Nursing V*		12	
5.723	Nursing VI*			8
5.729	Nursing in Contemporary Society*			1
Wr 121-2	Writing	3	3	
PE 180/190	Physical Education**	1	1	1
Hst 101	History of Western Civilization*	3		
	Humanities			3
Soc 204	General Sociology*			3
		16	16	16

\*Courses REQUIRED for A.D.N.

\*\*Physical Education may be taken any term

<b>5.711</b>	<b>Nursing I</b>			<b>F</b>
	<b>9 class hrs. lab/wk 5 cr.</b>			
<b>5.712</b>	<b>Nursing II</b>			<b>W</b>
	<b>9 class hrs. lab/wk 5 cr.</b>			
<b>5.713</b>	<b>Nursing III</b>			<b>Sp</b>
	<b>14 class hrs. lab/wk 8 cr.</b>			

**ADMISSION TO NURSING PROGRAM IS REQUIRED.****5.711-3 Nursing I, II, III**

Introduction to the role of the nurse in meeting the needs common to patients of all ages. Basic "fundamentals" plus normal prenatal care, growth and development, developmental tasks for all ages and beginning communication. Beginning physical and mental illness for all ages including labor and delivery and post-partum care, with emphasis on practice in problem solving. Independent learning tasks, demonstrations, audio-visual aids, discussion and lecture are used in the classroom. Supervised practice in the clinical area is provided with pre- and

post-conferences to evaluate planned patient care. Individually scheduled tutorial sessions are offered in addition to published schedules. Must be taken in sequence.

- 5.721      **Nursing IV**  
17 class hrs/wk    9 cr.                      F
- 5.722      **Nursing V**  
24 class hrs/wk    12 cr.                     W
- 5.723      **Nursing VI**  
14 class hrs/wk    8 cr.                      Sp
- 5.721-3    **Nursing IV, V, VI**

The continued study of major areas of illness in the United States, including complications of pregnancy. Consideration is given to the scope, prevention, diagnosis, treatment and psycho-social aspects of illness with an emphasis on decision making. Deviations from normal growth and development which predispose to illness are presented. The rehabilitative aspect of nursing care is studied with consideration of available community agencies. Social workers, psychologists and psychiatrists collaborate in the study of basic concepts of personality and behavior with attention given to psychological processes ranging from "normal" to extreme deviation in mental health. Additional topics include legal aspects and trends in nursing, community health, leadership skills and an overview of specialty nursing areas. Prerequisite: Full sophomore standing in Nursing. Must be taken in sequence.

- 5.726-9    **Nursing in Contemporary Society**  
1 class hr/wk      1 cr./term              F/W/Sp

The nursing role defined, based on the history of the profession, current theories pertaining to the nature of health and disease, and selected responsibilities of the role of the nurse in society and as a practitioner. The reciprocal influences between society and nursing are identified as they relate to biological, sociological, psychological and therapeutic setting. Must be taken in sequence. Prerequisite: Permission of the instructor.

- 9.424      **Independent Nursing Studies**  
1 hr/wk              1 cr.

This course is designed to provide supervised individual study for matriculating and non-matriculating pre-R.N. or post-R.N. Nursing students. The course content will be geared to the needs of the individual student. One-to-one conferences with instructors, field trips, research assignments, and audio-visuals are utilized for learning.

- 9.426      **Coronary Care Nursing**  
10 class hrs/wk    10 cr.                     F/W

A course presenting information needed for the registered nurse's role in the Coronary Care Unit. The emphasis is on recognition and treatment of cardiac arrhythmias and emergency procedures such as cardio-pulmonary resuscitation and electrical resuscitation. Review of normal and abnormal anatomy and physiology of the heart, diagnostic methods, and treatment of cardiovascular disease will be covered. Principles of cardiac monitoring and electrocardiography will be applied.

- 9.425      **Nurse Refresher Course**    On Demand  
10 cr.

This course is designed for registered nurses who have not been active in the practice of nursing for the past five years and must meet the Oregon State Board of Nursing requirements of a refresher training program; in order, to receive registered nurse license for the State of Oregon or those registered nurses who would like to take the course to meet their own needs for increased knowledge.

The course will consist of the State requirements of 240 hours or equivalent in classroom and clinical settings under the direct supervision of a LBCC Nursing Instructor. The course is one quarter in length and open to male and female students of all ages. Students who successfully complete the course receive a certificate. The program is approved by the Oregon Board of Education and the Oregon State Board of Nursing.

## NURSING RELATED COURSES

- 5.625      **Clinical Office Procedures I**  
4 class hrs/wk      4 cr.                      On Demand

This course will cover the basic procedures necessary for the medical receptionist and/or the medical assistant to successfully assist the doctor in patient preparation and examination. Pre-requisite: Anatomical Terminology.

- 5.626      **Clinical Office Procedures II**  
4 class hrs/wk      4 cr.                      On Demand

This course will cover examination techniques and sterilization and laboratory procedures. Pre-requisite: Clinical Office Procedures I.

- 5.627      **Clinical Office Procedures III**  
4 class hrs/wk      4 cr.                      On Demand

A continuation of Clinical Office Procedures II, with further development of skills necessary to assist the physician. Pre-requisite: Clinical Office Procedures II.

- 5.630      **Anatomical Terminology**  
3 class hrs/wk      3 cr.                      F

This course will include the terminology of anatomy and physiology which is fundamental to the understanding of the physician's diagnosis and treatment.

- 5.631      **Pharmaceutical Terminology.**  
2 class hrs/wk      2 cr.                      On Demand

This course will include the terminology of pharmaceutical (drugs) supplies as it relates to the physician's office, clinic, or hospital.

- 5.633      **Medical Terminology I**  
3 class hrs/wk      3 cr.                      W

This course will be an introduction to the basic root words, as well as prefixes and suffixes, which are fundamental to the understanding of medical terminology. Pre-requisite: Anatomical Terminology.

- 5.634      **Medical Terminology II**  
3 class hrs/wk      3 cr.                      Sp

This course will be a continuation of Medical Terminology I with special emphasis being placed on terminology as it relates to body systems. Pre-requisite: Medical Terminology I.

- 9.405      **Medical Assistant I**  
3 class hrs/wk      3 cr.                      F

This course is designed to assist doctor's office personnel in becoming proficient in understanding the health problems of the patient, the physician's diagnosis and treatment, and meeting the needs of the patient as they relate to the doctor's office.

**9.406 Medical Assistant II** **W**  
**3 class hrs/wk 3 cr.**

This course is designed for doctor's office personnel and covers oral and written communications, book-keeping, insurance, credit, collection, medical records, and administrative and secretarial procedures.

**9.407 Medical Assistant III** **Sp**  
**3 class hrs/wk 3 cr.**

A continuation of Division I. This course includes preparation of patient and specimen for laboratory tests, basic knowledge of the most frequent laboratory tests, procedures such as blood pressure, temperature, pulse rate, sterilization of equipment and knowledge of the care and use of electrical, optical and examining equipment.



# dental assistant

The Dental Assistant curriculum is designed to prepare individuals for receptionist-office management, technical or chairside assistant and inter-office laboratory procedures. To enable the student to gain the ability for intelligent and skillful application in fundamental techniques in the manipulation of equipment methods; for familiarization with problems, facts, theories, principles, and for problem solving in the technologies in keeping with accepted professional standards. The course is accredited by the Council of Dental Education and graduating students are eligible to take the Certification Exam administered by the Certifying Board of the American Dental Assistants Association.

Oregon Law requires Dental Assistants who expose dental x-rays to hold a Certificate of Radiological Proficiency. Radiology I, II, III prepares students for examination by the Oregon State Board of Dental Examiners. The Dental Assisting program includes basic dental sciences, oral anatomy, pathology nutrition and sterilization. Fundamentals of chairside assisting, technical skills, basic dental office records, office management and supervised clinical experiences. Concepts of oral health service, psychological considerations in patient treatment and an understanding of auxiliary personnel's professional responsibilities are an integral part of the program.

Emphasis is placed on the value of the development of proper attitudes and work habits, particularly in regard to accuracy, safety, cleanliness, conduct on the job; and to recognize the need for continuing education once they are in the field of employment.

The program accepts two classes per year, summer and winter term. Class size is limited. High school graduation or equivalency is required. High school typing, biology and chemistry are recommended.

Applicant must be in good physical and mental health as determined by a doctor's report. Applicants are asked to take the general aptitude test battery. (Med. series 079.378), and make an appointment for a personal interview with the Dental Assistant Director. Final selection is made by the Dental Assistant Acceptance Committee. Books, special clothing and miscellaneous costs total approximately \$215.00.

First Quarter		
Course No.	Course Title	Credits
1.101	Communication Skills I	3
SS122	Typing	2
4.201	Integrated Basic Science I	3
5.461	Dental Radiology I	2
5.445	Intro. to Dental Assisting	3
		13
Second Quarter		
Course No.	Course Title	Credits
4.202	Integrated Basic Science II	3
5.484	Dental Materials—Lab I	2
1.606	Intro. to Psychology	3
5.462	Dental Radiology II	1
5.494	Clinical Practice I	4
		13
Third Quarter		
Course No.	Course Title	Credits
5.453	Dental Pathology	1
5.505	Dental Specialties	1
5.485	Dental Materials—Lab 2	2
5.491	Dental Office Records	3
5.495	Clinical Practice II	4
5.463	Dental Radiology III	1
		12
Fourth Quarter		
Course No.	Course Title	Credits
5.510	Office Practicum	8
5.510	Office Practicum Seminar	3
5.463	Dental Radiology III	1
5.454	Patient Education	2
1.200	Sup. Field Exp.	3-16
		17-30

**5.445 Intro. to Dental Assisting** **W**  
**3 class hrs/wk 3 cr.**

An introduction to the practice of dentistry dental terminology and the various aspects concerned with the profession and the Dental Assistant.

**5.453 Dental Pathology** **W**  
**1 class hr/wk 1 cr.**

A study of common pathological diseases, injured and normal tissue developmental anomalies. Prerequisite: Integrated Basic Science I, II.

**5.454 Patient Education** **F/Sp**  
**2 class hrs/wk 2 cr.**

Basic principles of patient education including oral hygiene, preventative dentistry and the techniques involved in communicating with patients.

**5.461 Dental Radiology I**  
2 class hrs/wk 2 cr. F/Sp

An introduction to the history and principles of x-ray terminology and the hazards of radiation and safety factors. An introduction to the techniques for intra-oral periapical and bitewing film.

**5.462 Dental Radiology II**  
3 class hrs/wk 1 cr. W

Techniques of Radiology, positioning the patient and angulation. X-ray film, chemistry of development and fixation and complete darkroom procedures. Actual working procedures introduced. Prerequisite: Dental Radiology I.

**5.463 Dental Radiology III**  
3 class hrs/wk 1 cr. F/Sp

Working procedure dealing with the difficult patient. A study of pathological conditions. Review in entirety in preparation for Radiology Certification by the Oregon State Board of Dental Examiners. Prerequisite: Dental Radiology II.

**5.484 Dental Materials/Lab I**  
4 class hrs/wk 2 cr. F/Sp

An introduction of dental materials, their composites, and properties. Practical experience in handling and manipulating operator and laboratory equipment. Prerequisite: Admittance to Dental Assistant Program.

**5.485 Dental Materials /Lab II**  
4 class hrs/wk 2 cr. W

A continuation of dental materials and dental lab procedures and experiences. Prerequisite: Dental Materials I.

**5.491 Dental Office Records**  
3 class hrs/wk 3 cr. F/Sp

Dental Office records, patient reception, appointment scheduling, record maintenance, financial arrangements and coordination and supply control.

**5.494 Clinical Practice I**  
8 class hrs/wk 4 cr. F/Sp

An introduction to practical office procedures including instrumentation, tray set-ups, rubber dam and restorative procedures. Equipment and its care, patient seating, dismissal, and dental office emergencies. Prerequisite: Introduction to Dental Assistant 5.445.

**5.495 Clinical Practice II**  
8 class hrs/wk 4 cr. W

A continuation of Clinical Practice I in general chair-side assisting. Practical applications of dental procedures. Patient Education in preventive dentistry. Prerequisite: Clinical Practice I.

**5.505 Dental Specialities**  
1 class hr/wk 1 cr. W

Specialist in the dental profession to acquaint the student with all types of dental specialization. Prerequisite: Integrated Basic Science II 4.202.

**5.510 Office Practicum**  
24 clinical hrs/wk 8 cr. F/Sp

Students are assigned to ethical clinical practices for practical application of dental assistant procedures. The student will be trained under proper supervision. Prerequisite: \*Fourth term status.

**5.515 Office Practicum Seminar**  
3 class hrs/wk 3 cr. F/Sp

A discussion of office situations which arise after the student has entered externship in the dental office. A general overall review of the Dental Assistant Program.

\* Note: Attaining Fourth Term Status requires completion of every course during the first three terms.



The Nursing Assistants program is a 12 week course which prepares men and women, ages 17-62, for positions as nurses aides and orderlies in hospitals, nursing homes and with health services.

Classroom and on-the-job experience provides the student with the background needed to care for the moderately ill or convalescent patient under supervision of a professional nurse.

Course work includes both class and clinical experience.

While many of the graduates of the program are placed in positions with hospitals, nursing homes or with the health services, others use this training as a starting point toward related health careers such as physical therapist and licensed practical nurse.

Course No.	Course Title	Credits
5.406	Nursing Assistant Lecture	
5.407	Nursing Assistant Lab	12 credits

**Curriculum**

	Class	Clinic	Total
I.	8		8
II.	12	35	47
III.	8	9	17
IV.	50	124	174
V.	12	28	40
VI.	8		8
VII.	6		6



# physical education and health

The Physical Education and Health department provides a comprehensive program for students who want to gain knowledge about the value and need for preventive and corrective health practices, and who want to participate in physical activities to gain and maintain physical fitness while learning skills.

Health related instruction includes the theory and application of facts and attitudes for maintaining optimum health for the individual and society.

Physical activity is provided through three distinct learning and participation opportunities. Students can learn lifetime recreational skills. There are developmental courses which stress conditioning of the body and maintenance of a specific level of physical condition. There are team sport courses which provide a high level of conditioning and activity.

**PE 185 Creative Movement**  
3 class hrs/wk 1 cr. On Demand  
Dance as a creative art actively representing total personality growth. The course includes training and practice in movement as expression.

**PE 185 Beginning Ballet**  
3 class hrs/wk 1 cr. On Demand  
Beginning ballet introduces the student to classical ballet techniques. Study is made of the positions of the feet, the plie, various body positions, poses, and directions. Every class begins with work at the barre, where proper warm up methods are taught and emphasized. Simple series of ballet steps are also taught.

**PE 185 Intermediate Ballet**  
3 class hrs/wk 1 cr. On Demand  
Intermediate ballet, the logical extension of the beginning course, introduces the student to more sophisticated and difficult movements. Beginning steps are practiced and perfected at each class, new steps being added as the students progress. Attention is given to music for ballet and to elementary choreography.

**PE 180 Gymnastics**  
3 class hrs/wk 1 cr. W  
Gymnastics: Instruction and practice in tumbling, trampoline, unevens, balance beam, floor exercise, vaulting.

**PE 190 Gymnastics**  
3 class hrs/wk 1 cr. On Demand  
Instruction and practice in tumbling, trampoline, floor exercise, vaulting, parallel bars, side horse, high bar, and rings.

**PE 180 Body Conditioning**  
3 class hrs/wk 1 cr. F/W/Sp  
Instruction and practice in exercises that will condition the body to develop a level of strength, flexibility and endurance which enables one to maintain an erect alignment, complete ones work, participate in active recreation and to possess a reserve supply of energy.

**PE 190 Body Conditioning**  
3 class hrs/wk 1 cr. F/W/Sp  
This course is designed to elevate the level of fitness through general exercise and weight lifting.

**PE 180 Tennis**  
3 class hrs/wk 1 cr. F/Sp  
Instruction and practice in rules, etiquette, grips, stances, forehand and backhand drive, service, receiving, playing position and class play.

**PE 185 Tennis**  
3 class hrs/wk 1 cr. F/Sp  
Instruction and practice in rules, etiquette, grip, stance, forehand, and backhand drives, service, volley, lob, overhead smash, receiving, playing position and class play, game strategy (singles and doubles).

**PE 190 Tennis**  
3 class hrs/wk 1 cr. F/Sp  
Instruction and practice in rules, etiquette, grip, stance, forehand and backhand drives, service, volley, lob, overhead smash, receiving, playing position and class play, game strategy (singles and doubles).

**PE 180 Volleyball**  
3 class hrs/wk 1 cr. F/W/Sp  
This course is designed to teach basic volleyball skills to the beginner. A major emphasis will be to increase player abilities within a team situation.

**PE 185 Volleyball**  
3 class hrs/wk 1 cr. F/W/Sp  
A co-educational course designed to teach basic volleyball skills to the beginner. A major emphasis will be to increase player abilities within a team situation.

**PE 190 Volleyball**  
3 class hrs/wk 1 cr. F/W/Sp  
This course is designed to teach basic volleyball skills to the beginner. A major emphasis will be to increase player abilities within a team situation.

**PE 185 Beginning Bowling**  
3 class hrs/wk 1 cr. F/W/Sp  
A co-educational bowling class which stresses fundamentals. The course is intended to provide a basic foundation from which students may progress to advanced bowling skills.

- PE 185 Intermediate Bowling**  
3 class hrs/wk 1 cr. F/W/Sp  
A co-educational class which provides opportunity to increase skills and techniques of bowling. Rules and courtesies of the game as well as social recreational value to the student will be stressed.
- PE 185 Advanced Bowling**  
3 class hrs/wk 1 cr. F/W/Sp  
An advanced co-educational class which provides opportunity to further increase skills and techniques of bowling. Rules and courtesies of the game as well as social recreational value to the student will also be stressed.
- PE 185 Beginning Badminton**  
3 class hrs/wk 1 cr. F/W/Sp  
Instruction and practice in stances, grips, service, strokes, scoring, rules and strategy. Demonstration of singles and doubles play, plus teamwork involved.
- PE 185 Intermediate Badminton**  
3 class hrs/wk 1 cr. F/W/Sp  
A more advanced class of instruction and practice in stances, grips, service, strokes, scoring, rules and strategy. Demonstration of singles and doubles play, plus teamwork involved.
- PE 185 Beginning Golf**  
3 class hrs/wk 1 cr. F/Sp  
An introduction to the mental and physical needs involved in golf participation. This includes grip, stance, swing techniques, rules, strategy, and etiquette.
- PE 185 Intermediate Golf**  
3 class hrs/wk 1 cr. F/Sp  
Designed to improve and correct basic swing errors. A more detailed presentation of golf techniques and strategy will aid the intermediate golfer toward becoming a more successful golfer.
- PE 185 Advanced Golf**  
3 class hrs/wk 1 cr. F/Sp  
Intercollegiate as well as recreational golf with the emphasis on development of skills during competitive play.
- PE 185 Jogging**  
3 class hrs/wk 1 cr. F/Sp  
Instruction and practice in jogging to increase the maximum amount of oxygen that the body can process in a given time.
- PE 185 Beginning Swimming**  
3 class hrs/wk 1 cr. F/W/Sp  
Instruction and practice in individual basic water skills and knowledge to make one reasonably safe while in, on or about the water.
- PE 185 Intermediate Swimming**  
3 class hrs/wk 1 cr. F/W/Sp  
Instruction and practice in individual water skills and knowledge to make one safe while in, on or about the water; an opportunity to learn elements of good swimming.
- PE 185 Advanced Swimming**  
3 class hrs/wk 1 cr. F/W/Sp  
Instruction and practice in water skills and knowledge to increase one's endurance and versatility in the water by providing opportunity to coordinate the parts of strokes into the whole stroke.
- PE 185 Life Saving**  
3 class hrs/wk 2 cr. W  
Instruction and practice in lifesaving skills that will enable one to take care of himself and be able to aid or rescue anyone in danger of drowning when rescue is humanly possible.
- PE 185 Water Safety Instruction (WSI)**  
3 class hrs/wk 2 cr. Sp  
The training course for WSI instructors is divided into two parts. Part one trains, conditions and prepares one to enter part two, which trains an individual as a teacher of Red Cross Water Safety.
- PE 185 Beginning Baseball**  
3 class hrs/wk 1 cr. F  
A course which allows a student to learn or improve basic baseball skills and knowledge.
- PE 190 Advanced Baseball**  
3 class hrs/wk 1 cr. Sp  
A course designed to prepare students for intercollegiate competition in baseball.
- PE 185 Baseball Conditioning**  
3 class hrs/wk 1 cr. W  
A physical conditioning course with emphasis on developing strength and agility for better efficiency in baseball skills.
- PE 185 Baseball Skills**  
3 class hrs/wk 1 cr. W  
A course which offers students the opportunity to learn and improve individual baseball skills.
- PE 180 Softball**  
3 class hrs/wk 1 cr. Sp  
A course which provides experience and learning in fundamental skills of softball as well as providing game experience. It is basically designed with an emphasis on slow pitch rather than a fast pitch style of play.
- PE 190 Softball**  
3 class hrs/wk 1 cr. Sp  
A course which provides experience and learning in fundamental skills of softball as well as providing game experience. It is basically designed with an emphasis on slow pitch rather than a fast pitch style of play.
- PE 180 Beginning Basketball**  
3 class hrs/wk 1 cr. F/W  
This course is designed to teach the beginning basketball player basic skills and concepts in basketball. We will begin with fundamentals and work toward a full court situation.
- PE 190 Beginning Basketball**  
3 class hrs/wk 1 cr. F/W  
This course is designed to teach the beginning basketball player basic skills and concepts in basketball. We will begin with fundamentals and work toward a full court situation.
- PE 180 Intermediate Basketball**  
3 class hrs/wk 1 cr. F/W/Sp  
This course is designed to advance the beginning basketball player's skills toward better success in a game situation.

**PE 190 Intermediate Basketball**  
3 class hrs/wk 1 cr. F/W/Sp  
This course is designed to advance the beginning basketball player's skills toward better success in a game situation.

**PE 190 Advanced Basketball**  
3 class hrs/wk 1 cr. W  
This is intercollegiate basketball level. Emphasis is on development of skills for competition among the OCCAA conference colleges.

**PE 190 Flag Football**  
3 class hrs/wk 1 cr. F  
This course is designed to provide experience to develop various skills fundamental to flag football. Organization of class depends upon skill level of class.

**PE 190 Handball**  
3 class hrs/wk 1 cr. F/W/Sp  
This course is designed to instruct the student in the basic skills of handball.

**PE 190 Wrestling**  
3 class hrs/wk 1 cr. W  
Designed to acquaint the student with the fundamentals of collegiate wrestling as set forth by the NCAA. Included will be instruction, demonstration, and practice in all aspects of wrestling.

**PE 185 Karate**  
3 class hrs/wk 1 cr. F/W/Sp  
An introduction to the practices and principles of Tae Kwan Do (Korean Karate) as practiced by the World Tae Kwan Do Association.

**PE 185 Judo**  
3 class hrs/wk 1 cr. F/W/Sp  
Judo is a contact sport with great emphasis on the fundamentals of Kodokan judo skills. Concentration is placed on defensive and offensive workouts. The objective and philosophy of Kodokan judo is the cultivation of one's mind and body to the fullest.

**PE 131 Intro. to Health and Physical Education**  
3 class hrs/wk 3 cr. F  
Professional orientation; basic philosophy and objectives; professional opportunities and qualifications. Designed for students to learn about the Physical Education and Health profession as a career.

**PE194/195/294/295 Professional Program**  
6 class hrs/wk 2 cr. F/W/Sp  
These courses are 2 credit courses meeting 6 hours a week providing technical information for the student who desires to learn to teach various physical education activities.

**9.601 Women's Gymnastics Judging**  
3 class hrs/wk 1 cr. F/Sp  
This course is designed for individuals interested in women's gymnastics judging. The course will include both optional and compulsory FIG rules for women's gymnastics.

**HE 250 Personal Health**  
3 class hrs/wk 3 cr. F/W/Sp  
Health attitudes, outlooks and feelings as these affect the individual, community, nation and world. Emphasis is on improving the quality of health by providing reliable information in order to achieve a long and productive life.

**HE 252 First Aid**  
3 class hrs/wk 3 cr. F/W/Sp  
First Aid instruction and practice in First Aid skills that will enable one to take care of himself and to be able to aid others in the event of an accident or illness.

**9.137 First Aid Multi-Media**  
1 cr. On Demand  
The theory and practice in immediate and temporary care given in case of accident or sudden illness. This course is taught according to American Red Cross requirements through the Red Cross Multi-Media method. Completion of the course earns the student the Standard First Aid Certificate of the American Red Cross.

**9.315 Standard First Aid**  
1 class hr/wk 1 cr. On Demand  
Theory and practice in immediate and temporary care given in case of accident or sudden illness. Complies with American Red Cross requirements.

**4.108 Industrial Safety and First Aid**  
3 class hrs/3 cr. F/W/Sp  
Course content concerned with accident prevention and first aid in industry through the development of safety practices relating to personnel, design, equipment and maintenance. The requirements for first aid certification by the American Red Cross will be met.

**9.313 Emergency Medical Technician**  
81 hrs/6 cr. On Demand  
A basic training program which will include classroom theory and practice exercises in the problems encountered by ambulance personnel that involve: a) teaching students the overall role and responsibilities of the emergency medical technician in performing both the emergency care and operational aspects of his job. b) developing students skill in life-saving techniques and all emergency treatment procedures short of those rendered by physicians or by paramedical personnel under the direct supervision of a physician. c) developing student skill in the use of and care for all equipment required to accomplish his job.

**9.314 Emergency Medical Technician - Cardiovascular**  
156 hrs/10 cr. On Demand  
This course is designed to train emergency medical technicians-ambulance who have completed the basic 81 hr. E.M.T. program satisfactorily. It is designed to provide them with those additional skills required to function effectively in certain cardiac emergencies. The success of this type of program depends upon close medical supervision. It has been demonstrated that well-trained emergency medical technicians can function independently in life threatening cardiac emergencies.

**9.315 Emergency Medical Technician - Intravenous Therapy**  
20 hrs/2 cr. On Demand  
Upgrade the skills of all basically trained EMT's. Present a standardized I.V. therapy course for the entire state. It is the second step in a career development pattern. Advanced training in certain aspects of Intravenous Therapy.

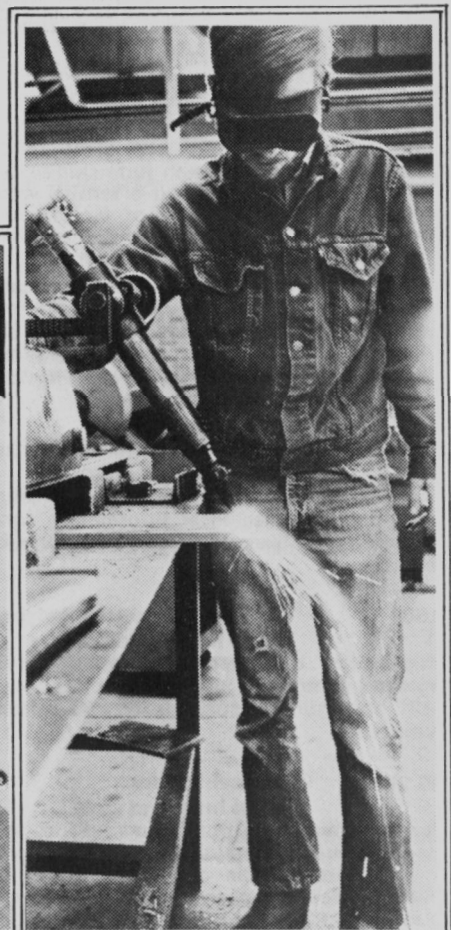
Education for business prepares the student vocationally and helps to develop the social and economic attitudes which are essential in establishing the future success of individuals within our economic system. It offers a knowledge and understanding of business and business methods that will help the student cope with our changing society.

The world of industrial technology has experienced many changes in recent years; the manufacturing industry has deleted, updated or created new production techniques; the federal, state, and local governments and industries are moving to control environmental problems created by increased population, production and resource depletion. The automotive industry has enjoyed rapid growth due to economy of repair versus replacement. All of these changes require increased and new skill levels.

The Business/Industrial Division attempts to meet the needs of all students, including those persons working full time in business and industry. It offers one-year and two-year programs leading to certificates and degrees. The Division also offers a variety of courses for those students with special needs and interests. Many of these courses are offered in the evenings. A number of one-day seminars are sponsored throughout the year, designed especially for people currently employed in the business and industrial areas.

Linn-Benton Community College encourages students to make career choices based on interests, needs, and abilities without regard to the traditional roles of men, women or minorities.

# business and industrial division





**DIRECTOR:**

Philip V. Clark

**FACULTY:**

John Alvin, Welding, Department Chairman  
 Illa Atwood, Business Skills  
 Garland Brooks, Business Management  
 Michael Burke, Machine Tool Technology  
 David Carter, Automotive Technology  
 Maynard Chambers, Business Management, Department Chairman  
 Patsy Chester, Business Skills, Department Chairman  
 Gerry Conner, Business Management  
 Charles Dallman, Food Services, Department Chairman  
 Henry Day, Wood Technology, Department Chairman  
 John Griffiths, Machine Tool Technology, Department Chairman  
 Lee Hansen, Small Engine/Recreational Vehicle Repair, Dept. Chmn.  
 Eugene Hysmith, Auto Body Repair, Department Chairman  
 Dorothy Lawrence, Business Skills  
 Ward Ledbetter, Business Management  
 L. Carl Love, Metallurgy, Department Chairman  
 James Moran, Data Processing, Department Chairman  
 Joyce Moreira, Business Skills  
 Edward Movius, Business Management/Community Liaison  
 Keith Pond, Automotive Technology  
 Stephen Shelton, Data Processing  
 Elwyn Stewart, Welding  
 David Stringer, Business Management  
 Larry Thornton, Auto Body Repair  
 Al Walczak, Business Skills

# business programs

The Business area offers the following types of courses and programs to meet a variety of student needs:

**Two-Year Programs**

1. A two-year program of Business Administration leading to an Associate of Arts degree;
2. A two-year program in Secretarial Science-Business Education leading to an Associate of Arts degree;
3. A two-year program in Management leading to an Associate of Science degree;
4. A two-year program in Data Processing leading to an Associate of Science degree;
5. A two-year program in Accounting Technology leading to an Associate of Science degree;
6. A two-year program in Banking and Finance leading to an Associate of Science degree;
7. A two-year program in Marketing leading to an Associate of Science degree;
8. A two-year program in Supervisory Training leading to an Associate of Science degree;
9. A two-year program for an Administrative Secretary leading to an Associate of Science degree;
10. A two-year program for Educational Secretaries leading to an Associate of Science degree;
11. A two-year program for Legal Secretaries leading to an Associate of Science degree;
12. A two-year program for Medical Office Assistants leading to an Associate of Science degree;

13. A two-year program for Medical Receptionists leading to an Associate of Science degree.

**One-Year Programs**

14. A one-year program in General Business leading to a Certificate of Completion;
15. A one-year program in Secretarial Services leading to a Certificate of Completion;
16. A one-year program for Medical Transcriptionists leading to a Certificate of Completion;
17. A one-year program in Supervisory Training leading to a Certificate of Completion;
18. A one-year Certificate of Completion in Data Processing;

**Special Programs**

19. A short program in Supervisory Training leading to a Supervisory Certificate.
20. Courses offered through the joint effort of the College and the American Institute of Banking designed as a program specifically for bank employees;
21. Courses to fit the personal or vocational needs of part-time students in the day or evening programs;
22. Varied general business courses for students majoring in other fields who desire some background and specific knowledge in business.

NOTE: Students wishing to take longer than the proposed number of quarters to complete their program may do so.

**Business Transfer**

Numerous courses in the business field are offered for students interested in lower division college transfer classes which will provide a foundation for additional bachelors degree study at a four-year college or university. Students interested in this course-of-study should also consult the business transfer curricula guides located on page 19 of this catalog.

**BA 101 Introduction to Business**  
 4 class hrs/wk 4 cr. F/W/Sp

A survey course in business with emphasis placed on organization, operation and management. It is intended to orient students to the field of business and to help them determine their field of major concentration.

**BA 199 Business Honors**  
 3 class hrs/wk 3 cr. F/W/Sp

Students will be exposed to advanced concepts of business structures and the individuals who may be expected to be found running them. They will experience additional human relations situations as preparatory to the jobs they will soon have. Individual and team studies of local business as well as larger national corporations will be made in order to prepare the student for rapid success in their chosen field. Prerequisite: Recommendation by the applicable Department Chairman. Five each from Business Skills and Business Management Departments and two each from Data Processing will be allowed. Department quotas may be exchanged. Department Chairmen will make their decision based on student performance, experience and attitude. Instructor input will be solicited.

**BA 211 Principles of Accounting I**  
 3 class hrs/wk 3 cr. F/W  
 Techniques of account construction and preparation of financial statements. Emphasis is on application of problems of recording, measuring income, purchasing, sales, inventories, special journals, and internal control of cash.

**BA 212 Principles of Accounting II**  
 3 class hrs/wk 3 cr. W/Sp  
 Accounting systems and management control, concepts and principles of depreciation, merchandise inventory, evaluation, partnership and corporate accounting, capital stock, investments, dividends. Prerequisite: BA 211 or consent of instructor.

**BA 213 Principles of Accounting III**  
 3 class hrs/wk 3 cr. Sp  
 Control accounting for departments and branches, cost accounting for manufacturing plants, income taxes and their effect on business decisions and analysis of financial statements. Prerequisite: BA 212 or consent of instructor.

**BA 217 Basic Accounting and Financial Analysis**  
 3 class hrs/wk 3 cr. On Demand  
 A one-term terminal course designed for students not majoring in business. Introduction to the recording, summarization, presentation, and interpretation of accounting data. Emphasis on basic accounting principles and terminology, the accounting cycle, and analysis of financial reports.

**BA 226 Business Law**  
 3 class hrs/wk 3 cr. W/Sp  
 The framework of the law as it affects the businessman, how the law operates, how it is enforced, and how to use the law in business. The origins of law, the relations of business to society and the law, evolution of business within the framework of the law, the historical development and present-day applications of the law of contracts.

**BA 131 Intro. to Business Data Processing**  
 6 class hrs/wk 4 cr. F/Sp  
 This course provides the student with the opportunity to write computer programs using a procedure or problem oriented language. It serves two main purposes: 1) introduces the student to the tasks that a computer programmer must perform; and 2) provides the student with the means to program a modern computing system. The computer language currently in use is FORTRAN. The topics covered are: input/output, arithmetic statements, transfer and control statements, arrays, and subprograms.

**BA232 Intro. to Business Statistics**  
 4 class hrs/wk 4 cr. W  
 A statistical analysis of business and economic data used in controlling an operation and in making sound business decisions. Special attention is given to assembling statistical data, statistical description, probability, sampling, and statistical inference. Prerequisite: Mth 101 or Mth 161.

**BA 238 Intro. to Management Science**  
 4 class hrs/wk 4 cr. Sp  
 Techniques of business mathematical models including simulation models, decision models, inventory control models, production models, capital budgeting models, queuing models, and net working models. Prerequisite: BA 232.



# accounting technology

This two-year program is designed to prepare students for highly rewarding 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.

The following outline indicates the general course requirements for those seeking the Associate of Science Degree in Accounting Technology. Students wishing to take individual courses to qualify for special employment opportunities may do so with the consent of the Chairman of the Business Management Department.

### Freshman Year

Course No.	Course Title	F	W	Sp
2.500	Business Orientation & Career Awareness	1		
BA101	Introduction to Business	4		
2.530	Practical Accounting I	3		
2.515	Business Math	3		
2.501	Typing I	3		
1.101	Communication Skills I		3	
2.119	Introduction to Management		3	
2.531	Practical Accounting II		3	
2.121	Applied Economics		3	
2.130	Business Quantitative Methods		3	
PE 180/190	Physical Education		1	
1.102	Communication Skills II			3
2.131	Marketing			3
2.532	Practical Accounting III			3
2.521	Office Machines			3
2.516	Business Statistics			3
PE 180/190	Physical Education			1
		14	16	16

### Sophomore Year

Course No.	Course Title	F	W	Sp
2.595	Intermediate Accounting I	3		
9.743	Income Tax Preparation	3		
2.645	Business Conference Techniques	3		
2.518	Business Law	3		
PE 180/190	Physical Education	1		
	Business Elective			3
2.710-2	On-The-Job Training			4
2.596	Intermediate Accounting II		3	
2.534	Cost Accounting		3	
2.415	Human Relations in Business		3	
	Business Elective			3
2.710-2	On-The-Job Training			4
2.597	Intermediate Accounting III			3
2.222	Financial Management			3
2.510	Introduction to Data Processing			4
	Business Elective			3
		16	16	17

**2.220 Personal Finance**  
3 class hrs/wk 3 cr. Sp  
A thorough study of home financing, installment buying, insurance, investments, wills, and other phases of managing family finances.

**2.222 Financial Management**  
3 class hrs/wk 3 cr. Sp  
A specialized course dealing with financing a business operation. Topics covered will deal with the tax environment, analysis of financial statements, working capital management, slow and long-term financial planning, budgeting and control. Prerequisites: Practical Accounting II or Principles of Accounting II.

**2.530 Practical Accounting I**  
5 class hrs/wk 3 cr. F/W/Sp  
Fundamental principles of double-entry accounting, general journals and ledgers, business forms, simple financial statements, and the completion of the accounting cycle. Specific emphasis on cash receipts and payments, payroll accounting, purchases, sales, promissory notes, and inventories.

**2.531 Practical Accounting II**  
5 class hrs/wk 3 cr. F/W/Sp  
A continuation of Accounting I with an expansion of the accounting cycle to include special journals, ledgers and business forms. A special emphasis will be placed on accounting for a partnership. Prerequisite: Practical Accounting - 2.530.

**2.532 Practical Accounting III**  
5 class hrs/wk 3 cr. F/W/Sp  
A course in accounting including entries of a nature requiring some analysis and interpretation; entries for promissory notes; adjustments for prepaid, unearned and accrued items; depreciation of assets; the voucher system; payroll records; property sales, and taxes. A special emphasis will be placed on accounting for a corporation. Prerequisite: Practical Accounting - 2.531.

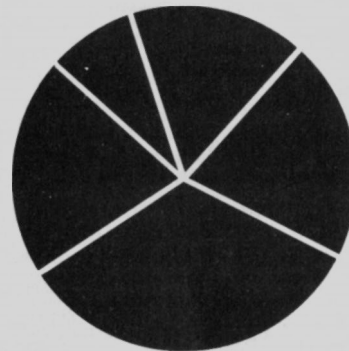
**2.534 Cost Accounting**  
3 class hrs/wk 3 cr. W  
A course that relates theory with practical problems in the analysis and control of material, labor and overhead costs in manufacturing. Special emphasis is given to the job cost system, the process cost system, and the standard cost system. Prerequisite: Practical Accounting II or Principles of Accounting II.

**2.595 Intermediate Accounting I**  
3 class hrs/wk 3 cr. F  
An advanced study of accounting theory and practice for measurement of income and valuation of assets in financial statement presentation. A critical re-evaluation of accounting concepts and the alternative approaches to various problems are reviewed. Prerequisite: Practical Accounting III, Principles of Accounting III, or consent of instructor.

**2.596 Intermediate Accounting II**  
3 class hrs/wk 3 cr. W  
A continuation of Intermediate Accounting I. Advanced concepts and procedures of valuation for various types of assets and liabilities. Special problems related to investments; plant, property, and equipment; consolidations, and corporate accounting. Prerequisite: Intermediate Accounting I.

**2.597 Intermediate Accounting III**  
3 class hrs/wk 3 cr. Sp  
A continuation of Intermediate Accounting II. Special emphasis on fund flow analysis, financial ratios, preparing statements from incomplete data, correcting errors in prior year statements, and price-level changes. Prerequisite: Intermediate Accounting II.

**9.743 Income Tax Preparation**  
3 class hrs/wk 3 cr. F  
A course explaining the Federal Income Tax laws in understandable language. The importance of adequate and suitable financial records is expanded upon. Special emphasis is placed on helping the taxpayer compute required reports and taxes due. Special interests (farm, manufacturing, etc.) may be discussed at the option of the class.



## banking and finance

This two-year program is designed for students seeking careers with financial institutions and for those already working for financial institutions who seek additional knowledge. Career opportunities are found in banks, savings and loan firms, consumer finance companies and similar financial companies.

This program was planned in cooperation with the Linn-Benton Chapter of the American Institute of Banking.

The following outline indicates the general course requirements for those seeking the Associate of Science degree in Banking and Finance. Students wishing to take individual courses to qualify for special employment opportunities may do so with the consent of the Chairman of the Business Management Department.

The specialized banking courses will only be offered during the evenings during the 1975-76 school year.

**Freshman Year**

Course No.	Course Title	F	W	Sp
2.500	Business Orientation & Career Awareness	1		
2.150	Principles of Bank Operations	3		
2.530	Practical Accounting I*	3		
2.501	Typing I	3		
PE 180/190	Physical Education	1		
2.515	Business Math*	3		
1.101	Communication Skills I*		3	
2.531	Practical Accounting II*		3	
2.121	Applied Economics*		3	
BA101	Introduction to Business		4	
PE 180/190	Physical Education		1	
2.130	Business Quantitative Methods		3	
1.102	Communication Skills II*			3
2.131	Marketing*			3
2.532	Practical Accounting III*			3
2.521	Office Machines			3
2.516	Business Statistics			3
PE 180/190	Physical Education			1
		14	17	16

**Sophomore Year**

Course No.	Course Title	F	W	Sp
2.155	Money and Banking	3		
2.518	Business Law*	3		
2.119	Introduction to Management*	3		
2.510	Introduction to Data Processing Banking & Finance Elective	4		
2.710-2	On-The-Job Training		4	
2.152	Bank Management		3	
HE 250	Personal Health		3	
	Business Elective		3	
	Banking & Finance Elective		3	
2.710-2	On-The-Job Training			4
2.645	Business Conference Techniques*			3
2.415	Human Relations in Business			3
	Banking & Finance Elective			3
	Banking & Finance Elective			3
		16	16	16

\*Courses in column two may be substituted for courses in column one.

Column One	Column Two
1.101-2 Communication Skills I, II	WR 121-2 English Composition
2.530-2 Practical Account'g I, II, III	BA 211-3 Principles of Accounting I, II, III
2.515 Business Math	1.110 Elements of Algebra
2.121 Applied Economics	EC 201 Principles of Economics
2.131 Marketing	2.160 Bank PR & Marketing
2.518 Business Law	BA 226 Business Law
2.119 Introduction to Management	9.500 Elements of Supervision
2.645 Business Conference Techniques	SP 111 Beg. Oral Communication

**2.150 Principles of Bank Operations**  
3 class hrs/wk 3 cr. On Demand

This course presents the fundamentals of bank functions in a descriptive fashion so that the beginning banker may acquire a broad (and operational) perspective. The descriptive orientation is intentional. Banking is increasingly dependent upon personnel who have the broad perspective so necessary for career advancement.

**2.151 Analyzing Financial Statements**  
3 class hrs/wk 3 cr. On Demand

This course is organized into two main sections: Characteristics of Financial Statements and Financial Statement Analysis. The first section serves as a useful review of basic accounting principles for those students who have studied accounting. For those who have not, this section provides the minimum accounting background necessary for profitable study of financial statement analysis.

**2.152 Bank Management**  
3 class hrs/wk 3 cr. On Demand

This course is based on new trends which have emerged in the philosophy and practice of management. The study and application of the principles outlined provide new and experienced bankers with a working knowledge of bank management.

**2.155 Money & Banking**  
3 class hrs/wk 3 cr. On Demand

This course stresses the practical aspects of money and banking and emphasizes the basic monetary theory needed by the banking student to apply knowledge acquired on the job. Historical treatment is kept to a minimum. Emphasis is also placed on such problems as economic stabilization, types of spending, the role of gold, limitations of central bank control, government fiscal policy, balance of payments, and foreign exchange, showing their repercussions on the banking industry in affecting yield curves and the structuring of portfolios.

**2.156 Agricultural Finance**  
3 class hrs/wk 3 cr. On Demand

Reflecting the rapid growth of the off-farm agribusiness sectors (the suppliers of farm inputs), this course emphasizes general principles associated with the evaluation of management and the use of capital, rather than stressing the examination of land and labor resources, which are more closely aligned with agricultural production. An understanding of agricultural finance should help the banker in satisfying the credit needs of modern agricultural.

**2.158 Home Mortgage Lending**  
3 class hrs/wk 3 cr. On Demand

This course approaches the subject from the viewpoint of the mortgage loan officer who seeks to develop a sound mortgage portfolio. A picture of the mortgage market is presented first, then the acquisition of a mortgage portfolio, mortgage plans and procedures, mortgage loan processing and servicing, and finally the obligations of the mortgage loan officer in overall portfolio management.

**2.159 International Banking**  
3 class hrs/wk 3 cr. On Demand

This is an introduction to a vast field for those working in international departments, as well as for those involved in the domestic activities of their banks. The essential objectives of this course are to present the basic framework and fundamentals of international banking: how money is transferred from one country to another, how trade is financed, what the international agencies are and how they supplement the work of commercial banks, and how money is changed from one currency to another.

**2.160 Bank Public Relations and Marketing**  
3 class hrs/wk 3 cr. On Demand

This course discusses the basis of public relations, both internal and external, and seeks simply to explain the why, the what, and some of the how of public relations and marketing. It is intended as an overview for all bankers in terms of what everyone in banking should know about the essentials of bank public relations and marketing.

**2.162 Trust Functions and Services**  
3 class hrs/wk 3 cr. On Demand

This course presents a complete picture of the services rendered by institutions engaged in trust business. Providing an introduction to the services and duties involved in trust operations, the course is intended for all bankers, not only those who are engaged in trust business. It endeavors to keep clear the distinction between business and legal aspects of trust functions.

**2.163 Banking Investments**  
**3 class hrs/wk 3 cr. On Demand**

Because the bank's needs for primary reserves and loanable funds limit the funds available for investment, this course describes the nature of such funds and how their uses are determined. It also analyzes the primary and secondary reserve needs of commercial banks, the sources of reserves, and their random and cyclical fluctuations, and shows the influence of these factors on investment policy. This analysis is followed by a study of yield changes as they affect a bank's long-term holdings.

**2.164 Instalment Credit**  
**3 class hrs/wk 3 cr. On Demand**

In this course, the techniques of instalment lending are presented concisely. Emphasis is placed on establishing the credit, obtaining and checking information, servicing the loan, and collecting the amounts due. Each phase of a bank's instalment credit operation is carefully scrutinized. Other topics discussed are inventory financing, special loan programs, business development and advertising, and the public relations aspect of instalment lending.

**2.165 Savings and Time Deposit Banking**  
**3 class hrs/wk 3 cr. On Demand**

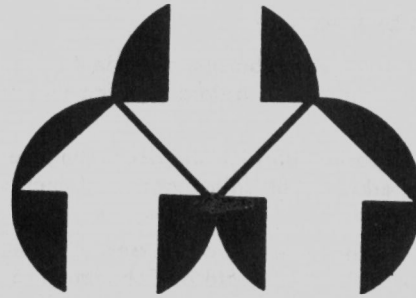
This course reflects recognition of the fact that a knowledge of the historical development of savings institutions and an awareness of the basic economic function of the savings process are necessary to an understanding of the current operations and policies of these institutions. It begins with a review of the economics of the savings process in order to clarify important differences between financial savings by individuals or organizations and real savings that appear as capital formation. Different types of financial savings are reviewed in order to describe the system of financial flows of income to capital investment.

**2.166 Bank Letters and Reports**  
**3 class hrs/wk 3 cr. On Demand**

This course is designed for those bank officers, supervisors, and employees who dictate or review correspondence. Since bank letters are actually public relations documents, all persons should be familiar not only with the mechanical forms of bank letters but also with the psychological principles that help the letter writer achieve best results. The course reviews letter forms, emphasizes fundamental principles underlying modern correspondence, and examines different kinds of bank letters.

**2.169 Federal Reserve System**  
**3 class hrs/wk 3 cr. On Demand**

This course examines the operations and policies of the Federal Reserve System during critical periods over the past 60 years. The approach taken is topical rather than chronological, thereby enabling students to compare and contrast Federal Reserve policies dealing with similar problems at different periods in time. Attention is given to international monetary affairs and economic developments affecting the American fiscal system.



# business management

This two-year program is designed to meet the needs of persons preparing for employment in a variety of business occupations.

The successful completion of this course of study should afford the graduate a better entry-level position and lead eventually to middle-management positions. Career opportunities include management positions in: Retail Business, Public Utilities, Insurance Companies, Real Estate Agencies, Transportation Firms, and Manufacturing Industries.

The following outline indicates the general course requirements for those seeking the Associate of Science in Management. Students wishing to take individual courses to qualify for specific employment opportunities may do so with the consent of the Chairman of the Business Management Department.

**Freshman Year**

Course No.	Course Title	F	W	Sp
2.500	Business Orientation & Career Awareness	1		
BA 101	Introduction to Business	4		
2.530	Practical Accounting I	3		
2.515	Business Math	3		
2.501	Typing I	3		
1.101	Communication Skills I		3	
2.119	Introduction to Management		3	
2.531	Practical Accounting II		3	
2.121	Applied Economics		3	
2.130	Business Quantitative Methods		3	
PE 180/190	Physical Education		1	
1.102	Communication Skills II			3
2.131	Marketing			3
2.532	Practical Accounting III			3
2.521	Office Machines			1
2.516	Business Statistics			3
PE 180/190	Physical Education			1
		14	16	14

**Sophomore Year**

Course No.	Course Title	F	W	Sp
2.645	Business Conference Techniques	3		
2.518	Business Law	3		
2.113	Personnel Management	3		
PE 180/190	Physical Education	1		
2.510	Introduction to Data Processing	4		
	Business Elective	3		
2.710-2	On-The-Job Training		4	
2.415	Human Relations in Business		3	
HE 250	Personal Health		3	
	Business Elective		3	
	Business Elective		3	
2.710-2	On-The-Job Training			4
2.222	Financial Management			3
2.111	Labor-Management Relations			3
	Business Elective			3
	Business Elective			3
		17	16	16

**General Business**

This is a one-year program for students not wishing to spend two full years before entering the job market.

Career opportunities include accounting clerks, inventory clerks, retail sales, and customer service representatives.

The following schedule of courses will lead to the awarding of the Certificate of Completion. Students wishing to take individual courses to qualify for specific employment opportunities may do so with the consent of the Chairman of the Business Division.

Course No.	Course Title	F	W	Sp
2.500	Business Orientation & Career Awareness	1		
BA 101	Introduction to Business	4		
2.530	Practical Accounting I	3		
2.515	Business Math	3		
2.501	Typing I	3		
1.101	Communication Skills I		3	
2.119	Introduction to Management		3	
2.531	Practical Accounting II		3	
2.121	Applied Economics		3	
2.130	Business Quantitative Methods		3	
PE 180/190	Physical Education		1	
1.102	Communication Skills II			3
2.131	Marketing			3
2.532	Practical Accounting III			3
2.521	Office Machines			1
2.516	Business Statistics			3
PE 180/190	Physical Education			1
		14	16	14

**2.500 Business Orientation & Career Awareness**  
2 class hrs/wk 1 cr. F

This course is designed to introduce to the student the various career opportunities in the business field. Included in the course will be films, speakers, and field trips.

**2.111 Labor-Management Relations**  
3 class hrs/wk 3 cr. Sp

This course explores the nature of the collective bargaining system in the United States and the parties who have a vital interest in the operation of the system.

**2.113 Personnel Management**  
3 class hrs/wk 3 cr. F

All managers and business educators agree that the first line supervisor is the most critical member of the management team. This course, therefore, will deal primarily with this first line supervisor. It looks at his styles and patterns of behavior with particular emphasis on how the supervisor handles himself with his subordinates, colleagues, his boss, and the Union - in a wide variety of situations. Prerequisites: BA 101. 2.119.

**2.119 Business Management**  
3 class hrs/wk 3 cr. F/W/Sp

A course designed to allow the student an opportunity to study the management essentials of both merchandising and industrial organization. Emphasis will be placed on the complex problems of marketing of policies, purchasing procedures, financial requirements, budgeting, human relations, physical facilities, and government regulations.

**2.121 Applied Economics**  
3 class hrs/wk 3 cr. W

The underlying principles by which business and industry are influenced. Production, income, management prices, values, markets, money wastes, interests and profits are examples of subjects studied with illustration of how they affect current business situations.

**2.130 Business Quantitative Methods**  
3 class hrs/wk 3 cr. W

A course designed to introduce students to number and symbol vocabulary, manipulating symbols and numbers, algebraic equation and their solution, equalities and inequalities, break-even analysis, inventory and production models, linear programming, queuing theory and network models. Prerequisite: Elements of Algebra skills.

**2.415 Human Relations In Business**  
3 class hrs/wk 3 cr. F/W/Sp

Course to assist the supervisor in understanding the people with whom he works, with emphasis on the psychological aspects, perceptions, learning processes, emotions, attitudes and personalities.

**2.499 Business Honors**  
3 class hrs/wk 3 cr. F/W/Sp

Students will be exposed to advanced concepts of business structures and the individuals who may be expected to be found running them. They will experience additional human relations situations as preparatory to the jobs they will soon have. Individual and team studies of local business as well as larger national corporations will be made in order to prepare the student for rapid success in their chosen field. Prerequisite: Recommendation by the applicable Department Chairman. Five each from Business Skills and Business Management Departments and two each from Data Processing will be allowed. Department Chairmen will make their decision based on student performance, experience and attitude. Instructor input will be solicited.

**2.516 Intro. to Business Statistics**  
3 class hrs/wk 3 cr. W

A statistical analysis of business and economic data used in controlling an operation and in making sound business decisions. Special attention is given to assembling statistical data, statistical description, probability, sampling, times series analysis, index numbers, and tests of significance. Prerequisite: One year of high school algebra, Mth 1.110 or consent of instructor.

**2.518 Business Law**  
3 class hrs/wk 3 cr. W/Sp

The legal environment of business and principles of contract law. An introduction to the study of law and business, legal reasoning and the evolutionary process of law. Emphasis is placed on the study of business agreements—their information, operation, performance and discharge.

**2.645 Business Conference Techniques**  
3 class hrs/wk 3 cr. F/W/Sp

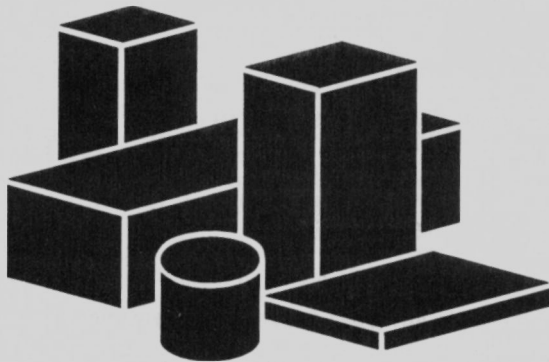
The study of motivation and audience adaptation particularly as they apply to the business conference. Emphasis will be on effectively communicating business ideas, statistics and research to business superiors and colleagues.

**2.751 Professional Development**  
 3 class hrs/wk 3 cr. F/W/Sp

A course for people who want to be employed. The course includes goal setting, self-motivations, self-evaluation, personal care, social and business manners, discrimination in business, resume preparation, job search techniques, and interview techniques.

**2.710-2 On-The-Job Training (Management)**  
 2-24 hrs/wk 1 - 12 cr. F/W/Sp

A program of supervised employment intended to provide practical experience related to the student's major field of interest. This course is primarily for Sophomores who have completed Freshman requirements. Attendance at seminar and class projects are also required. Prerequisite: consent of instructor before registration.



# marketing

The Marketing program is designed to prepare students for careers related to sales to the public. Careers are found in retailing, wholesaling, specialty selling and buying, advertising, sales information research, and purchasing.

The following outline indicates the general course requirements for those seeking the Associate of Science degree in Marketing. Students wishing to take individual courses to qualify for specific employment opportunities may do so with the consent of the Chairman of the Business Management Department.

**Freshman Year**

Course No.	Course Title	F	W	Sp
2.500	Business Orientation & Career Awareness	1		
BA 101	Introduction to Business	4		
2.530	Practical Accounting I	3		
2.515	Business Math	3		
2.501	Typing I	3		
1.101	Communication Skills I		3	
2.119	Introduction to Management		3	
2.531	Practical Accounting II		3	
2.121	Applied Economics		3	
2.130	Business Quantitative Methods		3	
PE 180/190	Physical Education		1	
1.102	Communication Skills II			3
2.131	Marketing			3
2.532	Practical Accounting III			3
2.521	Office Machines			1
2.516	Business Statistics			3
PE 180/190	Physical Education			1
		14	16	14

**Sophomore Year**

Course No.	Course Title	F	W	Sp
2.110	Salesmanship	3		
2.645	Business Conference Techniques	3		
2.415	Human Relations in Business	3		
2.518	Business Law	3		
PE 180/190	Physical Education	1		
2.510	Introduction to Data Processing	4		
2.710-2	On-The-Job Training		4	
2.134	Retail Merchandising		3	
HE 250	Personal Health		3	
2.139	Market Research		3	
	Business Elective		3	
2.710-2	On-The-Job Training			4
2.308	Advertising			3
2.140	Promotional Strategy			3
2.222	Financial Management			3
	Business Elective			3
		17	16	16

**2.110 Principles of Salesmanship**  
 3 class hrs/wk 3 cr. W

An introductory course on the subject of business from the viewpoint of the sales-oriented firm. Included discussion of the characteristics of the customer, his buying motives and approach, presentation, demonstration and overcoming objections in closing the sale. Emphasis will also be placed on advertising, pre-selling techniques, as well as the various media, copy, illustration and layout.

**2.131 Elements of Marketing**  
 3 class hrs/wk 3 cr. W

A general survey of the nature, significance, and scope of marketing. Emphasis will be placed upon the channels of distribution; the marketing of consumer shopping, specialty and other goods; service marketing; middlemen, wholesaling, shipping, and warehousing; standardization, grading and pricing; government regulations of completion.

**2.134 Retail Merchandising**  
 3 class hrs/wk 3 cr. Sp

A general survey of the principles of efficient retail organization and management. Topics include location and layout, types of store organization, personnel management, credit and collection, store protection and other operating activities.

**2.135 Visual Merchandising**  
 3 class hrs/wk 4 cr. W/Sp  
 2 lab hrs/wk

The application of the principles of line and display to interior and window display. Emphasis is placed on practical problems of arrangement, improvisation, color, lighting, signing, safety, and seasonal displays. Students are given practice in creating displays in campus display areas and in various stores in the community.

**2.138 Purchasing**  
**3 class hrs/wk 3 cr. On Demand**

This course is designed with a special application of fundamental principles of economics and management. Principles and methods of purchasing are covered with a broad application to the business environment. The use of quantitative techniques as applied to purchasing will be presented when applicable to certain buying decisions. Prerequisite: Business Statistics, 2.516.

**2.139 Marketing Research**  
**3 class hrs/wk 3 cr. W**

This course introduces the student to marketing research. This course is designed to examine why business uses marketing research, how business uses research, and its limitations. Prerequisite: Business Statistics, 2.516.

**2.140 Promotional Strategy**  
**3 class hrs/wk 3 cr. Sp**

This course is designed around case problems as related to marketing promotion. The course builds on a rigorous base of consumer psychology and the proceeds to treat advertising, reseller stimulation, and other communication tools as a part of the overall promotion mix. Prerequisite: Marketing Research, 2.139.

**2.308 Principles of Advertising**  
**3 class hrs/wk 3 cr. Sp**

An introductory course explaining the role of advertising in the distributive process. Emphasis on various media; copy, illustration and layout; retail advertising and promotion; advertising budget; and an advertising program.



# supervisory training

This program is designed as a series of courses of supervisory methods and techniques. The courses are available to any individual who is currently in a supervisory position or is preparing for such a position.

There are four options available to the student  
 1) an 18 credit Certificate of Completion in Supervision,  
 2) an 18 credit Certificate of Completion in

Industrial Safety, 3) a 45 credit Certificate of Completion in Advanced Supervisor Development, and 4) an Associate of Science Degree in Supervision (90 credits). Students are encouraged to first complete the 18 credit program, then the 45 credit program and finally the Associate of Science Degree.

The following outlines indicate the general course requirements for those seeking these Certificates and/or Degrees. Students wishing to take individual courses to qualify for special employment may do so with the consent of the Business Management Department.

The programs are designed primarily for evening students and the supervisory training courses are offered only during the evening.

**Certificate in Supervision (18 quarter cr.)**

Course No.	Course Title	Credits
BA 101	Introduction to Business	4
9.500	Elements of Supervision	3
9.502	Psychology for Supervisors	3
9.506	Human Relations	3
	Business Electives, On-The-Job Training, or credit for approved prior work experience	6
		<hr/> 19

**Certificate in Industrial Safety (18 credits)**

Course No.	Course Title	Credits
9.555	Industrial Safety I	3
9.500	Elements of Supervision	3
9.556	Industrial Safety II	3
9.502	Psychology for Supervisors	3
9.557	Industrial Safety III	3
9.506	Human Relations	3
		<hr/> 18

**Certificate in Advanced Supervisor Development (45 credits)**

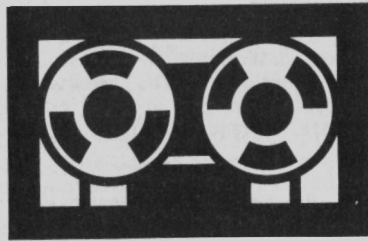
Course No.	Course Title	Credits
BA 101	Introduction to Business	4
9.500	Elements of Supervision	3
9.502	Psychology for Supervisors	3
9.506	Human Relations	3
1.101	Communication Skills I	3
9.508	Labor-Management Relations	3
SP 111	Beg. Oral Communication	3
9.555	Industrial Safety I	3
	Business Electives, On-The-Job Training, or credit for approved prior work experience	8
		<hr/> 45

**Associate of Science Degree (90 quarter hours)**

Course No.	Course Title	Credits
BA 101	Introduction to Business	4
9.500	Elements of Supervision	3
9.502	Psychology for Supervisors	3
9.506	Human Relations	3
1.101-2	Communication Skills I, II	6
9.508	Labor-Management Relations	3
9.555	Industrial Safety I	3
SP 111	Beg. Oral Communication	3
9.509	Applied Economics	3
2.518	Business Law	3
2.530	Practical Accounting I	3
9.514	Cost Control for Supervisors	3
PE 180/190	Physical Education	1
PE 180/190	Physical Education	1
PE 180/190	Physical Education	1
HE 250	Personal Health	3
	Business Electives	9
	Non-Business Electives	12
	On-The-Job Training, or credit for approved prior work experience	24
		<hr/> 91



- 9.500 Elements of Supervision**  
3 class hrs/wk 3 cr. F  
A basic introductory course covering in general terms the total responsibilities of a supervisor in industry, such as organization, duties and responsibilities, human relations, grievance, training, rating, promotion, quality-quantity control, and management-employee relations.
- 9.502 Psychology for Supervisors**  
3 class hrs/wk 3 cr. Sp  
Course to assist the supervisor in understanding the people with whom he works, with emphasis on the psychological aspects, perceptions, learning processes, emotions, attitudes and personalities.
- 9.503 Oral Communication for Supervisors**  
3 class hrs/wk 3 cr. F  
How we communicate. Effective speaking and listening. Kinds of supervisory communications. Saying what we mean, which covers oral versus written communications. Understanding what is communicated as related to intent and effect. Conference leading practice for supervisors.
- 9.504 Employee Training**  
3 class hrs/wk 3 cr. Sp  
The supervisors' responsibility for developing employees through training, orientation and induction. Vestibule and on-the-job techniques. Job instruction principles. Apprenticeship training, technical training. Supervisory training and management development. Use of outside agencies. Advisory committees.
- 9.506 Human Relations (Developing Supervisory Leadership)**  
3 class hrs/wk 3 cr. Sp  
To show the practical application of basic psychology in building better employer-employee relationships by studying human relations techniques. Prerequisite: Basic Psychology for Supervisors.
- 9.508 Labor-Management Relations**  
3 class hrs/wk 3 cr. On Demand  
The history and development of the Labor Movement. Development of the National Labor Relations Act, the Taft-Hartely Act. The supervisor's responsibility for good labor relations. The union contract and grievance procedure.
- 9.509 Applied Economics**  
3 class hrs/wk 3 cr. On Demand  
Significant economic facts. Development of a critical attitude toward industrial economics. Institutions and practices that determine our social environment. Management supervisory-employee relationships to economics and local industry.
- 9.512 Methods Improvement for Supervisors (Work Simplifications)**  
3 class hrs/wk 3 cr. Sp  
The supervisor's responsibility for job methods improvement. The basic principles of work simplification. Administration and the problems involved. Motion study fundamentals for supervisors.
- 9.514 Cost Control for Supervisors**  
3 class hrs/wk 3 cr. F  
How costs are determined in industry. Cost control and its functions. The supervisor's responsibility for costs. Factors in cost control: costs, materials, waste, salvage, quality control, control of time.
- 9.516 Personnel Management**  
3 class hrs/wk 3 cr. On Demand  
Personnel techniques for which the supervisor is partially responsible and for which he should have some training in carrying out his responsibility. Selection, placement, testing, orientation, training, counseling, merit rating, promotion, transfer and training for responsibility.
- 9.518 Organization and Management**  
3 class hrs/wk 3 cr. W  
The supervisor's responsibility for planning, organizing, directing, controlling, and coordinating. Acquaints the supervisor with these basic functions of an organization and his responsibility in carrying them out in accordance with the organization's plan. Establishing lines of authority, function of departments or units, duties and responsibilities, policies and procedures, rules and regulations.
- 9.520 Wage Administration**  
3 class hrs/wk 3 cr. On Demand  
The history of wages, inequalities in rates of pay. Management and union movement toward a "fair wage" plan. The supervisory and job descriptions, job specification, job evaluations and job classification. The wage laid down by the Department of Labor. The Federal Employment Service. Wage administration and the line organization.
- 9.524 Management Controls and The Supervisor**  
3 class hrs/wk 3 cr. On Demand  
Basic principles of controls. Delegation of responsibility through the use of quality control, quantity control, production control, control over materials, control over personnel, organization.
- 9.555 Industrial Safety I**  
3 class hrs/wk 3 cr. On Demand  
This course stresses the supervisor's role in safe employment of people. Included are basic principles, safety training, employee safety participation, enforcement, human factors in safety, and protective equipment.
- 9.556 Industrial Safety II**  
3 class hrs/wk 3 cr. On Demand  
This course covers specific areas of industrial safety including plant inspection, accident investigation, maintenance, material handling, hand tools, electrical hazards, machine guarding, falls, fire prevention, and personal protective equipment.
- 9.557 Industrial Safety III**  
3 class hrs/wk 3 cr. On Demand  
This course covers "The Oregon Safe Employment Act" for the development, administration, and enforcement of safety and health laws and standards. The Occupational Safety and Health Act of 1970 is also reviewed. Also included are employer and employee responsibilities, inspections, complaints, citations and penalties.



# data processing

The Business Data Processing curriculum is designed to develop graduates who will be able to successfully enter the job market as application programmers. Working under a true third-generation environment the student will learn to write programs in several different languages and to apply these skills to the solving of actual business problems both within the college and the community. Students finishing the first year of the curriculum should be able to enter the job market as programmer-trainees with at least two languages at their disposal. Students completing the full two-year curriculum will be granted an Associate of Science Degree and will be in a strong position to enter a rapidly-growing job market.

Freshman Year				
Course No.	Course Title	F	W	Sp
2.571	Data Processing I	10		
2.572	Data Processing II		10	
2.573	Data Processing III			10
1.101-2	Communication Skills I, II			
or				
Wr 121-2	English Composition	3	3	
2.518	Business Law			3
2.530-2	Practical Accounting I, II, III			
or				
BA 211-3	Principles of Accounting I, II, III	3	3	3
PE 180/190	Physical Education	1	1	1
		17	17	17

Sophomore Year				
Course No.	Course Title	F	W	Sp
2.581	Data Processing IV	10		
2.582	Data Processing V		10	
2.583	Data Processing VI			10
2.585	Management Decision Simulation			3
2.516	Intro. to Business Statistics		3	
HE 250	Health		3	
2.415	Human Relations in Business	3		
	General Education Electives	3		
		16	16	13

## 2.508 Introduction to Key punch Operation 5 class hrs/wk 2 cr. F/W/Sp

Individualized instruction on operation of the IBM 029 key punch machine. It includes familiarization with IBM Card and interpretation of punched hole instruction on the names and functions of all operating parts, keys, and switches; manual duplication procedures and error corrections procedures; operation of the program control unit and coding of the program card.

## 2.509 Introduction to Computers 5 class hrs/wk 3 cr. F

This course is designed for students majoring in data processing. Emphasis is placed on "how" computers work and their place within the modern business society. The history of data processing, punched card equipment, job flow, computer architecture, and memory design, systems design, and third-generation operating systems concepts are covered. Consideration is given throughout the course to the application of data processing systems and the correlation of systems design to the application.

## 2.510 Introduction to Data Processing 6 class hrs/wk 4 cr. F/W/Sp

The prime objective of this course is to introduce the layman to the world of data processing and its influence on his everyday life. Topics include: the history of data processing, the punched card, card-oriented processing systems, analysis of computer-generated reports, third generation processing systems, and number systems. A symbolic, machine oriented language will be used to explain data flow, and several problems will be solved utilizing a procedure-oriented language.

## 2.556 Advanced Key punch Operation 7½ class hrs/wk 3 cr. F/W/Sp

Practice on building of key punch speed and accuracy to employment level. 8000 strokes with 90% = A; 7000 strokes with 80% accuracy = B; and 6000 strokes with 70% accuracy = C. Also extensive practice in producing typical jobs a keypuncher will encounter in the working world. Course also includes an acquaintanceship with the 129 Card Recorder.

## 2.558 Introduction to Programming 6 class hrs/wk 4 cr. F/Sp

This course provides the student with the opportunity to write computer programs using a procedure or problem oriented language. It serves two main purposes: 1) introduces the student to the tasks that a computer programmer must perform; and 2) provides the student with the means to program a modern computing system. The computer language currently in use is FORTRAN. The topics covered are: input/output, arithmetic statements, transfer and control statements, arrays, and subprograms.

## 2.571 Data Processing I 20 class hrs/wk 10 cr. F

This block provides the student with the opportunity to write computer programs using a problem-oriented language. It serves two main purposes: 1) introduces the student to the tasks that a computer programmer must perform; and 2) provides the student with the means to program a modern computing system. The computer languages currently in use are FORTRAN and BASIC. Additional topics include: data processing mathematics, program documentation with emphasis on flowcharting, an introduction to "how" computer work, and an introduction to an assembler language.

**2.572 Data Processing II**  
 20 class hrs/wk 10 cr. W

The computer programming effort continues in this block with additional work in a problem-oriented language and an assembler language including topics in data processing mathematics. Punched card equipment, job flow, computer architecture and memory design, systems design, and third-generation operating systems concepts are covered.

**2.573 Data Processing III**  
 20 class hrs/wk 10 cr. Sp

The study of an assembler language continues along with a look at the roll of the data processing function within a modern business environment and how it can be used to further the goals of the firm. The effect of the computer is studied from the systems approach using a case study.

**2.581 Data Processing IV**  
 20 class hrs/wk 10 cr. F

This block introduces the student to a business-oriented computer language—COBOL. Topics include I/O, decision and PERFORM statements, and up through three level tables. The responsibilities, job assignments, and specific tasks of a computer programmer are examined with the intent of preparing the student for his/her future career. Emphasis is placed on methods of efficiently utilizing compilers while accomplishing a specific programming task.

**2.582 Data Processing V**  
 20 class hrs/wk 10 cr. W

Advanced COBOL topics are covered with emphasis on tape and disk storage I/O techniques. Several application programming systems are studied including a scientific and a commercial subroutine package. An involved programming project will be assigned to each student. In addition, several third-generation operating systems are examined including the IBM 1130 Monitor System, and IBM's DOS/TOS and OS/360.

**2.583 Data Processing VI**  
 20 class hrs/wk 10 cr. Sp

A block of instruction and practice of skills and techniques acquired in previous courses within the Business Data Processing curriculum. Individual selected projects from business industrial organizations within the community are assigned by the instructor. The student is required to plan the project and to carry out all phases of system design, machine programming, design of forms, testing of representative data, and writing of operational procedures. Class time will be utilized to guide the students toward completion of the project and to look to actual data processing solutions to other types of business problems.

**2.589 Data Processing Readings & Conferences**  
 1 - 20 class hrs/wk 1 - 10 cr. F/W/Sp

Topics covered in this course are at the discretion of the instructor and the student. Subject areas of particular interest to the student or areas where the student needs some additional work can be covered under this course. The number of credits can vary from 1 to 10.



## food services

The Food Services curriculum is designed to provide basic knowledge and develop the understanding and skills to work with materials, equipment, and processes in the field of food preparation today. The student will gain experience in preparation of baked goods, entrees, salads, soups, sauces, and vegetables. Advanced students will assume responsible kitchen positions such as student chef, sous chef, and second cook.

Requirements for the freshman year will be the same for all students enrolled in the Associate of Science degree program. The sophomore year offers a choice among programs in advanced professional cooking, chef training, and restaurant management.

One and two-year certificates in cooking will be awarded students who satisfactorily complete forty-five and ninety credits respectively, yet do not intend to pursue the degree program.

Students who apply themselves will be in good position to enter industry as a cook's helper or trainee after one year of study. Those completing the two-year course will go to industry with a chance for rapid advancement.

The Food Services Department also intends to offer a one-year program in Professional Food Service for students interested in a waiter-waitress training program. Course offerings will depend upon available facilities. Interested students should check the class schedule or see the Food Services Department Chairman.

Freshman Year				
Course No.	Course Title	F	W	Sp
8.303	Intro. to Professional Cooking	10		
8.325	*M & P: Kitchen Stations, Tools, Equipment, Methods and Safety	2		
8.300	Food Microbiology	2		
3.311	A Cook's French: French Culinary Vocabulary	2		
PE 180/190	Physical Education	1		
8.304	Intermediate Professional Cooking I		10	
8.326	*M & P: Gardemanger		2	
1.101	Communication Skills I		3	
HE 252	First Aid		3	
PE 180/190	Physical Education		1	
8.305	Intermediate Professional Cooking II			10
8.327	*M & P: Vegetables and Entrees			2
2.751	Professional Development			3
PE 180/190	Physical Education			1
		17	19	16

\*Materials and Processes

Sophomore Year Advanced Professional Cooking				
Course No.	Course Title	F	W	Sp
8.306	Advanced Professional Cooking I	10		
8.328	*M & P: Stocks, Soups, and Sauces	2		
4.211	Nutrition I	3		
2.415	Human Relations in Business	3		
8.307	Advanced Professional Cooking II		10	
8.329	*M & P: The Butcher Station		2	
8.309	Food Purchasing and Storage		2	
2.645	Business Conference Techniques		3	
8.308	Advanced Professional Cooking III			10
8.330	*M & P: The Bakeshop			2
8.310	Menu and Food Preparation			2
8.320	Projects and Conferences for Food Service Skills			1-5
		18	17	15-20

Sophomore Year Chef Training				
Course No.	Course Title	F	W	Sp
8.315	Intro. to Commercial Kitchen Production and Management	10		
8.328	*M & P: Stocks, Soups, and Sauces	2		
4.211	Nutrition I	3		
2.415	Human Relations in Business	3		
8.316	Intermediate Commercial Kitchen Production and Management		10	
8.329	*M & P: The Butcher Station		2	
8.309	Food Purchasing and Storage		2	
2.645	Business Conference Techniques		3	
8.317	Advanced Commercial Kitchen Production and Management			10
8.330	*M & P: The Bakeshop			2
8.310	Menu and Food Preparation			2
BA 217	Basic Accounting and Financial Analysis			3
		18	17	17

Sophomore Year Restaurant Management				
Course No.	Course Title	F	W	Sp
8.306	Advanced Professional Cooking I	10		
8.328	*M & P: Stocks, Soups, and Sauces	2		
2.530	Practical Accounting I	3		
2.131	Elements of Marketing	3		
8.315	Intro. to Commercial Kitchen Production and Management		10	
8.309	Food Purchasing and Storage		2	
2.645	Business Conference Techniques		3	
2.531	Practical Accounting II		3	
8.295	Restaurant Management (20 hrs/wk O.J.T. included)			9
2.415	Human Relations in Business			3
2.518	Business Law			3
2.222	Financial Management			3
		18	18	18

\*Materials and Processes

**8.300 Food Microbiology I**  
4 class hrs/wk 3 cr. **F**

Types of food poisoning; transmission of food-borne diseases; sanitation measures for discouraging optimum condition for growth of microorganisms; storage conditions for certain foods as related to metal toxicity.

**8.303 Introduction to Professional Cooking**  
20 class hrs/wk 10 cr. **F**

A laboratory and work-experience class in which the beginning student will spend two weeks as an assistant on each of the basic kitchen stations; entree, salad, vegetable, soup and sauce, and bakery. The instructor will demonstrate safe use of hand tools and machines, sanitation and hygiene procedures, basic cooking processes, and proper station set-up and clean-up. Students are expected to schedule twenty hours per week for this class with the instructor.

**8.304 Intermediate Professional Cooking I**  
20 class hrs/wk 10 cr. **W**

A second laboratory course in food preparation, with emphasis on mastery of the basic salads and dressings. Students will continue to rotate stations on a two-week basis but will begin to take on more responsibility in producing a salable product for the cafeteria customers.

**8.305 Intermediate Professional Cooking II**  
20 class hrs/wk 10 cr. **Sp**

This laboratory section focuses on vegetable and entree preparation. Students will cook vegetables, starches and main dishes for service in the college cafeteria. Student cooks will prepare entrees according to the various styles of service: restaurant, hotel and institutional. The student will begin in this quarter to assume responsibility for directing a station as he rotates duties every two weeks.

**8.306 Advanced Professional Cooking I**  
20 class hrs/wk 10 cr. **F**

An advanced course in the kitchen under service conditions. For the first time students will take charge of a station and be responsible to the student chef and instructor for its efficient operation. Students may begin to specialize on a station and rotate at monthly or quarterly intervals.

**8.307 Advanced Professional Cooking II**  
20 class hrs/wk 10 cr. **W**

The advanced cooking student will begin to make a menu for his station and coordinate the activities of his station with that of the chef and the rest of the kitchen. He will order and receive merchandise for his station.

**8.308 Advanced Professional Cooking III**  
20 class hrs/wk 10 cr. **Sp**

In this final quarter of lab experience the student will be placed increasingly on his own to develop menus and recipes for service. The student may continue to specialize for entry level or may wish to broaden his knowledge at the instructors discretion.

**8.309 Food Purchasing and Storage**  
2 class hrs/wk 2 cr. **W**

The overall responsibilities of purchasing, storeroom control, inventories, and standards of quality.

**8.310 Menu and Food Preparation**  
2 class hrs/wk 2 cr. Sp

This course will incorporate complete menu and meal design and preparation. Menu balance and preparation of any and all food items previously practiced in the food service course will be employed. Special projects will be assigned to evaluate student food preparation and menu planning skills.

**8.311 A Cook's French: French Culinary Vocabulary**  
3 class hrs/wk 3 cr. F

In this course students will become familiar with French cooking terms, including those used in the preparation and serving of French cuisine. They will learn what constitutes famous French dishes and how to pronounce them; they will learn the names of basic French raw foods. Names of those who prepare and serve food will also be taught.

**8.312 Restaurant A La Carte**  
1 lec hr/wk 4 lab hrs/wk 3 cr. F/W/Sp

A course in basic food preparation with emphasis on foods cooked to order. The student will have an opportunity to work the broiler, fry, griddle, and saute stations. Student cooks will prepare a variety of short order dishes, from grilled sandwiches and omeletes to broiled steaks and other a la carte lunch and dinner entrees. High priority will be placed on efficient station set-up and clean-up. Prerequisite: Intro. to Professional Cooking, 8.303.

**8.315 Intro. to Commercial Kitchen and Production and Management**  
20 Class hrs/wk 10 cr. F/W

Students pursuing a course in chef training will begin to take on the more responsible kitchen stations: entrees, sauces, second cooks, sous chef, and student chef. Students will be entirely responsible for the efficient running of the kitchen. Chef trainees will familiarize themselves with job descriptions for every station of the kitchen in order to delegate authority properly.

**8.316 Intermediate Commercial Kitchen Production and Management**  
20 class hrs/wk 10 cr. W

Chef-trainees will work as chef or sous chef to coordinate kitchen activities from planning and ordering, to receiving, storing, cooking, and serving.

**8.317 Advanced Commercial Kitchen Production and Management**  
20 class hrs/wk 10 cr. Sp

Students in their last quarter will assume title, responsibility, and authority of student chef. Under the instructors guidance the student will prepare a two-week menu, and order sheet. He will oversee the ordering, receiving, preparation, and service of food for the college cafeteria for a two-week period.

**8.320 Projects and Conferences for Food Service Skills**  
3 - 30 hrs/wk 1 - 10 cr. F/W/Sp

Subject areas of particular need or interest to the student can be given additional attention in this course. Open to continuing Food Service students with instructor's permission. Hours and credits by arrangement.

**8.325 Materials and Processes: Stations, Tools, Equipment, Methods and Safety**  
2 hrs/wk 2 cr. F

A lecture-demonstration class which presents theory and provides practice in the proper care, cleaning, and use of tools and equipment. Lectures and discussions will center on the additional topics of culinary terms, safety, sanitation, history and development, job descriptions and opportunities in industry.

**8.326 Materials and Processes: The Gardemanger**  
2 hrs/wk 2 cr. W

This course will provide a background through lectures, demonstrations, and discussions of proper techniques for the preparation of appetizers, hors-d'oeuvres, salads and dressings, sandwiches, coffee and eggs. Basics of the buffet, chaud-froid pieces, ice carving, and cold soups are additional topics for study. This class complements and supplements Professional Cooking I.

**8.327 Materials and Processes: Vegetables and Entrees**  
2 class hrs/wk 2 cr. Sp

This course provides basic knowledge and techniques through lecture-demonstrations and discussions on the preparation of green, red, yellow, and white vegetables. The student will familiarize himself with the various market forms of vegetables from raw to frozen-pre-cooked. Rice, pastas, legumes and dried vegetables are among the topics studied. Students will also receive instructions and procedures for preparing entrees from beef, veal, lamb, pork, poultry, variety meats, pastas, vegetables, and dairy products.

**8.328 Materials and Processes: Stocks, Soups and Sauces**  
2 class hrs/wk 2 cr. F

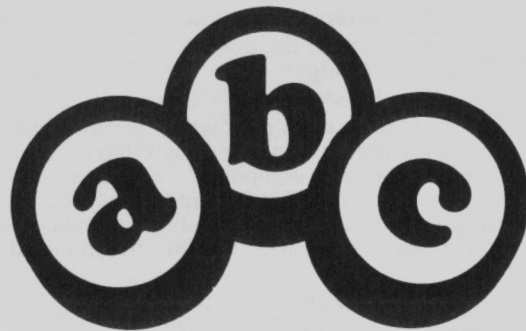
Students will receive theory and training in preparation of basic and specialty stocks, classic and innovative soups, and the leading mother and secondary warm sauces.

**8.329 Materials and Processes: The Butcher Station**  
2 class hrs/wk 2 cr. W

The student will familiarize himself with the cutting of beef hindquarter, arm chuck, and portion steaks. Student butchers will break a leg of veal and a lamb carcass. The instructor will demonstrate how to split a chicken, skin and filet a fish, peel prawns and shuck clams and oysters for service. Safety will be stressed along with proper sanitation. Students will familiarize themselves with grades and cuts of beef.

**8.330 Materials and Processes: The Bakeshop**  
2 class hrs/wk 2 cr. Sp

A lecture-discussion class which will provide knowledge of leavening action, the uses of fats and sugars, pastry, sweet dough and cake baking. Readings and lectures will be divided equally on bread and dessert products. Student bakers will learn basic techniques with the pastry bag.



# secretarial sciences

## Secretarial Services

This one-year curriculum is designed to provide students with the training necessary for general office secretarial positions. These courses will prepare the students for civil service examinations. Students may complete the requirements listed for Option A or Option B.

After satisfactory completion of this program, the student will be awarded a Certificate of Completion.

### Option A

Course No.	Course Title	F	W	Sp
1.101-2	Communication Skills I, II	3	3	
2.501-3	Typing I, II, III	3	3	3
2.541-3	Stenography I, II, III	3	3	3
2.515	Business Math	3		
2.500	Business Orientation	1		
2.652	Filing	1		
2.551	Business Correspondence			3
2.521	Office Machines		3	
2.530	Practical Accounting I		3	
2.526	Duplicating Equipment		1	
2.527	Transcribing Machines I			3
2.610	Clerical Office Procedures			3
		14	16	15

### Option B

Course No.	Course Title	F	W	Sp
1.101-2	Communication Skills I, II	3	3	
2.501-3	Typing I, II, III	3	3	3
2.537	Personal Shorthand		3	
2.538	Applied Personal Shorthand			3
2.515	Business Math	3		
2.500	Business Orientation	1		
2.652	Filing	1		
2.521	Office Machines		3	
2.551	Business Correspondence			3
2.530	Practical Accounting I	3		
2.526	Duplicating Equipment		1	
2.527	Transcribing Machines I			3
2.610	Clerical Office Procedures			3
	Elective (Practical Accounting II is recommended.)		3	
		14	16	15

## Administrative Secretary

This two-year curriculum is designed to prepare students for responsible secretarial positions. Serious students with ambition and aptitude will find themselves well qualified for preferred positions in the ever-expanding secretarial field, including those positions found in the field of civil service. Students

may complete the requirements listed for Option A or Option B.

Successful completion of this program will result in the awarding of an Associate of Science Degree.

### Freshman Year

#### Option A

Course No.	Course Title	F	W	Sp
1.101-2	Communication Skills I, II	3	3	
2.501-3	Typing I, II, III	3	3	3
2.541-3	Stenography I, II, III	3	3	3
2.515	Business Math	3		
2.500	Business Orientation	1		
2.652	Filing	1		
2.551	Business Correspondence			3
2.521	Office Machines		3	
2.530	Practical Accounting I		3	
2.526	Duplicating Equipment		1	
2.527	Transcribing Machines I			3
2.610	Clerical Office Procedures			3
		14	16	15

#### Option B

Course No.	Course Title	F	W	Sp
1.101-2	Communication Skills I, II	3	3	
2.501-3	Typing I, II, III	3	3	3
2.537	Personal Shorthand		3	
2.538	Applied Personal Shorthand			3
2.515	Business Math	3		
2.500	Business Orientation	1		
2.652	Filing	1		
2.521	Office Machines		3	
2.551	Business Correspondence			3
2.530	Practical Accounting I	3		
2.526	Duplicating Equipment		1	
2.527	Transcribing Machines I			3
2.610	Clerical Office Procedures			3
	Elective (Practical Accounting II is recommended.)		3	
		14	16	15

### Sophomore Year

#### Option A

Course No.	Course Title	F	W	Sp
2.613-4	On-The-Job Training		4	4
2.545-7	Applied Stenography I, II, III	3	3	3
2.415	Human Relations in Business	3		
2.510	Introduction to Data Processing			4
HE 250	Health			3
PE 180/190	Physical Education	1	1	1
2.653	Word Processing	3		
2.528	Transcribing Machines II	3		
2.647	Administrative Management	3		
2.651	Business Report Writing		3	
2.645	Business Conference Techniques		3	
		16	14	15

#### Option B

Course No.	Course Title	F	W	Sp
2.613-4	On-The-Job Training		4	4
2.415	Human Relations in Business	3		
2.510	Introduction to Data Processing			4
HE 250	Health			3
PE 180/190	Physical Education	1	1	1
2.653	Word Processing	3	3	
2.528	Transcribing Machines II	3		
2.647	Administrative Management	3		
2.651	Business Report Writing		3	
2.645	Business Conference Techniques		3	
2.518	Business Law			3
	Electives	4	2	
		14	16	15

- SUGGESTED ELECTIVES**  
 Advanced Office Machines  
 Typing IV  
 Typing V  
 Practical Accounting II  
 Practical Accounting III  
 Business Law  
 Key Punch  
 Personal Finance  
 Leadership—F.S.A.  
 Executive Typewriter  
 Professional Development

**Educational Secretary**

This two-year degree will prepare students for employment in educational organizations. The coursework will also offer currently-employed educational secretaries an opportunity to update their skills.

Freshman Year				
Course No.	Course Title	F	W	Sp
2.501-3	Typing I, II, III	3	3	3
2.541-3	Stenography I, II, III	3	3	3
	OR	or	or	or
2.530-2	Practical Accounting I, II, III	3	3	3
1.101-2	Communication Skills I, II	3	3	
HE 250	Personal Health	3		
2.551	Business Correspondence		3	
2.415	Human Relations in Business			3
2.610	Clerical Office Procedures			3
2.521	Office Machines			3
PE 180/190	Physical Education		1	1
2.650	Records Management for Educational Secretaries			1
	Electives	3	3	
		15	16	16

Sophomore Year				
Course No.	Course Title	F	W	Sp
2.509	Introduction to Data Processing	4		
PSY 201-203	General Psychology	3	3	3
9.764	Oregon School Law	3		
HE 252	First Aid	3		
SP 111	Beg. Oral Comm.		3	
2.651	Business Report Writing		3	
2.220	Personal Finance			3
9.500	Elements of Supervision			3
PE 180/190	Physical Education		1	
	Electives*	2	5	6
		15	15	15

\*A suggested elective, especially for students with no previous work experience, would be On-The-Job Training.

**Legal Secretary**

This two-year degree should prepare students to enter the profession as a beginning legal secretary in a general practitioner's office. Through this degree, the student will have developed the ability to type and take shorthand as well as having a background in legal terminology and procedures.

Freshman Year				
Course No.	Course Title	F	W	Sp
1.101-2	Communication Skills I, II	3	3	
2.501-2	Typing I, II	3	3	
2.541-3	Stenography I, II, III	3	3	3
2.515	Business Math	3		
2.500	Business Orientation	1		
2.518	Business Law	3		
2.660	Legal Terminology		3	
2.521	Office Machines		3	
2.652	Filing		1	
2.551	Business Correspondence			3
2.530	Practical Accounting I			3
2.661	Legal Typing			3
2.610	Clerical Office Procedures			3
		16	16	15

Sophomore Year				
Course No.	Course Title	F	W	Sp
2.545-7	Applied Stenography I, II, III	3	3	3
2.527	Transcribing Machines I	3		
2.415	Human Relations in Business	3		
2.663	Legal Procedures and Ethics	3		
PE 180/190	Physical Education	1	1	1
2.662	Legal Transcription		3	
2.645	Business Conference Techniques		3	
2.613-4	On-The-Job Training		4	4
HE 250	Health			3
2.653	Word Processing			3
	Electives	1	1	
		14	15	14

**Medical Office Assistant**

The medical office assistant program trains students to do some medical tasks as well as performing administrative and/or clerical duties in support of the medical receptionist. The office assistant is trained to assist with equipment sterilization, x-ray and patient preparation tasks which do not have to be done by a licensed nurse. An Associate of Science degree is given to students completing the two-year program.

Freshman Year				
Course No.	Course Title	F	W	Sp
1.101-2	Communication Skills I, II	3		3
2.501-2	Typing I, II	3	3	
2.500	Business Orientation	1		
2.652	Filing	1		
5.630	Anatomical Terminology	3		
2.521	Office Machines*	1		
2.526	Duplicating Equipment		1	
2.415	Human Relations in Business		3	
5.625-6	Clinical Office Procedures I, II		4	4
2.506	Medical Typing			3
HE 252	First Aid			3
PE 180/190	Physical Education	1		
5.631	Pharmaceutical Terminology			2
	Electives		4	
		13	15	15

Sophomore Year				
Course No.	Course Title	F	W	Sp
2.670	Medical Procedures & Ethics	3		
5.627	Clinical Office Proc. III	4		
2.530	Practical Accounting I	3		
2.645	Business Conference Technique	3		
2.551	Business Correspondence		3	
2.613-4	On-The-Job Training		4	4
PE 180/190	Physical Education		1	1
2.510	Intro. to Data Processing			4
	Electives	3	7	6
		16	15	15

SUGGESTED ELECTIVES  
 Business Math  
 Transcribing Machines I  
 Medical Transcription I  
 Medical Transcription II

\* 10 key adding machine and electronic calculator.

**Medical Receptionist**

The two-year medical receptionist program trains students to work in physicians' offices, clinics, hospitals and medical departments of government agencies or large companies. The receptionist performs the majority of secretarial duties including initial contact with patients. An Associate of Science degree is awarded upon completion of the program.

Freshman Year				
Course No.	Course Title	F	W	Sp
2.501-2	Typing I, II	3	3	
1.101	Communication Skills I		3	
2.500	Business Orientation	1		
2.515	Business Math	3		
2.652	Filing	1		
PE 180/190	Physical Education	1		
2.521	Office Machines		3	
2.526	Duplicating Equipment		1	
2.537	Personal Shorthand		3	
2.538	Applied Personal Shorthand			3
5.633-4	Medical Terminology I, II		3	3
2.506	Medical Typing			3
2.527	Transcribing Machines I			3
2.610	Clerical Office Procedures			3
5.630	Anatomical Terminology	3		
	Electives*	3		
		15	16	15

\*The student desiring Gregg shorthand should start the sequence his first term and take it in place of Personal Shorthand and Applied Personal Shorthand.

Sophomore Year				
Course No.	Course Title	F	W	Sp
2.524-5	Medical Transcription I, II	3	3	
2.670	Medical Procedures & Ethics	3		
5.625	Clinical Office Procedures I	4		
2.530	Practical Accounting I	3		
2.415	Human Relations in Business	3		
2.645	Business Conference Techniques		3	
2.551	Business Correspondence			3
HE 252	First Aid		3	
2.613-4	On-The-Job Training		4	4
2.510	Intro. to Data Processing		4	4
5.631	Pharmaceutical Terminology			2
PE 180/190	Physical Education			1
1.102	Communication Skills II		3	
		16	16	14

**Medical Transcriptionist**

Medical transcriptionists are trained in secretarial and medical terminology skills necessary to transcribe patient health reports and records. Most full-time employment opportunities exist in hospitals or clinics with part-time jobs available in doctors' offices. A Certificate of Completion is awarded upon graduation from the program.

Course No.	Course Title	F	W	Sp
2.501-2	Typing I, II	3	3	
2.506	Medical Typing			3
2.500	Business Orientation	1		
5.633-4	Medical Terminology I, II	3	3	
1.101-2	Communication Skills I, II	3	3	
2.524-5	Medical Transcription I, II		3	3
2.527	Transcribing Machines I		3	
2.415	Human Relations in Business			3
2.551	Business Correspondence			3
5.630	Anatomical Terminology	3		
5.631	Pharmaceutical Terminology			2
	Electives	2		1
		15	15	15

**SS111 Stenography I**  
**5 class hrs/wk 3 cr. F/W/Sp**  
 Introduction to theory of Gregg shorthand, including the alphabet, brief forms, phrasing and abbreviating principles. Students will be given the opportunity to advance at their own rate.

**SS112 Stenography II**  
**5 class hrs/wk 3 cr. F/W/Sp**  
 Completion of shorthand theory and review of all principles. Development of ability to construct new

outlines rapidly from dictation and to lay a solid foundation for further development of dictation and transcription skill. Prerequisite: SS III or equivalent. Students will be given the opportunity to advance at their own rate.

**SS113 Stenography III**  
**5 class hrs/wk 3 cr. F/W/Sp**  
 Emphasis on further development of speed and accuracy in dictation and transcription. Intensive practice in refining shorthand skills and producing mailable letters. Prerequisite: SS II2 or equivalent. Students will be given the opportunity to advance at their own rate.

**SS 211 Applied Stenography**  
**6 class hrs/wk 3 cr. F/W/Sp**  
 A thorough and extensive review of Gregg Shorthand, advanced principles, phrases and short cuts, dictation covering vocabularies representative of various types of businesses. Basic skills of office work are stressed. Prerequisite: SS 113 or equivalent.

**SS 212 Applied Stenography**  
**6 class hrs/wk 3 cr. F/W/Sp**  
 A continuation of SS 211 with emphasis on speed, accuracy and secretarial standards. Included in this course will be medical and technical dictation and transcription. Prerequisite: SS 211 or equivalent.

**SS 213 Applied Stenography**  
**6 class hrs/wk 3 cr. F/W/Sp**  
 A continuation of SS 212 with emphasis on speed, accuracy and secretarial standards. Included in this course will be legal dictation and transcription. Prerequisite: SS 212 or equivalent.

**SS 121 Typewriting I**  
**5 class hrs/wk 3 cr.\* F/W/Sp**  
 A beginning course in typing for those with no previous instruction or those needing a review of basic techniques. It covers the basic techniques of the touch system, speed and accuracy, manuscript writing, tabulation, correspondence, and centering. Individualized instruction prevails throughout the entire typing sequence. Students will be given the opportunity to advance at their own rate.  
 \*A four-year school might accept only 2 credits.

**SS 122 Typewriting II**  
**5 class hrs/wk 3 cr.\* Sm/F/W/Sp**  
 Continued practice in the mastery of the keyboard with emphasis on speed, accuracy, and secretarial standards. Review and advanced work in manuscripts, tabulations, business forms, rules that govern word division, correspondence and similar typing techniques. Individualized instruction prevails throughout the entire typing sequence. Students will be given the opportunity to advance at their own rate. Prerequisite: SS 121 or equivalent.  
 \*A four-year school might accept only 2 credits.

**SS 123 Typewriting III**  
**5 class hrs/wk 3 cr.\* Sm/F/W/Sp**  
 Continued units on correspondence, tabulation, business forms, manuscripts, secretarial projects, speed and accuracy, and number proficiency. Individualized instruction prevails throughout the entire typing sequence. Students will be given the opportunity to advance at their own rate. Prerequisite: SS 122 or equivalent.  
 \*A four-year school might accept only 2 credits.



**SS 124 Typing Skill Building**  
5 class hrs/wk 3 cr.\* Sm/W/F/Sp  
Special emphasis on speed and accuracy. Use of a wide variety of special drills to work on numbers and remedial techniques. Prerequisite: SS 121 or equivalent. Permission of Business Division required for enrollment.  
\*A four-year school might accept only 2 credits.

**2.500 Business Orientation & Career Awareness**  
2 class hrs/wk 1 cr. F  
This course is designed to introduce to the student the various career opportunities in the business field. Included in the course will be films, speakers, and field trips.

**2.501 Typewriting I**  
5 class hrs/wk 3 cr. F/W/Sp  
A beginning course in typing for those with no previous typing instruction or for those needing a review of basic techniques. It covers the basic techniques of the touch system, speed and accuracy, manuscript writing, tabulation, correspondence, and centering. Individualized instruction prevails throughout the entire typing sequence. Students will be given the opportunity to advance at their own rate.

**2.502 Typewriting II**  
5 class hrs/wk 3 cr. F/W/Sp  
Continued practice in the mastery of the keyboard with emphasis on speed, accuracy, and secretarial standards. Review and advanced work in manuscripts, tabulation, business forms, rules that govern word division, correspondence and similar typing techniques. Individualized instruction prevails throughout the entire typing sequence. Students will be given the opportunity to advance at their own rate. Prerequisite: 2.501 or equivalent.

**2.503 Typewriting III**  
5 class hrs/wk 3 cr. F/W/Sp  
Continued units on correspondence, tabulation, business forms, manuscripts, secretarial projects, speed and accuracy, and number proficiency. Individualized instruction prevails throughout the entire typing sequence. Students will be given the opportunity to advance at their own rate. Prerequisite: 2.502 - or equivalent.

**2.504 Typewriting IV**  
5 class hrs/wk 3 cr. F/W/Sp  
Additional units on correspondence, business forms, manuscripts, with special job-oriented projects and composition at the typewriter. Emphasis on speed and accuracy improvement. Individualized instruction prevails throughout the entire typing sequence. Students will be given the opportunity to advance at their own rate. Prerequisite: 2.503 or equivalent.

**2.505 Typing V-Skill Building**  
5 class hrs/wk 3 cr. F/W/Sp  
Special emphasis on speed and accuracy. Use of a wide variety of special drills to work on numbers and remedial techniques. Permission of Business Division required for enrollment. Prerequisite: 2.501 or equivalent.

**2.506 Medical Typing**  
5 class hrs/wk 3 cr. F/W/Sp  
This course will include preparation of medical forms and projects, as well as continued drills for speed and accuracy. Prerequisite: 2.502 or equivalent.

**2.507 Executive Typewriter**  
2 class hrs/wk 1 cr. F/W/Sp  
This course will allow the student an opportunity to develop skill in using the executive typewriter. Students will be responsible for scheduling their time to develop the necessary skill. Prerequisite: 2.502 or equivalent.

**2.515 Business Mathematics**  
5 class hrs/wk 3 cr. F/W/Sp  
This course is designed to give a student the mathematical background needed for general business application. After a review of the fundamental processes including decimals and fractions, the students will be involved in such mathematical calculations as determining percentages, discounts, commission, markup, depreciation, and interest. The student is allowed to advance at his own rate.

**2.520 Automated Typing**  
4 class hrs/wk 2 cr. On Demand  
Technical instruction in the use of IBM magnetic card selectric typing equipment, which will afford the student the expertise required to work as a typing specialist in a Word Processing Center. Prerequisite: Typing speed of 60 WPM.

**2.521 Office Machines**  
5 class hrs/wk 3 cr. F/W/Sp  
Instruction and operating experience on the ten-key adding machine, full keyboard adding machine, printing calculator, rotary calculator, and electronic calculator.

**2.522 Advanced Office Machines**  
5 class hrs/wk 3 cr. F/W/Sp  
A continuation of the initial course in Office Machines. Includes emphasis on building speed as well as practical business applications. Prerequisite: 2.521 or equivalent.

**2.524 Medical Transcription I**  
5 class hrs/wk 3 cr. F/W/Sp  
This course is designed to acquaint the student with medical terminology and to prepare the student for a beginning position as a medical secretary or a medical transcriptionist. Prerequisites 2.501 and 5.633.

**2.525 Medical Transcription II**  
5 class hrs/wk 3 cr. F/W/Sp  
This course will further develop the student's skill in the preparation of medical forms and records from dictated material. Prerequisites: 2.502 and 5.634.

**2.526 Duplicating Equipment**  
2 class hrs/wk 1 cr. F/W/Sp  
This course will provide the student with a general background and specific instruction in a variety of duplicating processes. Prerequisite: 2.501 or equivalent.

**2.527 Transcribing Machines I**  
5 class Hrs/wk 3 cr. F/W/Sp  
This course will allow the student an opportunity to develop a job-entry level skill on the transcribing machine. Students will be responsible for scheduling their time to develop the necessary skill. Prerequisite: 2.502 or equivalent.

**2.528 Transcribing Machines II**  
5 class hrs/wk 3 cr. F/W/Sp

This course will further develop the student's skill on the transcribing machine. Material covered will include projects from a variety of business situations. Prerequisite: 2.527.

**2.537 Personal Shorthand**  
5 class hrs/wk 3 cr. W

A course designed for people needing a short and rapid method of writing both notes and verbatim dictation. It covers the theory of ABC Stenoscrypt, including the dominant sound rule, hi-frequency words, hi-frequency letter groups, prefix and suffix rules, and phrasing and abbreviating principles. There is emphasis on the development of speed and accuracy in dictation and transcription.

**2.538 Applied Personal Shorthand**  
5 class hrs/wk 3 cr. Sp

A complete and extensive review of ABC Stenoscrypt Shorthand including all theory, brief forms, phrases and shortcuts. Dictation will cover vocabularies representative of a variety of businesses including: banks, real estate, insurance, legal, travel, etc. Emphasis will be placed on development of transcription skills including correct form punctuation, capitalization, and spelling, as well as transcription speed and accuracy. Prerequisite: 2.537 and 2.501 or equivalent.

**2.539 Leadership - F.S.A**  
1 cr. F/W/Sp

Members of the F.S.A. organization will be permitted to earn one credit — based on their participation in the club's activities.

**2.541 Stenography I (Gregg)**  
5 class hrs/wk 3 cr. F/W/Sp

Introduction to Gregg shorthand theory, including the alphabet, brief forms, phrasing, and abbreviating principles.

**2.542 Stenography II (Gregg)**  
5 class hrs/wk 3 cr. F/W/Sp

Completion of shorthand theory and review of all principles. Development of ability to construct new outlines rapidly from dictation and to lay solid foundations for further development of dictation and transcription skill. Prerequisite: 2.541 or equivalent.

**2.543 Stenography III (Gregg)**  
5 class hrs/wk 3 cr. F/W/Sp

Emphasis on further development of speed and accuracy in dictation and transcription. Intensive practice in refining shorthand skills and in producing mailable letters. Prerequisite: 2.542 or equivalent.

**2.545 Applied Stenography I**  
6 class hrs/wk 3 cr. F/W/Sp

A thorough and extensive review of shorthand, advanced principles, phrases and short cuts, dictation covering vocabularies representative of various types of business. Basic skills of office work are stressed. Prerequisite: 2.543 or equivalent.

**2.546 Applied Stenography II**  
6 class hrs/wk 3 cr. F/W/Sp

A continuation of 2.545 with emphasis on speed, accuracy and secretarial standards. Included in this course will be medical and technical dictation and transcription. Prerequisite: 2.545 or equivalent.

**2.547 Applied Stenography III**  
6 class hrs/wk 3 cr. F/W/Sp

A continuation of 2.546 with emphasis on speed, accuracy and secretarial standards. Included in this course will be legal, medical, and technical dictation and transcription. Prerequisite: 2.546 or equivalent.

**2.551 Business Correspondence**  
3 class hrs/wk 3 cr. W/Sp

The analysis and composition of the principal types of present-day business letters. Prerequisites: Communication Skills I and 2.501 or equivalent.

**2.590 Readings & Conferences for Secretarial Skills**  
2-10 lab hrs/wk 1-5 cr. On Demand

Subject areas of particular interest to the student or areas where the student needs some additional work can be covered in this course. The number of credits will be determined by the amount of time to be spent.

**2.610 Clerical Office Procedures**  
6 class hrs/wk 3 cr. Sp

Includes instruction in telephone techniques and job interviewing. The students will be employed in a simulated office in the classroom integrating all office skills and techniques. Prerequisite: 2.502, Typing II.

**2.613-5 On-the-Job Training (Secretarial)**  
3 - 36 cl. hrs/wk 1 - 12 cr. F/W/Sp

Supervised employment in a secretarial field primarily for sophomore students. The purpose of the employment is to provide a practical experience, related to the student's major field of interest. Prerequisite: Consent of Business Division before registration.

**2.647 Administrative Management**  
3 class hrs/wk 3 cr. F

This course will include office managerial topics, such as office layout and equipment, records management, selection of office personnel, and automation.

**2.650 Records Mgt. for Educational Secretaries**  
3 class hrs/wk 3 cr. On Demand

This course is designed to assist educational secretaries in the creation, storage and disposal of business and school records, through the use of alphabetic, numeric and subject systems. A variety of storage and retrieval methods are explored.

**2.651 Business Report Writing**  
3 class hrs/wk 3 cr. W

This course is designed to provide the business student with experience in preparing minutes of meeting, inter-office reports, and formal business reports. Prerequisite: 1.101 Communication Skills I or equivalent.

**2.652 Filing**  
**2 class hrs/wk 1 cr. F/W/Sp**  
 This course provides the basic principles and information that aim toward efficient performance in managing and using records in the office.

**2.653 Word Processing**  
**5 class hrs/wk 3 cr. F/W/Sp**  
 This course includes the basic principles involved in a word processing center, including instruction on automated typing equipment. Prerequisite: 2.503.

**2.660 Legal Terminology**  
**3 class hrs/wk 3 cr. F**  
 Legal Terminology is an individualized course designed to prepare students for the legal secretarial field. It will give students a basic knowledge of terminology in the following areas: general legal, real property, pleadings, medical, corporate, probate, and latin expressions.

**2.661 Legal Typing**  
**5 class hrs/wk 3 cr. Sp/Sm**  
 The emphasis will be on typing legal documents. Continued drills on speed and accuracy will be given. Prerequisite: 2.502 or equivalent.

**2.662 Legal Transcription**  
**5 class hrs/wk 3 cr. W**  
 Stresses the ability of students to take instructions via the dictaphone as well as to type legal documents verbatim. Prerequisites: 2.660, 2.661, and 2.527.

**2.663 Legal Procedures & Ethics**  
**3 class hrs/wk 3 cr. F**  
 Specifics of working in a legal office will be stressed, such as confidentiality, methods of handling clients, interaction with other attorneys and the courthouse, the law library, etc. Prerequisites: 2.660, 2.661, and 2.662.

**2.670 Medical Procedures and Ethics**  
**3 class hrs/wk 3 cr. F**  
 Specifics of working in a medical office will be stressed, including insurance, medical records, medical law and ethics, and administrative procedures. Prerequisites: 2.503, 5.633, and 5.634.

**9.764 Oregon School Law (for Educational Secretaries)**  
**3 class hrs/wk 3 cr. On Demand**  
 The course will cover the legal framework for education, creation and administration of school districts, pupil control, contractual relations and conduct of schools in general.

# industrial programs

The Industrial area offers the following types of courses and programs to meet a variety of student needs:

## Two-Year Programs

1. A two-year program in Auto Mechanics leading to an Associate of Science degree;
2. A two-year program in Machine Tool Technology leading to an Associate of Science degree;
3. A two-year program in Metallurgical Technology leading to an Associate of Science degree;
4. A two-year program in Auto Body Repair leading to an Associate of Science degree;
5. A two-year program in Welding leading to an Associate of Science degree;
6. A two-year program in Small Engine and Recreational Vehicle Repair leading to an Associate of Science degree;
7. A two-year program in Construction Technology-Carpentry leading to an Associate of Science degree;

## One-Year Programs

8. One year Certificates of Completion are available in all Industrial programs.

## Special Programs

9. Courses to fit the personal or vocational needs of part-time students in the day or evening programs in any of the Industrial programs:
  - A. Radiator and Air Conditioning Specialist
  - B. Brakes Specialist
  - C. Tune-Up Technician
  - D. Transmission Technician
  - E. Engineer Machine Shop Specialist
  - F. Metals Testing Technician

## GENERAL INDUSTRIAL TECHNOLOGY

### 3.425 Employment Search Technique 1 class hr/wk 1 cr. Sp

A course designed to aid the student in locating and securing employment. Emphasis will be placed upon personal interviews, writing letters of application, and organizing a personal resume. Local personnel managers will be invited to class sessions to discuss aspects of job applications and to discuss why some applicants fail to get jobs.

### 3.444 Welding Metallurgy I 6 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 effect the structural and service requirements of metal joints. Investigations will be made to determine operator responsibility in regards to completing joints in welded metals that are capable of matching or exceeding the strength and reliability of the base metals.

### 3.445 Welding Metallurgy II 6 class hrs/wk 4 cr. W

An introduction to the basic processes of welding fabrication as they effect metallic products. Structural characteristics of metals are investigated as this information relates to quality low-cost welded assemblies. Prerequisite: Welding Metallurgy 3.444 or consent of instructor.

### 3.462 Industrial Electricity 5 class hrs/wk 3 cr. F

An introductory course concerned with principles and applications of electricity in industry. Studies are made of the properties of conduction and insulators, the basic electrical and electronic circuits in testing equipment, principles and maintenance of AC and DC motors and generators, their controls, switching gear, and circuit protection devices.

### 4.108 Industrial Safety and First Aid 3 class hrs/wk 3 cr. F/W/Sp

Course content is concerned with accident prevention and First Aid in industry through the development of safety practices relating to personnel, design, equipment and maintenance. The requirements for First Aid Certification by the American Red Cross will be met.

### 4.120 Fundamentals of Specifications 5 class hrs/wk 3 cr. Sp

This course is designed to acquaint the student with usage and practice in the preparation and interpretation of manufacturing and fabrication specifications. Practical problems will be assigned to relate class-work to industry.

### 4.127 Industrial Practices 5 class hrs/wk 3 cr. On Demand

An analysis of the technical procedures and processes used in industry. Manufacturing and fabrication terminology, methods, materials, and tools will be studied as they relate to major course requirements. Visitations to local industries will be correlated with class assignments.



# auto body repair

Training in the Auto Body Repair Program offers an opportunity to gain the skills and knowledge necessary for entry level employment in all basic phases of auto collision repair, reconditioning and refinishing. Experience is gained on estimating repair costs of components related to this industry.

Both a Certificate and Associate of Science program are available. Students seeking an Associate of Science Degree must meet college requirements for the degree. The Certificate is issued upon satisfactory completion of the Freshman year.

Freshman Year				
Course No.	Course Title	F	W	Sp
3.511	Auto Body Repair I	12		
3.512	Auto Body Repair II		12	
3.513	Auto Body Repair III			12
4.151	Welding I	3		
4.152	Welding II		3	
PE 180/190	Physical Education	1	1	1
PE 252	First Aid			3
		16	16	16
SUGGESTED ELECTIVES				
4.202	Math II		4	
2.110	Principles of Salesmanship			3
Sophomore Year				
Course No.	Course Title	F	W	Sp
3.514	Auto Body Repair IV	12		
3.515	Auto Body Repair V		12	
3.516	Auto Body Repair VI			12
4.108	Industrial Safety			3
1.101	Communication Skills I	3		
1.102	Communication Skills II		3	
SUGGESTED ELECTIVES				
2.515	Business Mathematics	3		
2.651	Business Report Writing	3		
		15	15	15

Students registering for Auto Body Repair Block will progress at their own pace through the six courses comprising the Auto Body Program. Grades and credits will be issued only for levels achieved by the end of the quarter.

### 3.511 Auto Body Repair I 25 class hrs/wk 12 cr. F/W/Sp

This course provides instruction concerning auto body and chassis construction, procedures of metal working, assembly and dis-assembly of components, alignment practices, preparation of vehicle surfaces, use of solder and plastic materials, application of primer and spray painting surface finishes. Instruction of atomic and metallurgical structures of mild sheet steel, elastic and plastic deformation, locking of structure in bent areas, undirected release and controlled directive. Procedures for pulling out areas of impact, shrinking and restressing metal areas.

### 3.512 Auto Body Repair II 25 class hrs/wk 12 cr. F/W/Sp

Introduction to correct shop procedure, cleanliness, care, use and safety of tools and equipment. Types and use of sandpaper and grinding discs, operation and maintenance of paint guns, masking, priming, sealing and panel painting. Instruction in pivot points of sheet metal corrections, damage correction planning, displaced metal, simple bends, rolled buckles, hinge buckles, work-hardened ridges, stretched and upset metal. Principles of heat corrections to metal, filing, picking, and metal finishing.

### 3.513 Auto Body Repair III 25 class hrs/wk 12 cr. F/W/Sp

Minor collision damage repair, alignment of doors, fenders, hood and trunk lids. Forming curvature of metal, repairing holes in panels, sectioning and welding torn and damaged areas. Filing, grinding, solder and plastic filling, sanding, priming, and painting. Instruction in replacement of glass, moulding, hardware, headlinings and interior trim. Principles of glass cutting, grinding and polishing. Door lock, power seat, window regulator repairs and adjustments as well as diagnosis and correction of water and dust leaks.

### 3.514 Auto Body Repair IV 25 class hrs/wk 12 cr. F/W/Sp

Principles of conventional and unitized frame member construction and alignment. Instruction in straightening frame damage, replacing necessary members, tramping, heating, and methods of damage correction. Principles of steering geometry and front system alignment and alignment of sheet metal. Introduction to door and panel replacement including sectioning, sanding, priming, and painting.

### 3.515 Auto Body Repair V 25 class hrs/wk 12 cr. F/W/Sp

Unitized body repair and major section replacement. Body structure alignment, panel replacement, custom styling and fabrication. Sanding, priming, painting, reverse blending and glamour-color application. Principles of estimating all collision damage, appearance reconditioning and refinishing. Instruction in parts and materials purchasing, retail labor rate, flat rate, time and material jobs, and judgment items. Agreed Prices and guaranteed bids are contrasted. Instruction is also given in customer relations, cost accounting and analysis and employee payment plans.

### 3.516 Auto Body Repair VI 25 class hrs/wk 12 cr. F/W/Sp

Major collision rebuilding, vehicle structure fabrication, major section replacement, detailing final repairs, and complete refinishing. Employer employee relations, employment search techniques and final preparation for occupational employment. Principles of insurance claim handling techniques, policies coverage and types of loss. Instruction in types of payment forms, loss reports, affidavits, witness statements, fire losses, theft losses, subrogation, mediation and arbitration is given and practiced. Adjustor-Shop manager relations are clarified.



# automotive technology

The curriculum set forth by the Automotive Technology Department is designed to develop the knowledge and skills necessary to enter the Automotive Industry as an Automotive Technician. It provides the graduate with the ability to functionally perform mechanical work on any portion of the domestic automobile within the realm of the auto mechanics trade.

The Automotive Technology Department has two programs, the Certificate and Associate of Science Degree programs. The Certificate program provides the student with qualifications in one or more specific areas related to the Auto Mechanics Trade.

The Associate of Science Degree program provides the student with qualifications in all areas of auto mechanics as well as all academic qualifications that correspond directly to being a well versed and comprehensive technician with the ability to relate to new concepts and design changes within the Automotive Industry.

Automotive Mechanics offers broad basic instruction and practice in fundamental service and repair practices and procedures. This training provides the knowledge, skills, habits, and attitudes needed for employment at the job entry level in the automotive service and repair field. An Associate of Science Degree will be awarded to those who successfully complete the two-year program.

The Automotive Technology program is designed so that the student may enter at the beginning of any quarter at any point of the program. Each automotive course is designed as a course of material within itself and has no other course within the program as a prerequisite.

Freshman Year		F	W	Sp
Course No.	Course Title			
3.295	Auto Mechanics I	12		
3.296	Auto Mechanics II		12	
3.297	Auto Mechanics III			12
4.151	Welding I	3		
1.101	Communication Skills I		3	
PE 180/190	Physical Education		1	1
4.202	Math II			4
		15	16	17

Sophomore Year		F	W	Sp
Course No.	Course Title			
3.298	Auto Mechanics IV			12
3.299	Auto Mechanics V	12		
3.300	Auto Mechanics VI		12	
4.108	Industrial Safety			3
HE 252	First Aid	3		
3.425	Employment Search Tech.	1		
2.415	Human Relations in Business		3	
PE 180/190	Physical Education	1	1	1
		17	16	16

## 3.295 Auto Mechanics I 22 hrs/wk 12 cr. F

Introduction to correct shop procedures and cleanliness. Information on the correct selection, use, care, and safety of tools and equipment in conjuncture with skill development and information is offered for the repair and adjustment of auto brakes, suspension/steering systems, and wheel balance.

## 3.296 Auto Mechanics II 22 hrs/wk 12 cr. W

A study of the complete power train system. Emphasis is placed upon the theory, application, and servicing of clutch systems, manual transmissions, transfer cases, drive lines, universal joints, and differential assemblies.

## 3.297 Auto Mechanics III 22 hrs/wk 12 cr. Sp

A course devoted to study of the operating principles, maintenance, repair, and overhaul of the internal combustion engine. The various engine types, their component parts, and related accessories are studied, and in conjunction with the correct engine machining skills, a specific engine is rebuilt and returned to manufacturers' specifications, that operate correctly on a test stand.

## 3.298 Auto Mechanics IV 22 hrs/wk 12 cr. F

Instruction and practice in the operating principles and servicing of the auto fuel and electrical systems and their accessories. Conditions similar to those experienced by the live mechanic are provided to aid in correctly selecting equipment to be used for testing, adjusting, and servicing these systems.

## 3.299 Auto Mechanics V 22 hrs/wk 12 cr. W

A problem solving source designed to develop the students knowledge and skills in the area of tune-up. Emphasis will be placed on the selection and use of equipment to include electrical test equipment, oscilloscope, emission test equipment, and the dynamometer to find various malfunctions and make necessary repairs for optimum engine performance in operating autos.

**3.300 Auto Mechanics VI**  
22 hrs/wk 12 cr.

A study of the operating principles, testing, and repair procedures of the automatic transmission, air conditioning and cooling systems. Direction towards developing the ability to accurately analyze the performance factors or diagnosis of the malfunctions of these systems shall be accomplished through the use of live units.

**3.305 Automotive Fundamentals**  
9 class hrs/wk 6 cr. On Demand

This course is designed to develop the student's skills and knowledge in the use of hand tools, fasteners, precision measuring instruments, tubings and fittings, and safety practices as they pertain to the automotive industry. This course also offers the student the general conceptual knowledge in the internal combustion engine and its parts nomenclature. Methods of power transmissions and other mechanical devices, as they pertain to the automobile.



# construction technology- carpentry

A two-year curriculum in the carpentry trade is the major emphasis of LBCC's Construction-Technology-Carpentry program. Students completing the program have the necessary skills to pursue a variety of employment options in the building trades industry.

Carpenters are employed in almost every type of construction. Most are hired by contractors and home builders to construct new buildings. Others are employed in the alteration, remodeling and repair of buildings.

Large numbers of carpenters are also hired to maintain and repair facilities within factories, hotels,

and office buildings. And the opportunity for self-employment also exists within the carpentry trade.

The types of work performed by carpenters includes erecting frameworks, building stairs, laying hardwood floors, and building forms used to pour concrete in the construction of bridges and buildings.

\* Carpenters, particularly those in rural areas, where there is less specialization, may perform the work of other craftsmen such as painting or roofing.

Students in the program will learn the use of tools, machines, equipment and materials associated with the trade. Related course work in drafting, blueprint reading, and math are also taught. Actual experience is gained through the construction of a home.

Persons completing the comprehensive two-year Associate of Science degree program will be in greater demand and will have a better chance for advancement to carpenter foremen or general construction foremen positions.

Freshman Year			
Course No.	Course Title	F	W Sp
3.200	Wood Technology	10	10 10
3.429	Blueprint Reading for the Construction Trades	2	
4.202	Math II	4	
3.205	Drafting I—Construction		3
1.101	Communication Skills I		3
3.206	Drafting II—Construction		3
2.651	Business Report Writing		3
		16	16 16

Sophomore Year			
Course No.	Course Title	F	W Sp
3.200	Wood Technology	6	8 8*
2.530	Practical Accounting I	3	
4.108	Industrial Safety	3	
PE 180/190	Physical Education	1	1
HE 252	First Aid	3	
2.531	Practical Accounting II		3
3.215	Construction Estimating, Codes, Contracts, and Specifications		4
4.300	Practical Physics		4
2.534	Cost Accounting		3
		16	16 16

\*1.200 Cooperative Work Experience

**3.200 - 4 Wood Technology**  
20 class hrs/wk 10 cr. F/W/Sp

A learning program to give the student theory, fundamentals and practical "hands-on" experience in the process of converting blueprint reading, practical "on-site" estimating, surveying, masonry, and all aspects of framing and finishing to a finished product. Field trips to suppliers, manufacturers, and special action construction sites.

**3.205 Drafting I - Construction**  
5 class hrs/wk 3 cr. W

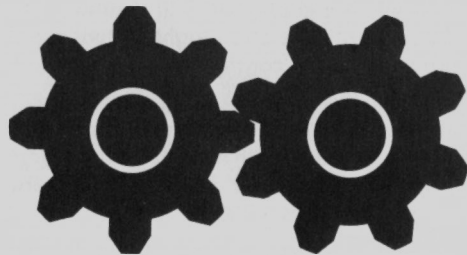
A drafting program to develop the student's spatial visualization of a blueprint or sketch. The student will progress through geometric constructions to the sizes, shapes, and arrangements of the areas of a residence.

**3.206 Drafting II - Construction**  
5 class hrs/wk 3 cr. Sp

A drafting program to develop the student's ability to draw a set of working plans, with necessary detail drawings, for a residence.

**3.215 Construction Estimating, Codes, Contracts, and Specifications**  
 4 class hrs/wk 4 cr. W

Introductory overview designed to inform the students of the importance and legal status of estimates, codes, contracts, and specifications in the construction industry.



# machine tool technology

Machine Tool curriculum is designed to develop skills in a wide variety of machining processes including the operation of engine lathe, milling machine, drill press, surface grinder, tracer lathe, radial drill press and tool and cutter grinders. The students finishing the first year of the curriculum should be able to enter the job market as a trainee with basic skill in machining processes at their disposal. Students completing the full two year curriculum will be granted an Associate of Science degree and will be in a strong position to enter a rapidly growing job market.

**Freshman Year**

Course No.	Course Title	F	W	Sp
3.403-5	Machine Tools I, II, III	10	10	10
4.100	Blueprint Reading & Sketching	2		
4.202. 4	Mathematics		4	4
PE 180/190	Physical Education		1	1
4.151	Welding I	3		
HE 252	First Aid	3		
		18	15	15

**Sophomore Year**

Course No.	Course Title	F	W	Sp
3.406-8	Machine Tools IV, V, VI	10	10	10
6.293	Introduction to Metallurgy	2		
2.651	Business Report Writing			3
1.101	Communication Skills I		3	
PE 180/190	Physical Education		1	
4.152	Welding II	3		
4.108	Industrial Safety			3
		15	14	16

**3.403 Machine Tools I**  
 20 class hrs/wk 10 cr. F/W/Sp

A lecture and lab course that provides basic and introductory information to the student interested in the machinist trade and/or related fields. The student becomes familiar with the engine lathe and its applications through concentrated instruction. Other machines of the five basic machining arts are generally discussed and their uses explained. Blueprint reading, simple shop math, and cutting speeds and feeds are explained in sufficient depth to provide safe machine operation at an early part of the course. Films, slides, tape, field trips and demonstrations are all used to provide additional student interest and motivations.

**3.404 Machine Tools II**  
 20 class hrs/wk 10 cr. F/W/Sp

A lecture and lab course that provides basic and introductory information to the student interested in the machinist trade and/or related fields. This course concentrates on the machine arts of drill presses. Primary emphasis will be placed on lathe single point machining. Drill presses, milling machines, and grinders will be utilized to develop a broader range of skills. Related skills in measuring, blueprint reading and shop math will be increased through the variety of assigned projects.

**3.405 Machine Tools III**  
 20 class hrs/wk 10 cr. F/W/Sp

A lecture and lab course that provides basic and introductory information to the student interested in the machinist trade and/or related fields. This course concentrates on the machining arts of milling and grinding. Primary emphasis will be placed on relating single point cutting, machine set-up, tool selection and material removal rate skills to the more complicated milling machines and grinders. Drill presses and lathes will be used in conjunction with the milling and grinding projects. Shop set-up, part layout, measuring, blueprint reading and shop math skills will be increased through the variety of assigned projects.

**3.406 Machine Tools IV**  
 20 class hrs/wk 10 cr. F/W/Sp

A lecture and lab course that provides advanced training to students generally familiar with the five basic machining arts. Students will review and update previously acquired skills. Special attention is devoted to increasing the depth of knowledge on the lathe. More precision and special set up work will be assigned involving complex configurations and tracer lathe applications. Turning and boring are associated more closely with the supplemental operations. Increased emphasis is placed on industry accepted rates. Roughing and finishing operations are studied in depth. Milling machines, drill presses and grinders are used extensively in conjunction with lathe projects. Tool and cutter grinding is a part of the project requirements.

**3.407 Machine Tools V**  
 20 class hrs/wk 10 cr. F/W/Sp

A lecture and lab course that provides advanced training to students generally familiar with the five basic machining arts. Students will review and up-date previously acquired skills. Special attention is devoted to increasing the depth of knowledge on the lathe, mill, and drilling machines. Emphasis is placed on precision quality work, complex configurations, special set-ups, industry accepted material removal rates and tool and cutter sharpening. Roughing and



finishing operations are studied in depth. Lathes, mills, and grinders are used extensively in conjunction with precision boring projects. Related fields of machining such as tool making, machine repair, numerical control and automation are studied to broaden student's scope of knowledge.

**3.408 Machine Tools VI**  
20 class hrs/wk 10 cr. F/W/Sp

A lecture and lab course that provides advanced training to students generally familiar with the five basic machining arts. Students will review and up-date previously acquired skills. Special emphasis is placed on increasing the depth of knowledge of milling machines and grinder operation. Concentrated attention is placed on precision quality work, complex configurations, special shop set-ups, industry accepted material removal rates and proper tool selection. Roughing and finishing operations are studied in depth. Lathes, drills, and jig bores are used in conjunction with the milling and grinding projects. Increased attention is devoted to study of the related fields of tool making, equipment repair, numerical control and tool and cutter grinding.

**4.130 Machine Processes**  
3 class hrs/wk 2 cr. F

A basic machine tool operations course. Introducing the student to the principles involved in the operating of the basic machine tools, engine lathe, drill press, grinder and milling machine.

properties, and the influence of alloying elements as they are conditioned by mechanical working and heat treatment.

Satisfactory completion of the following program will lead to the Associate of Science Degree. Certificates will be offered to students who satisfactorily complete specific courses in metals testing.

Freshman Year		F	W	Sp
Course No.	Course Title			
6.293	Introduction to Metallurgy	4		
6.276	Physical Metallurgy		4	
6.294	Process Metallurgy			4
4.151	Welding I			3
3.444	Welding Metallurgy			4
4.100	Blueprint Reading & Sketching	2		
4.205-6	Basic Chemistry I, II	4	4	
Mth 95	Intermediate Algebra	4		
6.551	Technical Math I			
Mth 101	College Algebra		4	
6.552	Technical Math II			4
4.300-2	Practical Physics		4	4
PE 180/190	Physical Education	1	1	1
		15	17	16

Sophomore Year		F	W	Sp
Course No.	Course Title			
1.101	Communication Skills I	3		
9.502	Written Communication for Supervisors		3	
2.751	Professional Development			3
2.748	Professional Development			3
3.462	Industrial Electricity	3		
4.108	Industrial Safety			3
4.120	Fundamentals of Specification			3
4.130	Machine Processes		2	
4.161-2	Materials Testing I, II	2	2	
6.281	Non-Destructive Testing I		3	
6.282	Non-Destructive Testing II			3
6.293	Non-Destructive Testing III			3
6.298-9	Metallography I, II	2	2	
1.124	American Institutions	3		
HE 250	Personal Health	3		
Technical Electives			3	3
		16	15	18

SUGGESTED ELECTIVES	
2.415	Psychology for Supervisors
2.121	Applied Economics
4.122	Strength of Materials
3.162	Photography
6.288	Vacuum Technology

**4.161-2 Materials Testing I, II**  
4 class hrs/wk 2 cr. F/W

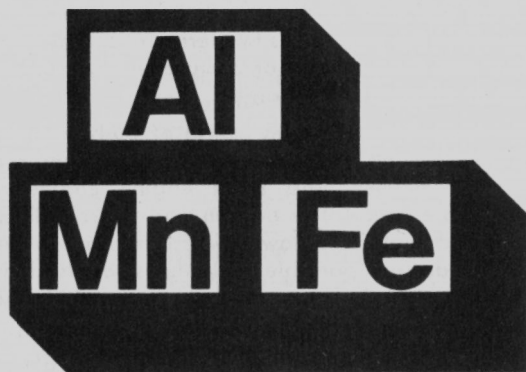
Study of the properties of engineering materials. Fundamental aspects of the behavior of engineering materials. Elastic and plastic deformation, fracture, creep, fatigue, impact, temperature effects, and corrosion. Destructive and non-destructive evaluation. Elementary principles of measurements, methodology test equipment, instrumentation, and analysis of data.

**6.276 Physical Metallurgy**  
6 class hrs/wk 4 cr. W

Study of the concepts, structures, properties, heat treatment, methods of forming, and evaluation of metals and alloys. Prerequisite: Introduction to Metallurgy or consent of Instructor.

**6.281 Non-destructive Testing I**  
5 class hrs/wk 3 cr. W

An introductory course in the theory and applied techniques of liquid penetrant, eddy current, and magnetic particle inspection dealing with industrial applications as an integral part of metals fabrication and development along with testing and inspection process in quality control.



# metallurgical technology

The Metallurgical program is intended to present information regarding the extraction and purification of metals; the subsequent alloying or combining treatment, and fabrication of metals; and the examination, analysis, and testing related to quality control and product development.

Metallurgical theory as presented deals with the processing of raw products to metals, internal structure of metals, the influence of microstructure on

**6.282 Non-destructive Testing II**  
5 class hrs/wk 3 cr. Sp

A continuation of Non-destructive Testing I with a major emphasis being placed upon ultrasonic and radiographic methods of testing and inspection.

**6.288 Vacuum Technology**  
3 class hrs/wk 3 cr. On Demand

The course will encompass several phases of vacuum technology starting with basic terminology and to progress through industrial applications and equipment selection. To include specifics such as what happens in a vacuum, need for a vacuum and vacuum chambers requirements. Maintenance of equipment will be stressed to help provide the students with a working knowledge of a vacuum industry.

**6.293 Introduction to Metallurgy**  
6 class hrs/wk 2 - 6 cr. F

Introduction to crystalline and atomic structure of metals, alloys, methods of bonding, types of solid solutions, analysis of phase diagrams, heat treatment and hardening mechanisms of metals, and the effect of alloying elements.

**6.294 Process Metallurgy**  
6 class hrs/wk 4 cr. Sp

Metallurgical principles are studied including raw materials requirements for metals processing, furnaces and refractories, furnace fuels and combustion, heat flow energy balances and alloy systems. Prerequisite: Basic Chemistry or consent of Instructor.

**6.298-9 Metallography I, II**  
4 class hrs/wk 2 cr. F/W

The understanding and use of metallurgical equipment including technical concepts of specimen procurement, mounting, polishing, etching, visual examination, sketching of structural characteristics, photomicrography and photomicrography of ferrous and non-ferrous materials.

**4.122 Strength of Materials**  
3 class hrs/wk 3 cr. On Demand

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. Prerequisite: Industrial Math III and Slide Rule.



# recreational vehicle and small engine repair

At Linn-Benton men and women can acquire mechanical skills in the repair of recreational vehicles, small engine equipment and industrial portable tools.

Through the Recreational Vehicle and Small Engine Repair program a number of options exist ranging from one term to two years. Each of the three areas within the program is two terms in length so the student can choose basic or comprehensive training in any or all of the three areas.

The recreational vehicles course of study includes work on snowmobiles, outboard marine engines and all-terrain vehicles. The small engine curriculum covers such equipment as garden tractors, rototillers, edgers and motorized lawn sweepers. And in the area of industrial portable tools the students study the repair of water pumps, chain saws, drill and generators.

During their instruction students work on actual equipment in need of repair and are trained as complete mechanics.

The employment outlook is good as the sale of recreational vehicles is increasing and mechanics with more specialized skills are being sought for work in this field. The opportunity for self-employment is also available.

An Associate of Science degree will be awarded to those individuals who complete 60 credits along with the required related courses. A Certificate of Completion will be awarded to those individuals who complete 20 credits (2 courses) or more in this program.

Course No.	Course Title	F	W	Sp
3.560	Small Engine Repair I	10	10	10
or 3.562	Small Engine Repair III	10	10	10
or 3.570	Recreational Vehicle Repair I	10	10	10
4.200-2	Math I and II	4	4	
PE 180/190	Physical Education	1		
HE 252	First Aid			3
or HE 250	Personal Health			3
1.101	Communications Skills I		3	
1.200	S.F.E. Small Engine Repair			3
or	Elective, Science & Tech.			
		15	17	16

Course No.	Course Title	F	W	Sp
3.561	Small Engine Repair II	10	10	10
or 3.563	Small Engine Repair IV	10	10	10
or 3.571	Recreational Vehicle Repair II	10	10	10
PE 180/190	Physical Education	1	1	
4.151	Welding I	3		
2.651	Business Report Writing			3
or 1.102	Communication Skills II			3
or 1.112	Technical Report Writing			3
or 1.200	S.F.E. Small Engine Repair			
or	Electives, Humanities & Social Ser.		3	
4.108	Industrial Safety			3
		14	14	16

**3.556 Basic Small Engine Repair**  
**6 class hrs/wk 3 cr. W/Sp**

This course includes the operating theory of 2 stroke cycle and 4 stroke cycle engines and proficiency in performing specific electrical, carburetion and service maintenance on small engines. It is designed for students who wish only a basic understanding of small engine service and tune-up. Credits earned in this course may be applied to the full time Small Engines program if desired.

**3.560 Small Engine Repair I**  
**20 class hrs/wk 1 - 10 cr. F/W/Sp**

This course includes the operating theory of 2 stroke and 4 stroke cycle engines and proficiency in performing specific electrical, carburetion, service, maintenance and overhaul techniques on lawn and garden equipment.

**3.561 Small Engine Repair II**  
**20 class hrs/wk 1 - 10 cr. F/W/Sp**

This course improves the skills and proficiency learned in Small Engine I. Service and repair of related lawn and garden equipment is also covered. Prerequisite: Small Engine Repair I.

**3.562 Small Engine Repair III**  
**20 class hrs/wk 1 - 10 cr. F/W/Sp**

This course includes the operating principles of engines used for chain saws, outboard marine and industrial tools. Proficiency in performing specific electrical, carburetion, service, maintenance and overhaul techniques is included.

**3.563 Small Engine Repair IV**  
**20 class hrs/wk 1 - 10 cr. F/W/Sp**

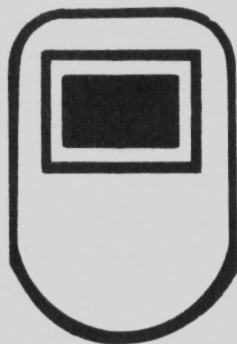
This course improves the skills and proficiency learned in Small Engines III. Service and repair of related chain saw components, outboard marine components and industrial equipment is also covered. Prerequisite: Small Engine Repair III.

**3.570 Recreational Vehicle Repair I**  
**20 class hrs/wk 1 - 10 cr. F/W/Sp**

This course includes the operating principles of engines used for motorcycles and/or snowmobiles and A.T.V.'s. Proficiency in performing specific electrical, carburetion, service, maintenance and overhaul techniques is included.

**3.571 Recreational Vehicle Repair II**  
**20 class hrs/wk 1 - 10 cr. F/W/Sp**

This course improves the skills and proficiency learned in Recreational Vehicle Repair I. Service and repair of the complete motorcycle, snowmobile and A.T.V. is also covered. Prerequisite: Recreational Vehicle Repair I.



# welding

The one-year certificate welding program can be entered at any time during the academic year and be completed in three 12-week quarters. Classes and laboratory periods are provided so that the student can develop the skills, habits, attitudes and knowledge that will prepare him for a wide range of job opportunities. Time is provided to prepare for and undergo certain welder certification tests. These tests are administered by independent agencies. A one-year Certificate of Completion will be issued upon fulfillment of the program requirement.

A two-year Associate of Science degree will be awarded to those individuals who complete the first year and second year curriculums. The welding curriculum is intended to be optional, thus allowing an individual to terminate at the end of one year or exercising the two year options.

The second year is designed to give more experience in specific areas such as layout, fabrication, repair and other related subjects.

Freshman Year				
Course No.	Course Title	F	W	Sp
3.444	Welding Metallurgy			4
4.100	Blueprint Reading & Sketching	2		
4.108	Industrial Safety	4		3
4.200, 4.202	Mathematics I, II	4	4	
4.240	Basic Arc Welding	6		
4.241	Intermediate Arc Welding		6	
4.242	Basic Oxyacetylene Welding	4		
4.243	Intermediate Oxyacetylene Welding		4	
4.245	Layout Procedures for Welding		3	
4.246	Advanced Arc Welding			6
4.250	Advanced Oxyacetylene Welding			4
		16	17	17

SUGGESTED ELECTIVE				
Course No.	Course Title	F	W	Sp
4.153	Welding Seminar			3

Sophomore Year				
Course No.	Course Title	F	W	Sp
PE 180/190	Physical Education	1	1	1
HE 252	First Aid	3		
4.124	Technical Drawing I	2		
4.130	Machine Processes	2		
4.255	Fabrication & Repair Practices I	6		
1.101	Communication Skills I		3	
3.445	Welding Metallurgy II		4	
6.330	General Electricity		3	
4.256	Fabrication & Repair Practices II		6	
2.651	Business Report Writing			3
2.415	Human Relations for Business			3
3.555	Hydraulics and Pneumatics			3
4.257	Fabrication & Repair Practices III			6
		14	17	16

## 4.151-2 Welding I, II

5 class hrs/wk 3 cr. F/W/Sp

Set-up and operation of Oxyacetylene welding, metal arc welding, and cutting equipment. Demonstrations and practice in welding, brazing and soldering ferrous and non-ferrous metals and their alloys. Technical information on use of rods and composition of metal and application is included. (For non-majors)

## 4.153 Welding Seminar

3 class hrs/wk 3 cr. Sp

Lecture and discussion sessions covering the field of welding, selection of equipment, and welder certification, etc.

## 4.240 Basic Arc Welding

14 class hrs/wk 6 cr. F

An introduction to arc welding practices on mild steel of various thicknesses and joint configurations in all positions.

## 4.241 Intermediate Arc Welding

14 class hrs/wk 6 cr. W

This course is a continuation of Basic Arc Welding 4.240. Areas of consideration will be arc welding, mild steel, and special ferrous and non-ferrous alloys employing the manual arc, TIG and MIG processes.

## 4.242 Basic Oxyacetylene Welding

8 class hrs/wk 4 cr. F

An introduction to oxyacetylene welding practices on mild steel of various thicknesses and joint configurations in all positions.

## 4.243 Intermediate Oxyacetylene Welding

8 class hrs/wk 4 cr. W

This course is a continuation of Basic Oxyacetylene Welding 4.242. Areas of consideration will be oxyacetylene welding, soldering, brazing and braze welding of various similar and dis-similar metals.

## 4.245 Layout Procedures for Welding

5 class hrs/wk 3 cr. W

A course to introduce layout principles and applications. Tools and equipment for lay-out are studied in respect to their operating performance while stressing the importance of maintenance of these tools. Laboratory work will consist of planning and construction of templates, layout followed by actual fabrication in specific areas to examine the quality of the layout process.

## 4.246 Advanced Arc Welding

14 class hrs/wk 6 cr. Sp

This course is a continuation of Intermediate Arc Welding 4.241. The area of consideration will be preparation for weld certification in all positions with the manual arc process.

## 4.250 Advanced Oxyacetylene Welding

8 class hrs/wk 4 cr. Sp

This course is a continuation of Intermediate Oxyacetylene Welding 4.243. Areas of consideration will be fabrication layout procedures, pipe joint preparation, and large and small diameter pipe welding in all positions.

**4.255-7 Fabrication & Repair Practices I, II, III**  
14 class hrs/wk 6 cr. F/W/Sp

A lecture and laboratory series of courses that provides advanced information and skills related to welding repair and fabrication. Instructor evaluated group or individual projects undertaken will provide a variety of experiences. These projects will require knowledge gained from related classes as outlined in the curriculum. Blueprint reading, cost estimation, ordering and inventory of materials, layout skills, fabrication and final assembly are skills that will be taught or utilized.

**9.148 Preparation for Welder Certification**  
8 class hrs/wk 4 cr. F/W/Sp

A course designed to provide the necessary information and skill development to successfully undergo certain welder certification tests administered by independent agencies. Several of these tests are provided upon completion of the course. Prerequisite: Approval of instructor.

**9.151-2 Beginning, Advanced Welding  
Occupational Extension**  
4 class hrs/wk 2 cr. F/W/Sp

Set-up and operation of Oxyacetylene welding, metal arc welding (including TIG and MIG equipment) and cutting equipment. Demonstrations and supervised practice are provided on ferrous and non-ferrous metals in all positions. Technical information on choice of electrodes and their application, welding power sources and accessories, and metal identification are included.

The Humanities and Social Services Division embraces a wide variety of academic subjects typically classified as the liberal arts. These include both the humanities (art, English, music, drama, speech, philosophy, religion, foreign languages, and the social sciences (anthropology, economics, geography, history, political science, psychology and sociology.) In addition to the broader subject-matter fields, the division offers specific occupational preparation in criminal justice, graphic communications, and human services.

The objectives of the Humanities and Social Services Division are to offer complete lower division preparation in the liberal arts for students planning entrance to a four-year college; to provide specific occupational and vocational skills for non-transfer students; and for all students, to stimulate the development of human thought and imagination, and to satisfy people's desire for creative enrichment, aesthetic development, and social sensitivity.

Linn-Benton Community College encourages students to make career choices based on interests, needs, and abilities without regard to the traditional roles of men, women or minorities.

# humanities and social services division



**DIRECTOR:**

Kenneth Cheney

**FACULTY:**

- Regina Andreasen, Social Science
- Martha Ayers, Speech-Drama
- Arthur Bervin, English
- J. W. Brick, Art
- Shirley Call, English
- Thomas Chase, English
- Douglas Clark, Social Science
- Russell Durham, Social Science
- Richard Hankey, Criminal Justice, Department Chairman
- Max Lieberman, Social Science
- Donald Minnick, English
- Maribel Montgomery, Social Science
- Sandra Nelson, Art
- Jean Schreiber, Human Services, Department Chairman
- William Sweet, English
- Clinton Tobey, Art, Department Chairman
- Richard West, Music
- Barbarajene Williams, English
- Dwain Wright, Graphic Communications, Department Chairman

# humanities

The Humanities and Social Services Division offers the following types of courses and programs to meet a variety of student needs.

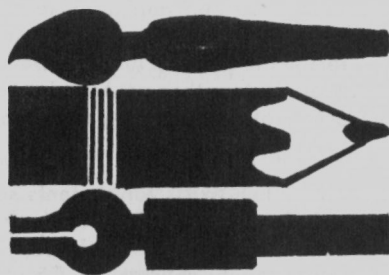
**Two-Year Programs**

A two-year program leading to an Associate of Arts Degree which is fully transferable to a four-year institution may be earned in the following areas: Fine Art, Criminal Justice, Elementary Education, English, Music, Philosophy and Religion, Secondary Education, Social Science, and Speech and Drama.

A two-year program leading to an Associate of Science Degree may be earned in the following areas: Graphic Communication, and Law Enforcement.

**One-Year Programs**

A one-year program leading to a certificate may be earned in Human Services (Child Care or Adult Services).



# art

The art curriculum is designed to promote the students' flexibility in communicating expressive ideas through art and to increase their ability to recognize historic influences in their own and other's works. The

department offers a wide variety of studio courses which are fully transferable, but which also have significant value as creative, avocational activities for the non-transfer student.

**AR 101 Weaving I**  
2 lec/4 lab 3 cr. F/W/Sp

Introduction to techniques of construction with fiber through experiences in weaving, macrame, stitchery. Emphasis placed on design considerations. \$5.00 lab fee.

**AR 102 Weaving II**  
2 lec/4 lab 3 cr. F/W/Sp

Further study of techniques of fiber construction with studio practice in weaving on multiple harness table and floor looms. Study of fibers, pattern, design considerations. Prerequisite: Art 101 \$5.00 lab fee.

**AR 195 Basic Design**  
2 lec/4 lab 3 cr. F/W/Sp

An introduction to the design field through a study of art elements and principles and the visual and psychological aspects of color. Students will explore applications; emphasis will be on developing sound judgment and individual creative growth.

**AR 201 Survey of Visual Arts -- Sculpture and Architecture**  
3 class hrs/wk 3 cr. F

To introduce the student to his environment, that is the architecture that surrounds him, as being not only a functional living or working setting, but having the possibilities of being a well designed art form similar to the three dimensional qualities of sculpture and their relationships one to another.

**AR 202 Survey of Visual Arts -- Photography in Motion Pictures**  
3 class hrs/wk 3 cr. W

Visual Art Appreciation of Motion Pictures offers an analysis of the motion picture as one of our most influential art forms. Emphasis will be on photography and photographic effects as they relate to "setting the mood" for the overall dramatic impact of a film. \$5.00 film fee.

**AR 203 Survey of Visual Arts -- History of Art**  
3 class hrs/wk 3 cr. Sp

Survey the scope of the visual arts as historical development and contemporary impact, pertaining to illustration, printmaking, easel and mural painting.

**AR 204, 205, 206 Intro. to Art History**  
3 class hrs/wk 3 cr. F/W/Sp

A three quarter sequence class of the history, aesthetics, and significance of the visual arts as they reveal man's concepts of his place in time and space; includes related contemporary thought in the fields of anthropology, religion, psychology and media studies. (204) Art origins; (205) Christian era to Industrialization; (206) Modern. \*See note below:

\*Art 204, 205, and 206 is a redesignation for what was formerly taught at LBCC as Art 201, 202, and 203. Students who have taken Art 201, 202, or 203 at LBCC prior to the fall of 1974 should not enroll in Art 204, 205 or 206. In this case, students may, at their option, petition the Registrar to change their previous credits in Art 201, 202, or 203 to reflect the new designation of Art 204, 205, or 206. They may then elect to enroll in the new Survey of Visual Art sequence.

**AR 235 Jewelry and Metalsmithing I**  
2 lec/4 lab 3 cr. F/W/Sp

General introduction to use of tools involved in fabricating jewelry. Guidance in design. Demonstration of the major processes involved in the design and creation of jewelry and other metal fabrication. In-depth study of lost wax casting. \$5.00 lab fee.

**AR 236 Jewelry and Metalsmithing II**  
2 lec/4 lab 3 cr. F/W/Sp

Continued work in the design and creation of jewelry and other metal fabrication. Prerequisite: Art 235. \$5.00 lab fee.

**AR 255 Ceramics I**  
2 lec/4 lab 3 cr. F/W/Sp

An introduction to clay as an expressive and utilitarian material. The composition of clay bodies and the basic forming processes; slab, pinch, coil, press mold, and the potter's wheel. Emphasis is on form and surface treatment. Some firing and glazing included. \$3.00 lab fee.

**AR 256 Ceramics II**  
2 lec/4 lab 3 cr. F/W/Sp

Further work in clay for the somewhat-experienced student. Advanced and specialty construction; glazing and firing techniques. Prerequisite: Art 255 or consent of instructor. \$3 lab fee.

**AR 281 Figure Drawing**  
2 lec/4 lab 3 cr. Sp

An introduction to drawing the clothed and unclothed model using a variety of materials and techniques. Prerequisite: Art 290 or consent of instructor. \$5.00 model fee.

**AR 282 Intermediate Drawing**  
2 lec/4 lab 3 cr. W

Advanced problems in drawing with greater emphasis on individual approaches in a variety of techniques and materials. Prerequisite: Art 291 or consent of instructor.

**AR 290 Painting I**  
2 lec/4 lab 3 cr. F/W/Sp

An introduction to the conventions of visual representation of a two-dimensional surface. Space division, color, and surface treatment with acrylic and oil paints are explored. This is a course designed for the inexperienced painter. It is preferred that the student is taking or has taken a drawing or design class.

**AR 291 Drawing Fundamentals**  
2 lec/4 lab 3 cr. F/W/Sp

An introduction to drawing still life and landscape using a variety of materials and techniques; training in observation and selection of significant elements.

**AR 292 Watercolor Painting**  
2 lec/4 lab 3 cr. F

An exploration of watercolor techniques in which subjects are to be taken from life, landscape, and imagination. It is preferred that the student has taken or is taking a drawing or design class.

**AR 293 Elementary Sculpture**  
2 lec/4 lab 3 cr. F

The course provides an understanding of sculptural techniques and theories explored through the use of clay, plaster, wire, wood, plastics, and casting materials and their relation to forms compatible with those materials and techniques.

**AR 294 The Sculptural Figure**  
2 lec/4 lab 3 cr. W

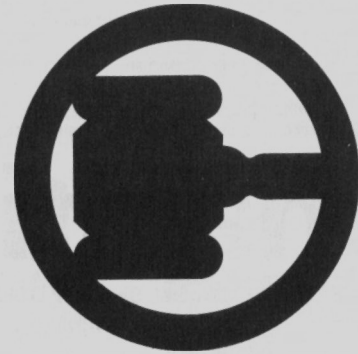
Concentrated study in clay of the surface and structural anatomy of the human figure. Aiming at a greater understanding and use of the figure in three-dimensional art.

**AR 295 Welded Sculpture**  
2 lec/4 lab. 3 cr. Sp

Concentrated work in the use of ferrous and non-ferrous metals, in the creation of sculpture. Instruction in the use of oxy-acetelene and arc welders to increase one's technical skills.

**AR 296 Painting II**  
2 lec/4 lab 3 cr. F/W/Sp

Further work in composition, surface, and color for the student who has had some painting experience. Individual vision is encouraged in a variety of expressions and techniques. Prerequisite: Art 290 or consent of instructor.



# criminal justice

## CRIMINAL JUSTICE ADMINISTRATION

The Criminal Justice Administration curriculum is designed to provide in-service personnel with the opportunity to increase their professional competence and their value to their employing agencies, and to make available educational experiences for students who desire careers in the criminal justice system. Two-year programs leading to either an Associate of Science or an Associate of Arts degree are available.

## ASSOCIATE OF SCIENCE DEGREE PROGRAM

A two-track curriculum exists for students seeking the Associate of Science degree. Students may achieve an emphasis in either Law Enforcement (including police and deputy sheriff), or Corrections, (including probation, parole and correctional personnel). See requirements listed below.

By special agreement between LBCC and Oregon College of Education, Law Enforcement and Corrections students may transfer as elective, lower-division credit up to twenty-one hours of the occupational courses (5. numbers) listed in the curriculum following toward graduation requirement at OCE in the fields of social science, corrections, and law enforcement.



ASSOCIATE OF ARTS PROGRAM

Increasingly, criminal justice agencies are requiring a four-year degree at the entry level. Although many four-year colleges will allow some transfer of occupational courses, students may more conveniently transfer an Associate of Arts degree throughout the state educational system. A suggested curriculum guide for transfer students is located on page 19.

**Law Enforcement**

**Freshman Year**

Course No.	Course Title	F	W	Sp
CJA 111	Introduction to Criminal Justice	3		
5.230	Fundamentals of Crime & Delinquency	3		
	Wr 121 or Com. Skills I	3		
	P.E. Activity	1		
	Math or Science Elective	3		
	Elective or SFE	3		
CJA 112	Intro. to Criminal Justice		3	
CJA 211	Criminal Law I		3	
	Wr 122 or Com. Skills II Composition		3	
	P.E. Activity		1	
	Humanities or Social Science Elective		3	
	Elective or SFE		3	
CJA 113	Intro. to Criminal Justice			3
CJA 212	Criminal Law II			3
HE 252	First Aid			3
	P.E. Activity			1
	Elective or SFE			3
		16	16	13

**Sophomore Year**

Course No.	Course Title	F	W	Sp
CJA 219	Community Relations	3		
5.220	Concepts of Enforcement Services	3		
	Electives or SFE	9		
CJA 214	Criminal Investigation		3	
CJA 213	Legal Aspects of Evidence		3	
	Electives or SFE		9	
5.236	Introduction to Juvenile Delinquency			3
	Electives or SFE			12
		15	15	15

**Corrections**

**Freshman Year**

Course No.	Course Title	F	W	Sp
CJA 111	Intro. to Criminal Justice	3		
5.231	Civil Procedures	3		
	Wr 121 or Com. Skills I Composition	3		
	P.E. Activity	1		
	Math or Science Elective	3		
	Elective or SFE	3		
CJA 112	Intro. to Criminal Justice		3	
CJA 211	Criminal Law I		3	
	Wr 122 or Com. Skills II		3	
	P.E. Activity		1	
	Humanities or Social Science Elective		3	
	Elective or SFE		3	
CJA 113	Intro. to Criminal Justice			3
5.225	Intro. to Corrections			3
HE 252	First Aid			3
	P.E. Activity			1
	Elective or SFE			3
		16	16	13

**Sophomore Year**

Course No.	Course Title	F	W	Sp
5.230	Fundamentals of Crime & Delinquency	3		
CJA 219	Community Relations	3		
	Electives or SFE	9		
5.233	Institutions and Agencies		3	
CJA 213	Legal Aspects of Evidence		3	
	Electives or SFE		9	
5.229	Intro. to Interviewing			3
	Electives or SFE			12
		15	15	15

**Supervised Field Experience**

Students may, upon the recommendation of the program coordinator, receive transfer or non-transfer college credit by participating in Supervised Field Experience (SFE). Further information may be found in the Cooperative Work Experience section of this catalog.

**CJA 111-3 Introduction to Criminal Justice Administration**  
 3 class hrs/wk 3 cr. F/W/Sp

Historical development of law enforcement; analysis of current crime picture; criminal behavior; professional career orientations; constitutional law enforcement. CJA 113 not open to students who completed CJS 211 prior to September 1974.

**CJA 211 Concepts of Criminal Law I**  
 3 class hrs/wk 3 cr. W

Historical development, philosophy of law and constitutional provisions; definitions, classification of crimes, and their application to the system of administration of justice; legal research, study of case law, methodology, and concepts of law as a social force. Prerequisite: CJA 111 or consent of instructor. Not open to students who completed CJS 212 prior to September 1974.

**CJA 212 Introduction to Criminal Law II**  
 3 class hrs/wk 3 cr. Sp

Developmental history in English common law and U.S. case law, constitutional and statutory provisions relating to arrest, search, and seizure. Rights and responsibilities of citizens and criminal justice personnel and agencies. Prerequisite: CJA 111 or consent of instructor. Not open to students who completed CJS 5.220 prior to September 1974.

**CJA 213 Legal Aspects of Evidence**  
 3 class hrs/wk 3 cr. F/W

Origin, development, philosophy and constitutional basis of evidence; constitutional and procedural considerations affecting arrest, search, and seizure; kinds and degrees of evidence and rules governing admissibility; judicial decisions interpreting individual rights and case studies.

Prerequisite: CJA 111 or consent of instructor.

**CJA 214 Introduction to Criminal Investigation**  
 3 class hrs/wk 3 cr. W

Fundamentals of criminal investigation, theory and history; crime scene to courtroom with emphasis on techniques appropriate to specific crimes.

Prerequisite: CJA 111 or consent of instructor.

**CJA 219 Community Relations**  
 3 class hrs/wk 3 cr. F

An in-depth exploration of the roles of the Administration of Justice practitioners and their agencies. Interrelationships and role expectations among the various agencies and the public. Principal emphasis will be placed upon the professional image of the system of Justice Administration and the development of positive relationships between members of the system and the public.

Prerequisite: CJA 111 or consent of instructor.

**5.220 Concepts of Enforcement Services**  
 3 class hrs/wk 3 cr. F

Exploration of theories, philosophies, and concepts related to the role expectations of the line enforcement officer. Emphasis is placed upon the patrol, traffic, and public service responsibilities and their relationship to the administration of justice system.

Prerequisite: CJA 111 or consent of the instructor.

**5.225 Introduction to Corrections**  
 3 class hrs/wk 3 cr. Sp

An examination of the total correctional process from law enforcement through the administration of justice, probation, prisons and correctional institutions, and parole. History and philosophy, career oriented.

Prerequisite: CJA 111. or consent of instructor.

5.229 Intro. to Interviewing  
3 class hrs/wk 3 cr. Sp

Introduction to approaches of behavior modification through interviewing and counseling. An overview of the techniques available to entry level practitioners in corrections in counseling and interviewing. Create an awareness of advanced methods utilized by professional counselors. Traces the development of positive relationships between the client and corrections personnel. Prerequisite: CJA 111, or consent of instructor.

5.230 Fundamentals of Crime and Delinquency  
3 class hrs/wk 3 cr. F

An introduction to major types of criminal behavior, role careers of offenders, factors which contribute to the production of criminality or delinquency: methods used in dealing with violators in the justice system; the changing roles of police, courts, and after-care process of sentence, probation, prisons, and parole: changes of the law in crime control and treatment processes. Prerequisite: CJA 111 or consent of instructor.

5.231 Civil Procedures  
3 class hrs/wk 3 cr. F

Fundamentals of the law of contracts, torts, and personal property, including liens, landlords and tenant as they apply to the criminal justice system.

5.233 Institutions and Agencies  
3 class hrs/wk 3 cr. W

History, objectives, and evaluation of community, state, and federal agencies involved in the disposition of offenders and potential delinquents. Prerequisite: CJA 111 or consent of instructor.

5.236 Introduction to Juvenile Delinquency  
3 class hrs/wk 3 cr. Sp

Definition, development and patterns of delinquent behavior; institutional controls and treatment; legal methods of dealing with delinquency. Prerequisite: CJA 111 or consent of instructor.

1.200/WE 201 Supervised Field Experience  
3-16 cr. F/W/Sp

Supervised Field Experience is a course designed to give the student actual work experience which closely parallels his field of study. Further information is available in the Cooperative Work Experience section of this catalog.

1.201 Field Experience Seminar  
1 cr. F/W/Sp

Refer to the Cooperative Work Experience section of this catalog.



## drama and speech

The speech and drama curricula is designed to provide skill-building opportunities in spoken inter- and intra-personal communication as well as performance and technical opportunities in theatre. All courses satisfy lower division college transfer requirements for those students seeking the bachelor's degree, but also offer professional instruction for those students whose interests are primarily vocational or avocational.

TH 202 Introduction to Theatre  
3 class hrs/wk 3 cr. W

A survey of theatre from ancient Greece to the present. The course follows the development of dramatic literature, performers, theatre facilities and organizations. The course also includes a more detailed look at modern theatre operations.

TH 248 Fundamentals of Acting  
3 class hrs/wk 3 cr. F/W/Sp

Classroom activities designed to develop skills in improvisation, pantomime, movement and voice. The course is designed to: provide basic training in the art of acting; increase the student's understanding of the performing artist; increase the student's sensitivities in communication situations. This is an experience-oriented class.

TH 249 Stagecraft  
3 class hrs/wk 3 cr. W

A theoretical and practical introduction in theatre support skills including: scenery construction and design, production organization, publicity, lighting and makeup. Instruction will be through lecture, group practical work and individual projects.

TH 250 Theatre Workshop  
2 - 6 lab. hrs/wk 1 - 3 cr. F/W/Sp

Any student can register for 3 credits in the following Theatre Workshop options at one credit per option. To receive credit he/she must only complete the requirements of each. Prerequisite: Permission of instructor.

**Theatre Workshop —  
(Acting Option 1)**

Credit can be received through participation as an actor in the main stage production of that quarter or through participation in a reader's theatre or experimental theatre productions. The student must be cast in the part and participate in the rehearsal and performance steps. No distinction is made on the basis of the size of the part.

**Theatre Workshop —  
(Stagecraft Option)**

Credit can be received for working a minimum of 20 hours on backstage and scene shop work during the quarter. Work times will be determined at the beginning of the quarter.

**Theatre Workshop —  
(Support Option)**

Credit can be received by working a minimum of 20 hours on support activities for theatre activities during a single quarter. This involves: ushering, publicity preparation, poster distribution, ticket distribution, running crew, costumes, makeup, stage managing, program preparation, etc. Work schedules will be determined at the beginning of the quarter.

**SP 111 Beginning Oral Communication  
3 class hrs/wk 3 cr. F/W/Sp**

An introductory course designed to give the student experience in three areas of speech communication: public address, interpersonal communication, and group discussion. Experience for the student will include informative and persuasive speeches; interpersonal exercises and task-oriented work group sessions.

**SP 112 Intermediate Oral Communication  
3 class hrs/wk 3 cr. F/W/Sp**

Further work in the areas of persuasive speaking, development of listening skills, structure and operation of formal work groups and development of leadership skills. Prerequisite: SP 111.

**SP 113 Advanced Oral Communication  
3 class hrs/wk 3 cr. W/Sp**

Advanced practical work in oral communication centering on semantics in action; group interaction and leadership; defensive and supportive communication and encounters. The course will be taught through lecture-discussion, communication exercises and related readings. Prerequisite: SP 111, 112.

**SP 229 Interpretive Reading  
3 class hrs/wk 3 cr. F/W/Sp**

The study of literature through oral performance. Analysis and performance of poetry, prose fiction, non fiction and drama. Recommended for those interested in voice, singing, elementary teaching and the study of literature.

# english

The English and Journalism curriculum is designed to provide skill-building opportunities in written communication as well as aesthetic appreciation and understanding of the various literary genres.

nai  
jā ita  
O si  
E. Da  
ahha

## Foreign Language

**RL 60, 61, 62 First Year Spanish  
3 lec/2 lab hrs wk. 4 cr. F/W/Sp**

First year of a two-year sequence. Stresses aural comprehension and oral expression for the beginning student. Must be taken in sequence.

fective  
olution  
ime....  
program  
ready to  
decrease

## Journalism

Lower-division course work in journalism taken at a community college is not required in the major and, if completed, will not be accepted toward meeting upper-division major requirements in journalism at four-year institutions. However, the courses listed below are highly recommended as elective credit for students planning a career in journalism.

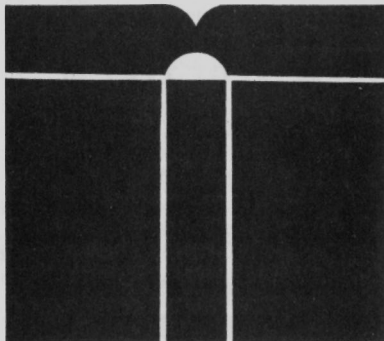
**JN 215 Journalism Laboratory: Newspaper  
3 lab hrs/wk 1 cr. F/W/Sp**

Work on the student newspaper. The lab for JN 216, JN 217, and JN 218.

**JN 216 Reporting I  
3 class hrs/wk 3 cr. F/W/Sp**

Basics of reporting news. Students will learn interview and research techniques, practice writing clearly, and study journalistic standards. JN 215 required in conjunction with this course.

- JN 217 Reporting II**  
3 class hrs/wk 3 cr. Sp  
Methods of gathering and organizing material for multiple-source, multiple-fact stories, as well as increased exposure to professional newsmen. JN 215 required in conjunction with this course.
- JN 218 Copy Editing and Makeup**  
3 class hrs/wk 3 cr. F/W  
Copy reading, head writing, proofreading and makeup. JN 215 required in conjunction with this course.
- JN 224 Introduction to Mass Communications**  
3 class hrs/wk 3 cr. F  
A survey course for students interested in understanding rules and issues involving print and electronic media in a democratic society.
- 3.165 Photojournalism**  
3 class hrs/wk 3 cr. W  
An introduction to the history and practices of photojournalism. Students will study the technological and artistic development of the craft, as well as the mediums it can be carried in. Lectures and projects will provide a basic understanding of and competence in the discipline.



## Literature

- EN 101, 102, 103, Survey of English Literature**  
3 class hrs/wk 3 cr. F/W/Sp  
Study of the principal works of English literature based on readings selected to represent great writers, literary forms and significant currents of thought. Provides both an introduction to literature and a background that is useful in the study of other literature and other fields of cultural history. (101) Chaucer through Milton; (102) Defoe through Wordsworth and Keats; (103) Browning to the present.
- EN 104 Introduction to Literature**  
3 class hrs/wk 3 cr. F/W/Sp  
An introduction to the art of narrative fiction (the short story and the novel) through a careful reading and discussion of numerous American, English and European short stories and a novel, all of which serve as outstanding examples of the genre.
- EN 105 Introduction to Literature**  
3 class hrs/wk 3 cr. F/W/Sp  
An introduction to drama as it was developed in ancient Greece and transmitted to successive historical periods up to the present time. The course introduces the student to Greek, Medieval, Shakespearian, and modern plays. It stresses conventions of drama as they developed in succeeding historical periods.
- EN 106 Introduction to Literature**  
3 class hrs/wk 3 cr. F/W/Sp  
The study of poetry and the nature of literary experience through the reading of great poetry, drawn from American, English, and world literature. Works are read in entirety when possible with emphasis on such elements as structure, style, imagery, figurative language, and musical devices.
- EN 199 The Literature of Science Fiction**  
3 class hrs/wk 3 cr. F  
Science fiction, according to Isaac Asimov, is the literature "concerned with the impact of scientific advance upon human beings." From that starting point, the course reviews the history of science fiction, or its predecessors, from the Greeks through Jules Verne and H.G. Wells to Asimov, Ray Bradbury, Arthur Clarke and Andre Norton. The course will focus upon contributions of twentieth-century writers.
- EN 199 The Bible as Literature**  
3 class hrs/wk 3 cr. Sp  
The course surveys selected Old and New Testament readings in order to acquaint students with the literary forms, styles and content of biblical materials; and to point to literature's indebtedness to the biblical heritage.
- EN 201, 202, 203, Shakespeare**  
3 class hrs/wk 3 cr. F/W/Sp  
A chronological reading of the important plays—comedies, tragedies, and histories—with emphasis upon Shakespeare as a dramatist and poet. The background of the Elizabethan period, its dramatic tradition, its theater, and its culture, is also emphasized. (201) Histories; (202) Tragedies; (203) Comedies.
- EN 253, 254, 255 Survey of American Literature**  
3 class hrs/wk 3 cr. F/W/Sp  
A study in the development of the literature of the United States from its beginning to the present day through intensive reading of significant authors representing major literary periods. Provides an understanding and appreciation of American culture as expressed in literature. (253) Puritanism through the Civil War; (254) Transcendentalism to the beginning of Realism; (255) Realism and Naturalism to the present.



## Writing

**Wr 121 English Composition**  
3 class hrs/wk 3 cr. F/W/Sp

A study of the elements of English Composition intended to develop skill in writing and understanding expository prose. Special attention to correctness of fundamentals, organization and development of a unified theme. Frequent written themes and tutorial conferences.

**Wr 122 English Composition**  
3 class hrs/wk 3 cr. F/W/Sp

A study of the procedures and methods used to produce the research paper. Special attention is given to library research techniques and the organization and development of argumentative research writing to include bibliographical development, note taking, and outlining. Prerequisite: Wr 121.

**Wr 123 English Composition**  
3 class hrs/wk 3 cr. F/W/Sp

A study of creative writing that examines the compositional design of the poem, the play, the short story, and makes application of these modes in the student's writing experiences. The course places primary emphasis on developing the writing of each student by providing him with opportunities to examine, explore, and experience the imaginative writing process. Prerequisite: Wr 121.

**1.101 Communication Skills I**  
3 class hrs/wk 3 cr. F/W/Sp

An open-ended, programmed-learning approach to basic usage and grammatical skills. The approach is clinical in nature. Students progress at their own speed. Pre-test performance may excuse students from one or all units. Individual assistance is emphasized.

**1.102 Communication Skills II**  
3 class hrs/wk 3 cr. F/W/Sp

A course dealing with basic rhetorical skills emphasizing expository writing. Not open-ended, the approach is more traditional. Practice in business oriented as distinguished from academic writing is stressed. Prerequisite: 1.101.

**1.112 Technical Report Writing**  
3 class hrs/wk 3 cr. F/W/Sp

A course designed to provide the technological or scientific student with intensive research and writing practice in his own field. Individual instruction is emphasized so that the student engages only in writing projects specifically applicable to his needs. One major paper integrated with a class project will constitute the major element in the course. Prerequisite: 1.101 or equivalent.

## CREATIVE WRITING

**Wr 241 Intro. to Imaginative Writing**  
3 class hrs/wk 3 cr. F/W

A course which deals with the elements of fiction (dialogue, setting, characters, tone) by first analyzing the story of the established writers and then applying the knowledge gained to the student's own work. Major emphasis placed on individual development as a creative writer.

**Wr 242 Intro. to Imaginative Writing**  
3 class hrs/wk 3 cr. W/Sp

A course in poetry writing which introduces the student to major concerns of technique and form by studying the writing of accomplished poets and experimenting with these discoveries in his own writing. Major emphasis is placed upon the development of individual work or consent of instructor.

**Wr 243 Intro. to Imaginative Writing**  
3 class hrs/wk 3 cr. W/Sp

An advanced course in style and technique designed to intermix studies of poetry and fiction in such a manner as to complement each other. Major emphasis will be placed upon revision of work in progress. The course is conducted in a workshop fashion. Prerequisite: Wr 241 or Wr 242, or consent of instructor.



# graphic communi- cations

Graphic Communications is a 90 hour, Associate Degree program in which students have the option of majoring either in commercial art or graphic production technology. The curriculum requires 18 hours of general education, 14-26 hours of elective credit, 23 hours of basic graphic courses, and 23-35 hours of specialized training in the graphic field of major interest.

Vocational opportunities for those majoring in graphic production technology include: photographer, stripper, darkroom technician, platemaker, duplicating machine operator, offset press helper, silk screen printer, cameraman, bindery helper, type-setter, and electronic graphics analyst.

Vocational opportunities for those majoring in commercial art include: sign painter, showcard painter, commercial illustrator, window designer, ad layout designer, brochure designer, educational media designer and illustrator, newspaper layout and paste-up, photographer's assistant, darkroom assistant, director of photographic advertising, silk screen printer.

Candidates for the associate degree in graphic communications must complete the following courses.

**Commercial Art**

Freshman Year				
Course No.	Course Title	F	W	Sp
3.150	Intro. to Graphic Communication	3		
3.151	Publication Design	3		
AR 195	Basic Design	3		
AR 291	Drawing Fundamentals	3		
1.101	Communication Skills I P.E. Activity	3 1		
3.170	Art Tools		3	
3.158	Typography		3	
3.162	Intro. to Photography		3	
AR 282	Intermediate Drawing		3	
1.102	Communication Skills II P.E. Activity		3 1	
3.154	Sign Writing			3
3.152	Layout and Pasteup Procedures			3
AR 281	Figure Drawing			3
3.180	Publications Lab P.E. Activity Elective			2 1 3
		16	16	15

Sophomore Year				
Course No.	Course Title	F	W	Sp
3.172	Commercial Illustration I	3		
3.166	Graphic Production I	3		
HE 250	Personal Health	3		
3.180	Publication Lab Elective	2 3		
3.173	Commercial Illustration II		3	
3.180	Publication Lab		2	
4.124	Technical Drawing I Electives		2 7	
3.174	Commercial Illustration III			3
4.123	Technical Illustration			3
4.115	Presentation Drawing Electives or SFE			2 7
		14	14	15

**Graphic Production Technology**

Freshman Year				
Course No.	Course Title	F	W	Sp
3.150	Intro to Graphic Communication	3		
3.151	Publication Design	3		
AR 195	Basic Design	3		
1.101	Communication Skills I	3		
HE 250	Personal Health P.E. Activity	3 1		
3.162	Introduction to Photography		3	
3.158	Typography		3	
1.102	Communication Skills II		3	
2.501	Typing I P.E. Activity Elective		2 1 3	
3.164	Basic Graphic Arts Photography			3
3.152	Layout and Pasteup Procedures			3
2.505	Typing V P.E. Activity Electives			2 1 6
		16	15	15

Sophomore Year				
Course No.	Course Title	F	W	Sp
3.166	Graphic Production I	3		
3.181	Production Lab	2		
2.505	Typing V Electives	2 8		
3.167	Graphic Production II			4
3.182	Typesetting			2
3.181	Production Lab			2
4.124	Technical Drawing I Electives			2 4
3.168	Graphic Production III			4
3.181	Production Lab Electives or SFE			2 9
		15	14	15

**Supervised Field Experience**

Students may, upon the recommendation of the program coordinator, receive transfer or non-transfer college credit by participating in Supervised Field Experience (SFE). Further information may be found in the Cooperative Work Experience section of this catalog.

**3.150 Introduction to Graphic Communications**  
3 class hrs/wk 3 cr. F  
A survey course that explores the field of Commercial Art, Advertising Design, Illustration, Printing and related areas. The basic printing processes of silkscreen, letterpress, offset and gravure printing are examined for operation and application to specific printing jobs. Also included is a study of printing papers.

**3.151 Publication Design**  
3 class hrs/wk 3 cr. F  
An introduction to arranging the elements of printed media. Students will learn to arrange heads, pictures, and body type for maximum unity, readability, and aesthetic effect. Lectures and design projects are intended to give the student a fundamental understanding and competence in the tasks of publication and advertising art direction.

**3.152 Layout and Paste-up Procedures**  
2 lec/4 lab hrs/wk 3 cr. Sp  
The preparation of mechanical art. The terminology and practice of layout, pasteup, headlines, and body copy. Use of headliner, body copy setter, lucigraph and related tools. Imposition, binding, diecutting, sealing and positioning of illustrative matter, the screen print of "Velox" reverse copy, screen tints, mechanical assembly, overlays, color preparation, the preparation of mechanical art and preparation of illustrations. Also included are line art, halftone art.

**3.154 Sign Writing**  
2 lec/4 lab hrs/wk 3 cr. Sp  
Introduction to merchandising and display projects involving two and three dimensional graphic, structural and marketing solutions; stressing suitability of concept, design, and color of the product. Point of sale, direct mail, editorial, window, point of purchase and other graphic design projects. Materials and methods of printing, cutting and folding are explored to elicit both tactile and visual expression. \$5.00 lab fee.

**3.158 Advertising Typography**  
2 lec/4 lab 3 cr. W  
Type layout and design. Hand lettering for the artist is studied on the basis of standard and unusual type faces, number and letter forms. Finished production lettering, type specifications and indications, and calligraphy as an element of typographical design. The use of the phototypesetter, phototype, and the new transfer lettering sheets are studied.

**3.162 Introduction to Photography**  
1 lec/4 lab 3 cr. F/W/Sp

An introduction primarily to black and white, but including, color photography. Students will calculate their exposures, develop film, and print enlargements. The course will primarily include instruction on the 35 mm. cameras, lenses, film, filters, lighting, photographic chemistry, composition, and printing techniques. Demonstrations and individual projects. Students must provide own camera. \$5.00 lab fee.

**3.164 Basic Graphic Arts Photography**  
2 lec/4 lab 3 cr. Sp

An introduction to Graphic Arts Photography. Uses of the process camera will be emphasized. The course will concentrate on such lithographic pre-press steps as line and halftone negative preparation, opaquing, stripping, and platemaking. Demonstrations and individual projects.

**3.166 Graphic Production I**  
1 lec/4 lab 3 cr. F

Introduction to graphic production techniques with special emphasis on letterpress, silk screen, and screenless processes. Students engage in type setting, make-up, make-ready, and lock-up activities. Practice in silk screen printing and imagery by various techniques. Introduction to screenless printing techniques by involving collotype and optak processes, and the dry offset process. Assigned projects and critiques.

**3.167 Graphic Production II**  
2 lec/4lab 4 cr. W

Introduction to the theory and practice of offset lithography. Preparation of the lithographic negative, stripping and opaquing. Lithographic plates, duplicates, conversions. Press operation, inks, and water systems. Project assignments and critiques. Prerequisite: 3.163 (Photography II) or consent of instructor. \$5 lab fee.

**3.168 Graphic Production III**  
2 lec/4 lab 4 cr. Sp

Advanced theory and practice of offset lithography. Special emphasis is given simple process and multi-color reproduction. Skill building in ink mixing, plate and blanket packing and register. Students do their own photography, drawing, negatives, strip their work, make and develop plates and print projects on a variety of papers. Prerequisite: Graphic Production I or consent of instructor. \$5 lab fee.

**3.170 Art Tools and Their Application**  
2 lec/4 lab 3 cr. W

The use of the artists' tools. Pen and ink, brushes, water colors, designers gouache, markers, inks, fixatives, colored pencils, washes, compass, rapidographs, air brush, drying equipment, pastels, matt knives, tapes, drafting machines, pencil pointers, templates, acrylics. Weekly class projects explore and develop skill in using the artist's tools. The course intent is to make the student aware of the techniques used by the commercial artist.

**3.172 Commercial Illustration I**  
2 lec/4 lab 3 cr. F

A basic course in illustration for reproduction. Weekly projects explore the various methods and techniques of commercial illustration. The preparation of illustrated matter including visual instruction materials. Students may specialize in their chosen area of interest. Layout and design are of primary intent. Matting, framing presentation, papers, board, effects, are all discussed. Prerequisite: Art Tools and Their Application or consent of instructor.

**3.173 Commercial Illustration II**  
2 lec/4 lab 3 cr. W

An advanced course in commercial illustration. Layout and design and effects of color on various subjects are included. Proposed use for reproduction is of prime consideration. Projects cover a wide application of materials, techniques, and styles. Students may choose their area of interest. Prerequisite: Commercial Illustration I or consent of instructor.

**3.174 Commercial Illustration III**  
2 lec/4 lab 3 cr. Sp

An advanced course in color and black and white illustration. Individual work and study is emphasized. The student may choose his area of interest. Prerequisite: Commercial Illustration II or consent of instructor.

**3.180 Publications Lab**  
4 lab hrs/wk 2 cr. F/W/Sp

Students work on the student newspaper to gain practical experience in the application of graphic arts skills. Maximum of 6 credits.

**3.181 Production Lab**  
2 - 10 lab hrs/wk 1 - 5 cr. F/W/Sp

Students whose primary interest is in graphic production technology may select the Graphics Department of the LRC to gain practical experience with hands-on operation of offset presses and associated graphic equipment. Maximum of 6 credits. Prerequisite: Graphic Production II.

**3.182 Typesetting**  
4 lab hrs/wk 2 cr. W

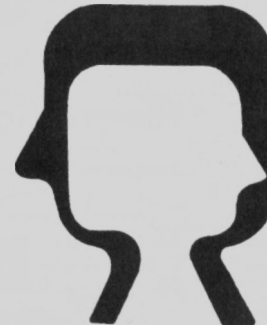
Introduction to various methods of setting type for publication. Students will learn to operate justo-writers, the Moris and Phototypesetter, the Compu-graphic, Jr. and the Compugraphic CG 7200 headliner \$5.00 lab fee.

**1.200/WE 201 Supervised Field Experience**  
3-16 cr. F/W/Sp

Supervised Field Experience is a course designed to give the student actual work experience which closely parallels his field of study. Further information is available in the Cooperative Work Experience section of this catalog.

**1.201 Field Experience Seminar**  
1 cr. F/W/Sp

Refer to the Cooperative Work Experience section of this catalog.



# human services

The Human Service Curriculum is designed to coordinate pre-professional experience and general educational opportunities for employed human service

agency personnel, persons seeking employment in the human service system, and students desiring pre-professional training in human services requiring advanced degrees beyond the lower division transfer level.

The curriculum consists of a basic core of 8 credit hours required of all human service majors. The Human Service Certificate may be achieved upon completion of the basic core in combination with additional course work in either child care or adult services. Forty-five credit hours of course work, lab experience, and supervised work experience are required.

The Child Development Option is designed to prepare child care personnel for employment with public and private child caring agencies, preschools, day care centers, residential treatment facilities and certain positions within the public school system such as teaching assistant and classroom aide.

The Adult Service Option is designed to prepare adult service personnel for employment with public and private adult caring agencies, activity centers, day programs and residential care facilities and certain positions within the social service system such as intake worker, field caseworker and counseling aide.

**Basic Core**

Course No.	Course Title	Credits
7.130	Human Service Systems and Personnel	3
7.148	Interviewing Procedures	3
7.153	Behavioral Objectives	2
		8

**Child Care Option**

Course No.	Course Title	F	W	Sp
7.150	Child Care Practice I	3		
7.153	Behavioral Objectives	2		
7.135	Ages/Stages: Introduction	2		
7.180	Supervised Placement Electives	4		3
7.130	Human Service Systems/Personnel			3
7.148	Interviewing Procedures			3
7.151	Child Care Practice II			3
FL 225	Child Development			3
7.180	Supervised Placement			4
7.145	Health of Young Children			3
7.137	Ages/Stages: Adolescence			3
7.180	Supervised Placement or SFE Electives			4
		14	16	15

**Adult Services Option**

Course No.	Course Title	F	W	Sp
7.142	Ages/Stages: Early Adult	3		
Soc 199	Women's Studies	3		
HE 250	Personal Health	3		
7.140	Techniques of Observing Behavior	1		
7.153	Behavioral Objectives Electives	2		3
7.143	Ages/Stages: Middle Years			3
FL 223	Family Living			3
HE 252	First Aid			3
7.130	Human Service Systems/Personnel			3
7.148	Interviewing Procedures			3
7.141	Techniques of Recording Behavior		1	
7.144	Ages/Stages: Later Years			3
1.606	Psychology of Human Relations			3
FL 240	Contemporary American Families Electives			5
		15	16	14

**Supervised Field Experience**

Students may, upon the recommendation of the program coordinator, receive transfer or non-transfer college credit by participating in Supervised Field Experience (SFE). Further information may be found in the Cooperative Work Experience section of this catalog.

**7.130 Human Services Systems and Personnel**  
3 class hrs/wk 3 cr. W

Survey of current systems of service provision. Particular emphasis on trends applicable to Oregon. Review of historical perspective of social welfare organizations. Identification of manpower trends and task description analysis. Career opportunities.

**7.135 Ages and Stages: Introduction**  
2 class hrs/wk 2 cr. F

Multidisciplinary introduction to the study of human growth and development. Includes historical, philosophical, anthropological, sociological, psychological and biological perspectives.

**7.137 Ages and Stages of Human Development: Adolescence**  
2 lec/2 lab 3 cr. Sp

Continuation of Ages and Stages sequence. Focus attention on adolescent behaviors, life styles and self-determination factors.

**7.140 Techniques of Observing Behavior**  
1 class hr/wk 1 cr. F

Introduction to behavioral observation techniques.

**7.142 Ages and Stages: Early Adult**  
3 class hrs/wk 3 cr. F

Multidisciplinary approach to the early adult development phase. Includes contemporary problem review and life style impact. Continues ages and stages perspective to the study of human growth and development.

**7.143 Ages and Stages: Middle years**  
3 class hrs/wk 3 cr. W

Continuation of Ages and Stages adult sequence. Includes recognition of the conflicts between youthful expectations and maturity limitations. Emphasis focuses attention on satisfactions of accepting mature self-concepts and relationships.

**7.144 Ages and Stages: Later Years**  
3 class hrs/wk 3 cr. Sp

Continuation of Ages and Stages adult sequence. Includes practiced considerations of the aging process from various perspectives. Pleasures and joys of the retirement years. Acceptance of closures.

**7.145 Health of Young Children**  
3 class hrs/wk 3 cr. W

Components of healthful environment. Child care agency personnel responsibility for developing procedures of screening, prevention, diagnosis and referrals. Teaching techniques of nutrition, self care and general health. "Health is defined as a state of complete physical, mental and social well being, not merely the absence of disease or infirmity". (World Health Organization).

**7.148 Interviewing Procedures**  
2 lec/2 lab hrs/wk 3 cr. W

Introduction to the role of interviewer. Practical skill training and opportunities to develop professional attitude toward interviewee-interviewer relationship.

**7.150 Child Care Practice I**  
2 lec/2 lab hrs/wk 3 cr. F

Analysis of alternatives to parental care. Examination of standards, methods, and programs related to the formation and maintenance of child care services, such as day care centers, family day care, foster care and institutions. Emphasis on family need and feasibility of maintaining specific programs.

**7.151 Child Care Practice II**  
2 lec/2 lab hrs/wk 3 cr. W

Methods of establishing environment for learning, physical development and emotional growth. Guidance



techniques appropriate for teaching language, social and manipulative skills within group setting.

**7.153 Behavioral Objectives**  
2 class hrs/wk 2 cr. F  
Identification of behavioral goals and preparation of plan for behavioral change.

**7.180 Supervised Placement**  
2 lec./4 lab hrs/wk 4 cr. F/W/Sp

Work in child development laboratory setting under the direction of teaching person. Assignment may include material preparation, skill training, and specific care tasks. Weekly class session will permit students from various placements to share in common learning experiences with peers and to tie placement activity to training objectives. Prerequisite: Instructor's consent.

**1.200/WE 201 Supervised Field Experience**  
3-16 cr. F/W/Sp

Supervised Field Experience is a course designed to give the student actual work experience which closely parallels his field of study. Further information is available in the Cooperative Work Experience section of this catalog.

**1.201 Field Experience Seminar**  
1 cr. F/W/Sp

Refer to the Cooperative Work Experience section of this catalog.



## music

The music curriculum is designed to provide skill building opportunities in vocal and instrumental music and to develop aesthetic appreciation and theoretical knowledge. The majority of classes are designed to satisfy lower division college transfer requirements for those students seeking the bachelor's degree, but offer as well professional instruction for those students whose interests are primarily vocational or avocational.

**Mu 111, 112, 113 Music Theory I**  
4 class hrs/wk 4 cr. F/W/Sp

Work in the elements of music science (melodic, harmonic, and rhythmic) taught through analysis of the

styles of Bach, Haydn, Mozart, and other eighteenth and nineteenth century composers. Must be taken in sequence.

**Mu 180 Class Lessons in Guitar**  
2 class hrs/wk 1 cr. F/W/Sp

A classroom instruction situation that deals with individual problems to the extent possible. Designed for beginning and intermediate students.

**Mu 195 Band**  
2 class hrs/wk 1 cr. F/W/Sp

Open to all students with reasonable proficiency on a band instrument. To offer rehearsal and performance opportunities in concert, pep, and stage band literature. Music selected will vary depending on the instrumentalization of the class and the proficiency of the students.

**Mu 201, 202, 203 Intro. to Music and Its Literature**  
3 class hrs/wk 3 cr. F/W/Sp

Cultivation of understanding and intelligent enjoyment of music through a study of its elements, forms, and historical styles. (201) Music Forms, (202) Middle Ages to Classical, (203) Romantic to contemporary. Need not be taken in sequence.

**Mu 211, 212, 213 Music Theory II**  
3 class hrs/wk 3 cr. F/W/Sp

Study of the disciplines of hearing, performing, analyzing, improvising, and composing different kinds of music, terminology concepts, and the development of aural-visual acuity. (See also Mu 214, 215, 216) Must be taken in sequence and in conjunction with Mu 214, 215, 216. Prerequisite: Mu 111, 112, 113.

**Mu 214, 215, 216 Keyboard Harmony**  
1 class hr/wk 1 cr. F/W/Sp

Keyboard application of the theoretical principles studied in Mu 211, 212, 213. Exercises are figured-bass realization, modulation, transposition, score reading. To be taken concurrently with Mu 211, 212, 213. Prerequisite: Mu 111, 112, 113.

**Mu 190 Performance Studies**  
1 class hr/wk 1 cr. F/W/Sp

Basic individual instruction in voice (popular or classical), piano, woodwinds, brass, percussion, stringed instruments. \$37.00 tutorial tuition.

**Mu 290 Performance Studies**  
1 class hr/wk 1 cr. F/W/Sp

Advanced individual instruction in the technical and stylistic aspects of artistic solo performance. \$37.00 additional tutorial tuition.

**Mu 197(C) Chorus (Concert Choir)**  
2 class hrs/wk 1 cr./3 cr. max. F/W/Sp

A performance oriented class, practice in performance material as well as music that presents different problems and styles in singing.

**Mu 297(C) Chorus (Concert Choir)**  
2 class hrs/wk 1 cr./3 cr. max. F/W/Sp

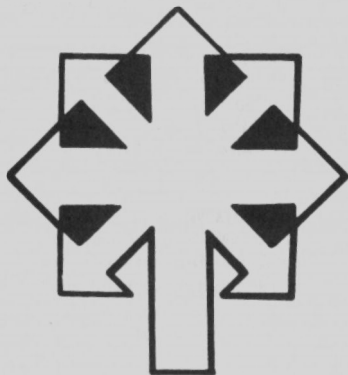
Advanced opportunities in concert choir. Prerequisite: Mu 197C.

**Mu 197(S) Chorus (Swing Choir)**  
3 class hrs/wk 2 cr./6 cr. max. F/W/Sp

Performance of popular vocal arrangements. Exploration of various swing choir concepts. Audition required for enrollment.

**Mu 297(S) Chorus (Swing Choir)**  
3 class hrs/wk 2 cr./6 cr. max. F/W/Sp

Advanced opportunities in swing choir. Audition required for enrollment. Prerequisite: Mu 197S.



## philosophy and religion

The philosophy curriculum is designed to provide an awareness and understanding of civilized man's ethical, moral, and religious thought and the process of his ability to reason critically. All courses carry college transfer credit.

**PH 201 Problems of Philosophy**  
3 class hrs/wk 3 cr. F/W

An introduction to some of the basic questions of philosophy and a study of the ways in which these problems have been treated. The study includes readings from most of the important philosophers.

**PH 202 Elementary Ethics**  
3 class hrs/wk 3 cr. W/Sp

An introduction to the study of morality. Deals with questions of right, free will, duty, good, etc. Some major ethical systems will be used.

**PH 203 Elementary Logic**  
3 class hrs/wk 3 cr. Sp

An introduction to the study of logical understanding. Emphasis will be placed upon recognizing, analyzing and criticizing various arguments and proofs.

**PH 204 Philosophy of Religion**  
3 class hrs/wk 3 cr. F

An introduction to the philosophical analysis and justification of religious claims and concepts, e.g., God, the soul, immortality.

**RE 201 Religions of the World**  
3 class hrs/wk 3 cr. F

The origin, thought, and practices of the world's major religions.

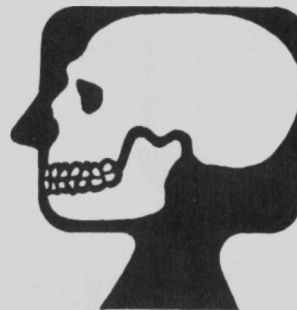
**RE 202 The Old Testament & its Backgrounds**  
3 class hrs/wk 3 cr. W

A study of the conditions that effected the production of the Old Testament. This includes a historic and cultural view of the Hebrew people.

**Re 203 The New Testament & its World**  
3 class hrs/wk 3 cr. Sp  
A study of the influences that produced the New Testament. This will include not only the religious and social content but also the literary styles.

## social science

The general objective of the social science curricula is to develop in the student accurate and extensive knowledge of society (past and present) and the activities of its members. Specific content fields are anthropology, the study of the varieties of man's physical and cultural characteristics; economics, the study of the things man wants and how he goes about getting them; geography, the study of man's relationship to the surface of the earth and its climates, plants, animals and natural resources; history, the study of man in relationship to his recorded past; political science, the study of man's political institutions, or of the principles, organization, and methods of government; psychology, the study of man's individual behavior; and sociology, the study of man's group interaction, the forms of organization of social groups, the relationships among them, and group influences on individual behavior.



### Anthropology

Recommended for students planning to major in anthropology. Also may be used to fulfill general education requirement in social science. Transfer students should not complete both Anth 101, 102, 103 and Anth 207, 208, 209.

**Anth 101 General Anthropology**  
3 class hrs/wk 3 cr. F

Examination of man's morphological variation and physical evolution. (Physical Anthropology)

**Anth 102 General Anthropology**  
3 class hrs/wk 3 cr. W

Examination of man's prehistorical cultural traditions, i.e., those which have no living bearers. (Archeology)

**Anth 103 General Anthropology**  
3 class hrs/wk 3 cr. Sp

Examination of man's cultural variation throughout the historical world. (Cultural Anthropology)

**Anth 207 Cultural Anthropology**  
3 class hrs/wk 3 cr. F

Examination of man's cultural traditions at the band and tribal-chieftdom levels, including discussion of the major theoretical concepts of cultural anthropology that apply to this level of cultural evolution.

**Anth 208 Cultural Anthropology**  
3 class hrs/wk 3 cr. W

Examination of state level cultural traditions (industrial and preindustrial), with major theoretical concepts of cultural anthropology that apply to that level of cultural evolution as well as ethnographic examples.

**Anth 209 Cultural Anthropology**  
3 class hrs/wk 3 cr. Sp

Examination of the process of growth and diversification of culture; a look at culture change in its many aspects, i.e., evolutionary, adaptive (or acculturative) and applied (or directed) change.



## Economics

**Econ 201 Principles of Economics**  
3 class hrs/wk 3 cr. F

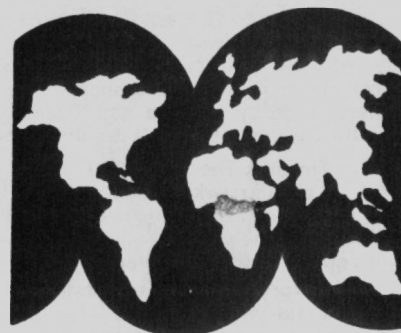
Introduction to Micro-Economics theory, policy, and institution. Includes principles underlying production, exchange and distribution.

**Econ 202 Principles of Economics**  
3 class hrs/wk 3 cr. W

Introduction to Macro-Economics theory, policy and institution. Includes practical problems relating to monetary and banking policy, consumption, investment, unemployment and inflation. Prerequisite: Econ 201.

**Econ 203 Principles of Economics**  
3 class hrs/wk 3 cr. Sp

Introduction to international economics and economic development. Includes principles underlying international trade, trade regulations, exchange rates, economic development in both developing, and developed parts of the world. Prerequisite: Econ 202



## Geography

**Geog 105 Introductory Geography**  
3 class hrs/wk 3 cr. F

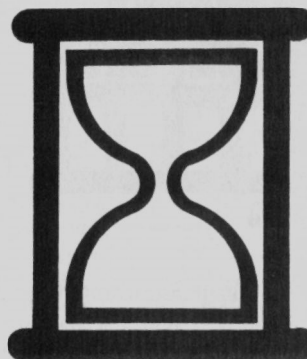
An introductory analysis of the physical aspects of the geographic landscapes, with emphasis on the genesis and characteristic features of climate, vegetation, soil, and land from zones of the earth's surface and their areal associations.

**Geog 106 Introductory Geography**  
3 class hrs/wk 3 cr. W

Survey of human occupants patterns of the world to aid in understanding special differences in people and environments.

**Geog 107 Introductory Geography**  
3 class hrs/wk 3 cr. Sp

Survey of the location, characteristics and relationships of world economic activities.



## History

**Hst 101 History of Western Civilization**  
3 class hrs/wk 3 cr. F/W

Origins and development of Western Civilization from ancient times to the end of the Middle Ages. Emphasis is placed on the important influence of the Greeks and Romans to modern times.

**Hst 102 History of Western Civilization**  
3 class hrs/wk 3 cr. W/Sp

The Renaissance, with its primary emphasis on Man, the development of nations, and the French Revolution, all represent the beginnings and early development of modern times.

**Hst 103 History of Western Civilization**  
3 class hrs/wk 3 cr. F/Sp  
The study of the political, economic, social, and religious institutions which have shaped the 'modern man'. Also, a study of the significant men and women who have influenced man's development.

**Hst 199 Towards The Year 2000**  
3 class hrs/wk 3 cr. F/W/Sp  
A study of the various problems that have to be faced by our society, and the psychological adjustment to the solutions or control of these problems.

**Hst 201 History of the United States**  
3 class hrs/wk 3 cr. F/W  
An in-depth study of the exploration and colonization of the American colonies, the attainment of independence, the formation of government under the Constitution and subsequent events up to the presidency of Jackson.

**Hst 202 History of the United States**  
3 class hrs/wk 3 cr. W/Sp  
The history of the United States from the presidency of Jackson, through the Civil War and Radical Reconstruction, the conquering of the West, the ascendancy of industry, the early labor movement, and the ultimate emergence of our nation as a world power.

**Hst 203 History of the United States**  
3 class hrs/wk 3 cr. F/Sp  
An analysis of the United States in the 20th Century encompassing the 'War to end all War', The Roaring Twenties, The Great Depression, World War II, The Cold War, and the Viet Nam conflict.



### Political Science

**Ps 201 American Government**  
3 class hrs/wk 3 cr. F/W  
The first course in the three part American Government sequence. The focus is on the structure of power in the United States, the functions of and interplay among the major political institutions of the country (including: the presidency, Congress, the Courts, American corporations, etc.) and the sources and uses of power, historically and currently in American politics.

**Ps 202 American Government**  
3 class hrs/wk 3 cr. W/Sp  
The second term of the American Government sequence. The focus is public policymaking: what political institutions do and how they do it. Current policymaking issues will be used to facilitate an understanding of formulation and implementation of public policies. Also emphasis will be placed on evaluating the mechanisms and outcomes of the policy-making process.

**Ps 203 American Government**  
3 class hrs/wk 3 cr. F/Sp  
The last course in the American Government sequence. The focus is on local political institutions and the relations of citizens to them. Special emphasis is placed on examining the meaning and operation of participatory institutions and the practical difficulties of developing and maintaining democratic institutions. Substantive issues such as land use planning, neighborhood organizations, and workers democracy will be used to facilitate an understanding of citizen involvement in state and local politics.

**Ps 205 International Relations**  
3 class hrs/wk 3 cr. F/W/Sp  
This course provides a general discussion of the structural characteristics of the relations among nations with particular emphasis on the predominant economic and political mechanisms in the world today. Substantive areas emphasized include: problems of development and underdevelopment, imperialism, world environmental and resource issues and the resolution of international conflicts through military, economic, diplomatic and subversive means.

**1.124 American Institutions**  
3 class hrs/wk 3 cr. F/W/Sp  
This is a course designed to familiarize the student with the workings of the basic national and local institutions in the United States. Particular emphasis is placed on gaining a perspective on the historical background of these institutions, the functions they perform and means of evaluating this performance. The student will relate directly to various social, political and economic institutions in the community in order to develop a basis for understanding the potentials and problems in developing and maintaining democratic institutions.



### Psychology/Education

**Psy 201 General Psychology**  
3 class hrs/wk 3 cr. F/W/Sp  
An introduction to the use of objective scientific procedures in the study of behavior. A brief overview is made first of the variety of fields of psychology, then a more concentrated study is undertaken of those specialities that are closest to the students own experience - the areas of social psychology and personality. Included are discussions of mental illness as well as the everyday problems of conflict and adjustment. Sophomore standing recommended.

**Psy 202      General Psychology**  
**3 class hrs/wk    3 cr.      F/W/Sp**

This quarter begins with a tracing of the unique human growth and development patterns. Following is a survey of current knowledge about special areas of individual functioning including intelligence, language, learning and memory, motivation and perception. Throughout the discussions man is viewed in the perspective of a biological organism sharing many features in common with other animals. Prerequisite: Psychology 201.

**Psy 203      General Psychology**  
**3 class hrs/wk    3 cr.      Sp**

Primarily for the Psychology major. Some of the more technical topics omitted in Psychology 201-202 are covered here such as psychophysics, biological processes in perception, learning and memory, and comparative psychology. Students are required to complete independent research assignments to prepare them for advanced work. Prerequisite: Psychology 201-202.

**Psy 205      General Psychology**  
**3 class hrs/wk    3 cr.      Sp**

Primarily for students majoring in subjects other than Psychology. Through individual assignments, a student explores the relationships between Psychology and his chosen major. Emphasis is placed on studying applications of psychological principles to the more practical problems encountered in professional fields such as medicine, law, business, education, etc. Prerequisite: Psychology 201-202.

**Psy 111      Personal Development**  
**4 class hrs/wk    3 cr.      F/W/Sp**

Experience in interpersonal communication and group dynamics, with emphasis on the communication of feelings.

**Psy 231      Human Sexuality**  
**3 class hrs/wk    3 cr.      F/W/Sp**

Physiology, terminology and varieties of human sexual response. Emphasis will be placed upon the in-cultural and cross-cultural breadth of normal sexual expression. The kinds and treatment of sexual dysfunction, anomalous development and behavior will be considered. Prerequisite: One quarter of either Psy 201, 202, 203, or Soc 204, 205, 206; or consent of instructor.

**1.606      Intro.to Psychology of Human  
 Relations**  
**3 class hrs/wk    3 cr.      F/W/Sp**

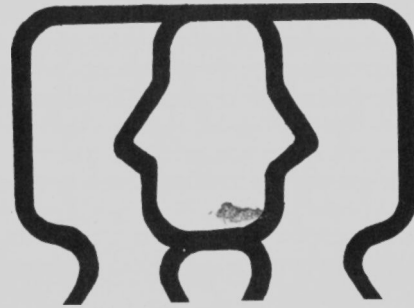
Help prepare students to solve potential work oriented individual and/or interpersonal behavioral problems. Includes study of fundamental psychological principles of development, personality, motivation, conflict, group behavior and occupational choice.

**Ed 207      Seminar**  
**1-3 class hrs/wk    1-3 cr.      F/W/Sp**

Introduction to the field of education. Not applicable toward meeting major requirements in the field of education.

**Ed 210      Theory and Practicum II A  
 (Field Experience)**  
**15 lab hrs/wk    6 cr.      F/W/Sp**

A field based program to provide students in teacher education experience in working with pupils in public elementary and secondary schools on problems related to reading, careers, the affective and cognitive development of children and youth (learning), in understanding the school as a social system, cultural diversity, behavior modification and change, and the use of educational media.



## Sociology

**Soc 199      Intro to Women's Studies**  
**3 class hrs/wk    3 cr.      F/W/Sp**

An examination of the research and theories in the area of sex-role ascription from the sociological perspective and the social stereotypes to which both men and women are expected to conform. The diversified roles and status of women in the community, their involvement in education, politics, business, economics, religion and the family are examined.

**Soc 204      General Sociology**  
**3 class hrs/wk    3 cr.      F/W**

Introduction to the sociological perspective: the components of society and social organization; culture; socialization; stratification.

**Soc 205      General Sociology**  
**3 class hrs/wk    3 cr.      W/Sp**

Analysis of major sociological institutions.

**Soc 206      General Sociology**  
**3 class hrs/wk    3 cr.      F/Sp**

Social issues and social movements. Stresses application of basic concepts to the analysis of contemporary problems in group life.

**FL 222      Marriage Preparation**  
**3 class hrs/wk    3 cr.      F**

Study of the nature of courtship and marriage; role expectations and responsibilities. Additional goals of the course are toward more self-understanding and competencies in establishing satisfactory interpersonal relationships. Topics covered include establishing a relationship, communication, conflict, self-understanding, love—its expression and dimensions, human sexuality, family finances, use of non-work time, divorce, and alternatives to marriage.

**FL 223      Family Living**  
**3 class hrs/wk    3 cr.      W**

Emphasis is placed on the relationships of the married couple and parenthood. Topics covered include role conflict, marital adjustments, crisis of marriage and resources to strengthen family life. Continued attention will be given to developing skills and competencies involved in interpersonal relationships.

**FL 225      Child Development**  
**3 class hrs/wk    3 cr.      W**

Introduction to the study of social, emotional, intellectual and physical growth and development of infants and young children. Observations in child development laboratory.

**FL240      Contemporary American Families**  
**3 class hrs/wk    3 cr.      Sp**

The student will study the family as an influence in the socialization and general development of individuals. Contemporary family practices, styles and issues as developmental factors will be discussed, and new ways of approaching family roles will be explored.

**DIRECTOR:**

William Siebler

**FACULTY:**

Virginia Bowler, Librarian

Marian Cope, Study Skills Instructor

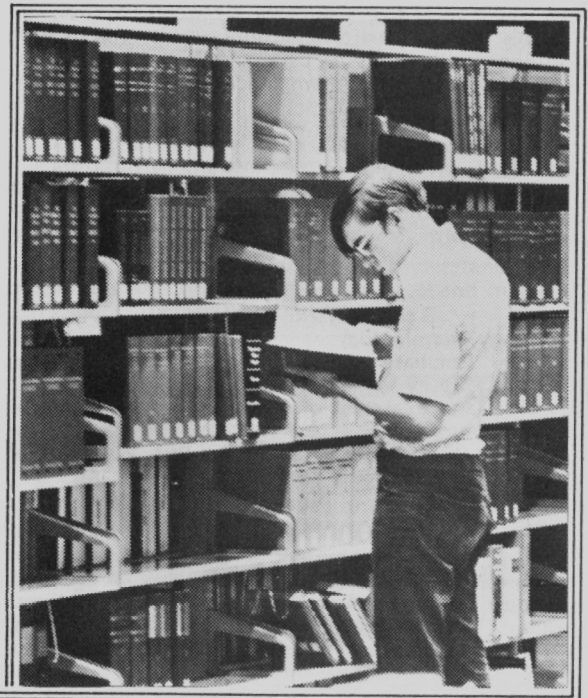
Yvonne Lee, Librarian

Charles Mann, Study Skills Instructor

Stan Ruckman, Assistant Director, Head Librarian

Paul Snyder, Instructional Media Specialist

# learning services division



The Learning Resource Center houses the Library, Media Services, Study Skills Center, Mathematics Lab and Graphic Services.

The College's Learning Resource Center is established to provide a unified approach to the support programs which serve the educational needs of the college students, faculty, and administration; providing them with comprehensive, quality instructional materials, equipment, production personnel, and facilities. Personnel are available for consultation for improving and broadening the scope of the instructional system. The primary purpose and objective of the Learning Resource Center is identical to the educational task and philosophy of the College itself.

## LIBRARY

The library maintains a balanced collection which has grown to over 25,000 volumes and subscribes to approximately 500 periodicals and newspapers. The materials and services available help make the library a total information center serving the college and the community. The library provides a basic reference collection, general index materials, and the latest books in the liberal arts, technical, and vocational fields.

As a center for many types of instructional materials, the library includes numerous pamphlets, vocational guidance materials, maps and charts, directories, and college catalogs in its collection.

Selected copies of periodicals and newspapers are stored on microfilm. Microfilm readers are available, as well as a reader-printer from which copies may be obtained. A coin-operated photo-copy machine is located in the library for making copies from books and periodicals.

Materials which are not available through Linn-Benton's library or other local sources may often be obtained through inter-library loan from the Oregon State Library, Pacific Northwest Bibliographic Center, or other libraries within the state of Oregon.

Students may receive instruction in library skills from the college librarians or in conjunction with several English classes. At all times, librarians are available to assist students in locating information and materials and in using all the services of the library.

## MEDIA CENTER/MATH LAB

The Media Center/Math Lab is designed to provide a flexible and easily used source of instruction for all Linn-Benton students. The facility is operated in cooperation with all instruction divisions and is used to provide opportunities for individual study. Included in the resources available are calculators, programmed materials, audio-visual equipment, audio tapes, video tapes, slides and filmstrips.

The Media Center/Math Lab is used as part of the mathematics program for many regularly scheduled classes. Math instructors schedule part of their time in the lab to help guide students in their studies. Materials which are available in the Center are organized so that a student can informally take an entire math course in the Center as well as mini-courses in such areas as slide-rule use, solving verbal problems, and many others.

## STUDY SKILLS CENTER

The Study Skills Center offers a program of classes and individualized instruction designed to help assure successful achievement in college courses through the improvement of reading, writing, listening, and study techniques. The college places special emphasis on the learning of basic skills, and students needing assistance are generally able to sign up for instruction any time during the quarter. The counseling staff and many faculty members refer students to the Study Skills Center when there is an indication of problems or deficiencies in various skills areas.

Students whose work in class or on diagnostic tests indicates a need for instructional assistance in the study skills areas will find the opportunity for improvement in the Study Skills Center. Students may register for regular classes, or may sign up on an individualized basis for whatever amount of time is needed. A tutorial program is also administered through the Study Skills Center to provide instructional assistance in various subject matter areas.

### 1.125 Study Skills 1 - 3 credits

Instruction in in-depth methods of study including how to budget your time, how to study for a test, various test-taking tips (essay, multiple choice, etc.), note-taking, outlining and effective listening, and library utilization. The emphasis is on application of technique, using the student's own textbooks.

### 1.126 Language Arts Skills (Individual) 1 - 3 credits

This course provides individualized instruction in English fundamentals, writing, spelling improvement, and vocabulary development. The available instruction varies from remedial and developmental to supplemental to established courses. Diagnosis, placement, and flexible scheduling are utilized to maximize effectiveness of learning.

### 1.128 Reading Skills (Individualized) 1 - 3 credits

This course provides individualized instruction in most reading skills, and in addition, study techniques and listening skills. The instruction offered is primarily remedial or developmental or supplemental to other courses. Diagnosis of deficiencies and interests of the student are used to determine placement.

### 1.130 Basic Grammar 3 credits

This course is designed to instruct students in the basic rules and practices in grammar, sentence structure, spelling, punctuation and general usage in writing. Special attention is given to individual differences and difficulties. The course is intended to prepare students who lack a satisfactory background for enrollment in English Composition or Communication Skills I.

### 1.135 Developmental Reading 3 cr.

A study of the many skills of reading which are necessary in preparing the student to meet the reading requirements placed upon him. The course is designed to meet the individual needs of the student in reading comprehension, reading rate, and vocabulary development. Many other reading skills are presented as group activities. The course may be taken three times for non-transfer credit.

### 1.156 English as a Second Language 3 credits

Designed for the students whose native language is not English. This course provides work in listening and reading comprehension, speaking and writing skills. Attention is given to individual problems and providing assistance to students who have encountered difficulties with the English language in other classes.

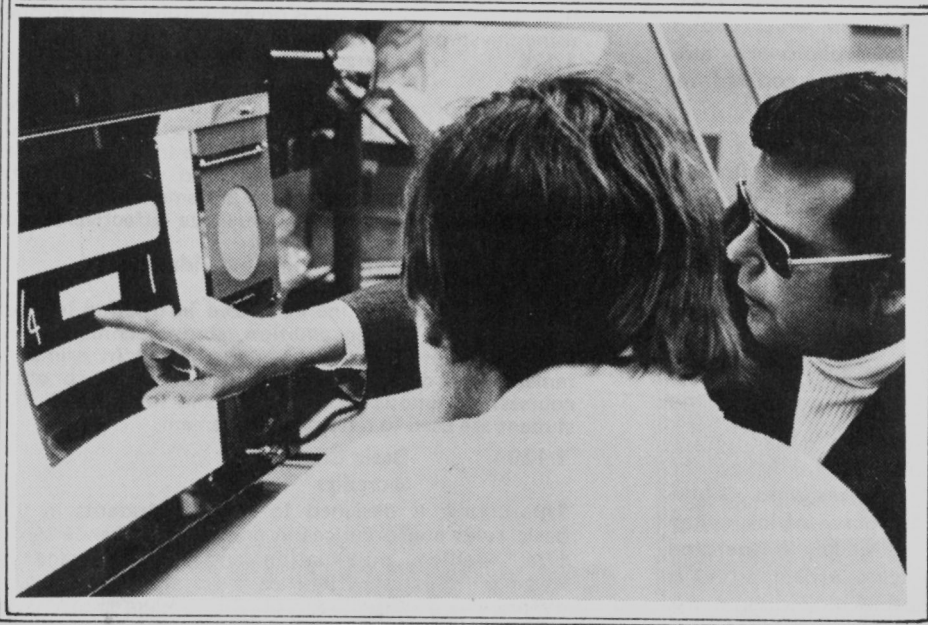
### EN 115 Effective Reading 3 class hrs/wk 3 cr.

This course is for the average reader who wishes to improve his study skills and increase his reading efficiency with regard to speed, comprehension, and vocabulary.

The Science and Technology Division provides students with science-related curricula enhancing their career development. The Division meets the need of both the vocational student and the student who is pursuing a professional career in science and science-related fields. Programs are offered in the engineering technologies such as drafting, refrigeration/heating/air conditioning, electronics, and civil engineering. Pre-employment programs are offered in agriculture, drafting, environmental science, and fire science. The programs in mathematics, physical science, and biological science serve the general education needs of the college as a whole.

The Division provides the technical background for students majoring in forestry, engineering, medicine, and similar transfer programs. The entire Division is involved in community development by providing the community with educational opportunities outside the traditional educational setting. Continuous upgrading for personnel presently employed within the district is provided through in-service training, workshops, and evening classes to meet these special needs.

Linn-Benton Community College encourages students to make career choices based on interests, needs, and abilities without regard to the traditional roles of men, women or minorities.



# science and technology division



**DIRECTOR:**  
Peter Scott

**FACULTY:**  
Everett Arasmith, Wastewater Technology  
James Baker, Biology  
Jack Cushman, Farm Management  
James Felton, Wastewater Technology  
Kent Hansen, Electricity/Electronics, Program Coordinator  
Hal Johnson, Agriculture, Program Coordinator  
John Kraft, Chemistry  
David Miller, Drafting  
Michael Morgan, Mathematics, Program Coordinator  
Karen Nesmith, Mathematics  
Raymond Perkins, Physical Science, Program Coordinator  
Steve Rasmussen, Physical Science  
Wallace Reed, Mathematics  
James Reynolds, Drafting, Program Coordinator  
Robert Ross, Biology, Program Coordinator  
Dell Swearingen, Mathematics  
Michael Vincent, Refrigeration/Heating/Air Conditioning,  
Program Coordinator  
John Wooley, Wastewater Technology

**Two Year Associate of Science Degree Programs**  
Agriculture Business Technology  
Drafting Technology  
Electricity and Electronics Technology  
Refrigeration, Heating and Air Conditioning Technology  
Wastewater Technology  
Fire Science

**One Year Programs**  
Fertilizer & Chemicals Certificate  
Turf & Forage Seed Program  
Turf Management Certificate  
Wastewater Treatment Plant Operation leading to a  
Certificate of Completion



# agriculture business

**AGRICULTURE BUSINESS . . .**

The Agricultural Business Technology Program is designed to train students for employment in the off-farm occupations of agriculture.

Individuals interested in the program should enjoy working with living things and the outdoors. The combination of manual and mental work make for satisfying careers.

Specific training in Agriculture courses of the student's choice and related business subjects will enable the student to qualify for positions in the Animal Science Industry, Turf Management Industry, Fertilizer and Chemical Industry, Turf and Forage Seed Industry and other related Agriculture Business occupations.

Some of the positions available in the various options are:

**ANIMAL TECHNOLOGY:** Livestock Supplies Fieldman; Artificial Breeding Technician; Herdsman; Farm Manager; Feed Mixing Technician.

**TURF MANAGEMENT:** Landscape Maintenance Service; Equipment and Supply Salesman; Golf Course Superintendent; Grounds Foreman; and Landscape Construction.

**FERTILIZER AND CHEMICALS:** Agriculture Chemical Fieldman; Fieldman Food Processor; Custom Applicator and Sales Representative.

**TURF AND FORAGE SEED:** Seed Fieldman, Seed Inspector; Warehouse Manager; Seed Salesman, and Seed Cleaner.

Students enrolling in the program may choose a one-year certificate program or the two-year curriculum leading to an Associate of Science Degree.

Students are encouraged to participate in an on-the-job experience during spring and/or summer quarter between the first and second year of the Associate Degree program. Those interested should refer to the appropriate section of the catalog under Cooperative Work Experience and consult with the Agriculture Department.

**Feed & Animal Technology Program**

		Freshman Year		
Course No.	Course Title	F	W	Sp
1.200-1	Work Experience & Seminar			12
	or			
4.202	Math II	4		
4.205-6	Basic Chemistry	4	4	
8.100	Survey of Agriculture	1		
8.125-6	Soils I, II	3	3	
8.143	Anatomy & Physiology of Farm Animals		3	
8.144	Animal Science & Nutrition		4	
8.145	Feeds and Feeding			3
8.150	Animal Genetics & Selection			4
8.160	Intro. to Animal Science	4		
8.151	Horsemanship & Horse Husbandry		3	
PE 180/190	Physical Education	1	1	1
		17	18	20

		Sophomore Year		
Course No.	Course Title	F	W	Sp
1.101-2	Communication Skills I, II	3	3	
1.200-1	Work Experience & Seminar			12
8.130	Ag. Chemicals		4	
8.152-3	Livestock Production I, II	4	4	
8.158	Artificial Insemination	3		
8.165	Plant Science	4		
8.170	Farm Management			3
AEC 111	Ag. Econ.			3
HE 252	First Aid	3		
		17	17	12

**Fertilizer and Chemicals Program**

**Freshman Year  
(Certificate Program)**

Course No.	Course Title	F	W	Sp
1.101-2	Communication Skills I, II	3	3	
1.200-1	Work Experience & Sem. or Electives			12
1.606	Intro. to Psy. & Human Relations		3	
4.202	Math II	4		
8.100	Survey of Agriculture	1		
8.125-7	Soils I, II, III	3	3	3
8.130	Agriculture Chemicals		4	
8.165	Plant Science	4		
8.188	Ag. Equipment Maintenance		3	
PE 180/190	Physical Education	1	1	
		16	17	15

**Sophomore Year**

The two-year program leading to an Associate Degree of Science requires the completion of a one-year certificate program and the second year program as outlined below.

Course No.	Course Title	F	W	Sp
4.205-6	Basic Chemistry	4	4	
8.131	Pest Control	3		
8.138	Irrigation & Drainage	3		
AEC 111	Ag. Econ.		3	
1.200-1	Work Experience & Sem. or Electives			12
PE 180/190	Physical Education	1		
HE 252	First Aid		3	
	Agriculture Electives		3	
	Business Electives	6	6	
		17	19	12

**Turf and Forage Seed Program**

**Freshman Year  
(Certificate Program)**

Course No.	Course Title	F	W	Sp
1.101-2	Communication Skills I, II	3	3	
1.200-1	Work Experience & Sem. or Electives			12
4.202	Math II	4		
8.100	Survey of Agriculture	1		
8.120	Seed Technology		3	
8.121	Seed Cleaning			3
8.125-6	Soils I, II	3	3	
8.130	Ag Chemicals		4	
8.165	Plant Science	4		
8.188	Ag Equipment Maintenance		3	
PE 180/190	Physical Education	1	1	
		16	17	15

**Sophomore Year**

The two-year program leading to an Associate Degree of Science requires the completion of a one-year certificate program and the second year program as outlined below.

Course No.	Course Title	F	W	Sp
1.606	Intro. to Psy. & Human Relations	3		
1.200-1	Work Experience & Sem. or Electives			12
4.205-6	Basic Chemistry I, II	4	4	
AEC 111	Ag Econ.		3	
PE 180/190	Physical Education	1		
HE 252	First Aid	3		
	Agriculture Electives	3	3	
	Business Electives	4	6	
		18	16	12

**Turf Management Program**

**Freshman Year  
(Certificate Program)**

Course No.	Course Title	F	W	Sp
1.606	Intro. to Psy. & Human Relations		3	
1.200-1	Work Experience & Sem. or Electives			12
4.202	Math II	4		
8.100	Survey of Agriculture	1		
8.125-6	Soils I, II	3	3	
8.130	Ag Chemicals		4	
8.135-6	Turf Management I, II	3	3	
8.140	Landscape Maintenance	3		
9.165	Plant Science	4		
8.188	Ag Equipment Maintenance		3	
PE 185	Fundamentals of Golf	1		
PE 180/190	Physical Education		1	
		19	18	12

**Sophomore Year**

The two-year program leading to an Associate Degree of Science requires the completion of a one-year certificate program and the second year program as outlined below.

Course No.	Course Title	F	W	Sp
1.101-2	Communication Skills I, II	3	3	
1.200-1	Work Experience & Sem. or Electives			12
4.205-6	Basic Chemistry I, II	4	4	
8.137	Turf and Plant Establishment	3		
8.138	Irrigation and Drainage	3		
8.141	Landscape Planning		3	
PE 180/190	Physical Education	1		
HE 252	First Aid		3	
	Business Electives	4	6	
		18	18	12

**8.100 Survey of Agriculture  
1 class hr/wk 1 cr. F**

Provides information on employment opportunities in marketing, sales, service, processing, management, and distribution functions that are related to agriculture off-farm occupations. Students will become acquainted with their own specific area of interest through individualized study.

**8.120 Seed Technology  
4 class hrs/wk 3 cr. W**

A course in the reproductive processes, environmental response and the harvesting and processing of seed crops. Laws and regulations governing the seed industry and seed certification programs will also be covered. Laboratory work will emphasize weed and crop seed identification, seed processing and seed testing.

**8.121 Seed Cleaning  
6 class hrs/wk 3 cr. Sp**

A comprehensive course in seed cleaning. The course is organized around practical experience in actual seed plant operations.

**8.125 Soils I  
4 class hrs/wk 3 cr. F/W**

A basic course in soil science designed to provide necessary background for work with fertilizer, irrigation, drainage, and other soil management practices. Physical, chemical and biological properties of the soil discussed in relation to plant growth.

**8.126 Soils II  
4 class hrs/wk 3 cr. W**

The second phase of soils instruction which deals with plant nutrition, and the proper use of fertilizer and other soil amendments. Diagnosing plant problems, soil testing, fertilizer recommendation, methods of application and storage and handling emphasized.

**8.127 Soils III  
3 class hrs/wk 3 cr. Sp**

Third in the sequence to deal with practical application of knowledge of fertilizers. Special emphasis will be given to field projects to promote understanding and skill competencies in this phase of learning.

**8.130 Agriculture Chemicals  
5 class hrs/wk 4 cr. W**

The course deals with the use and chemistry of herbicides, insecticides, fungicides and nematocides. The types of material, safety in handling and storage, and methods of application are emphasized. Students develop the ability to interpret and to explain to customers the directions and precautions to be observed with various agriculture chemicals. Attention also given to procedures used in keeping current with new product development.

- 8.131 Pest Control**  
4 class hrs/wk 3 cr. F  
A course of study which includes the classification, anatomy, growth, life history, recognition and control principles of selected weed diseases, and insect pests.
- 8.135 Turf Management I**  
4 class hrs/wk 3 cr. F/W  
The course 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.
- 8.136 Turf Management II**  
4 class hrs/wk 3 cr. W  
A course designed to provide students with the opportunity to adapt and apply principles and theories taught in Turf Management I. Field trips to observe common practices, and actual maintenance and management of turf areas by students provide these opportunities. Business practices and procedures also emphasized.
- 8.137 Turf and Plant Establishment**  
4 class hrs/wk 3 cr. F  
A course designed to teach the principles, methods, techniques and facilities used to propagate turfgrasses and other ornamentals used in turf areas.
- 8.138 Irrigation and Drainage**  
4 class hrs/wk 3 cr. F  
The course discusses the principles and practices of irrigation, including soil, water, and plant relations; and water sources, quality, methods of distribution and measurement. System design and selection also emphasized. Surface and subsurface drainage systems discussed.
- 8.140 Landscape Maintenance**  
5 class hrs/wk 3 cr. F  
A course designed to teach the principles, methods, techniques, and use of equipment for maintenance of turf areas.
- 8.141 Landscape Planning**  
5 class hrs/wk 3 cr. W  
A course in the basic layout and design, site utilization and orientation of turf facilities. Landscape contours, grading, trees, shrubs, floral selection, utilization and fertilization are also discussed.
- 8.143 Anatomy & Physiology of Farm Animals**  
4 class hrs/wk 3 cr. W  
A lecture and laboratory course that provides students with a basic background in the physiology of farm animals. Emphasis is placed on practical information and application that will be valuable to the student interested in animal agriculture. Subject matter areas will be male and female anatomy, livestock judging, basic reproductive physiology, milk production (including physiology of lactation), artificial insemination, and an introductory look at the endocrine system.
- 8.144 Animal Science & Nutrition**  
5 class hrs/wk 4 cr. W  
This introductory course is designed to develop an understanding of applied animal nutrition. The course will cover proteins, carbohydrates, liquids, vitamins, minerals, and the utilization of these nutrients by livestock and poultry. In addition, the methods of determining feed value and the fundamentals of balancing rations for maximum economical production will be discussed.
- 8.145 Feeds and Feeding**  
4 class hrs/wk 3 cr. Sp  
This course is designed to develop the ability to formulate rations for livestock and poultry. Choice of ration ingredients in relation to cost and suitability will be considered. Students will be given a working knowledge of feed medication, including a study of feed additives, their approval for use and the problems of residues.
- 8.150 Animal Genetics & Selection**  
6 class hrs/wk 4 cr. Sp  
This course is designed to teach the student basic concepts fundamental to animal genetics. Among other areas the course covers simple Mendelian inheritance, gene structure and function, dihybrid and trihybrid crosses, utilizing heritability for production gains, and practical mating systems for the modern livestock breeder. Laboratory work will emphasize proper selection of livestock for market and breeding purposes.
- 8.151 Horsemanship & Horse Husbandry**  
4 class hrs/wk 3 cr. W  
A study that will cover the fundamentals of horse husbandry in horse behavior, reproduction and nutrition. There will be laboratories demonstrating basic horsemanship techniques in breaking, training, judging and foot trimming and shoeing.
- 8.152 Livestock Production I**  
5 class hrs/wk 4 cr. F  
This course is designed to familiarize the student with the basics of modern beef production and management. The course will cover modern breeds of cattle, mating systems, basic genetics, nutrition and reproduction, as well as proper management practices.
- 8.153 Livestock Production II**  
5 class hrs/wk 4 cr. W  
This course provides the student with the fundamentals of modern sheep and swine production. The course will cover modern breeds of sheep and swine, mating systems, basic genetics, nutrition and reproduction, as well as proper management practices.
- 8.158 Artificial Insemination**  
3 class hrs/wk 3 cr. F  
Inseminator training program with emphasis on dairy and beef cattle.  
Furnish knowledge of the female reproductive organs and their general function. Training in the essentials of animal hygiene and observance of sanitation practices. Learn proper care, handling and storage of semen. Become familiar with the necessary breeding and calving records. Learn proper insemination techniques using live animals. People currently employed should enroll for 9.822 Artificial Insemination.
- 8.160 Intro. to Animal Science**  
5 class hrs/wk 4 cr. F  
A course to introduce and familiarize the student with the various phases of the modern livestock industry. Instruction will be presented in the scientific disciplines of animal science as well as the development of skill in selecting livestock and improved production practices.
- 8.165 Plant Science**  
5 class hrs/wk 4 cr. F  
A course which teaches the basic structure of plant life with emphasis placed on crop and ornamental plants. Environmental forces are discussed in relation to plant development and selection. Identification of common plants included.

**8.170 Farm Management**  
3 class hrs/wk 3 cr. W

A course designed to encompass the selection, organization, and operation of the modern farm. Emphasis will be placed on the basic economic and agricultural principles upon which the farm business is organized and operated. Laboratory periods will provide time for observing and practicing farm operations and management.

**8.188 Ag Equipment Maintenance**  
4 class hrs/wk 3 cr. W

A course designed to teach the principles, maintenance and repair of small engines used on power equipment.

**AEC111 Ag Econ**  
3 class hrs/wk 3 cr. W

An introduction to the application of economics to agriculture. The course will include production economics, marketing, agriculture policy and a discussion of agri-business.

**9.812 Seed Cleaning**  
3 class hrs/wk 3 cr. On Demand

Designed to furnish entry and updated skills for seed cleanermen. Will include equipment operation, safety, maintenance, and repair. Seed laws and regulations, seed and weed identification, and warehouse practices.

**9.813 Agriculture Chemicals**  
3 class hrs/wk 3 cr. On Demand

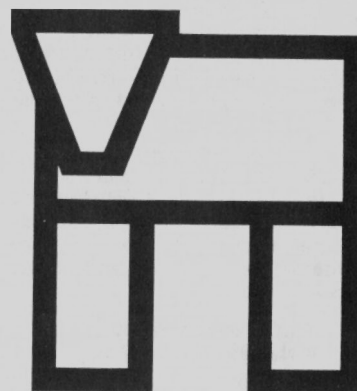
The course deals with the use and chemistry of herbicides, insecticides, fungicides and nematocides. The types of materials, safety in handling and storage, and methods of application are emphasized. Students develop the ability to interpret and to explain to customers the directions and precautions to be observed with various agriculture chemicals. Attention also given to procedures used in keeping current with new product development.

**9.814 Soils and Fertilizers**  
3 class hrs/wk 3 cr. On Demand

Presentation and discussion of basic facts of Science as they relate to crop production.

**9.822 Artificial Insemination**  
3 class hrs/wk 3 cr. On Demand

Inseminator training program with emphasis on dairy and beef cattle. Furnish knowledge of the female reproductive organs and their general function. Train in the essentials of animal hygiene and observance of sanitation practices. Learn proper care, handling and storage of semen. Become familiar with the necessary breeding and calving records. Learn proper insemination techniques using live animals. People currently employed should enroll in this class.



# animal technology

The Animal Technology program offers students a course of study in preparation for a wide variety of career options.

Graduates of this program are prepared for positions relating to on-farm livestock production, for jobs in the feed industry or for employment as technical assistant in an off-farm occupation such as artificial breeding or veterinary medicine.

Students may also choose to pursue course work which can be transferred later to a four-year college or university.

Typical jobs open to students completing the animal technology program include livestock supplies fieldman, artificial breeding technician, herdsman, farm manager or feed technician.

LBCC is the only community college in the Willamette Valley with an animal technology program.

Persons in this program also have the opportunity to participate in related activities such as agriculture and rodeo clubs and livestock judging teams.

An Associate of Science degree is awarded students upon completion of the two-year curriculum, which includes general studies classes in addition to the animal technology course work.

Complete curriculum guides and course descriptions were not available for this program when the catalog was printed. For more specific information contact the Admissions and Career Information Office, the Guidance Services Office or the Dean of Instruction's Office, all located on the first floor of the College Center.



## biological sciences

### 4.220-1 Integrated Basic Science I, II (Dental) 4-6 class hrs/wk 3-4 cr. Sm/F/W/Sp

An integrated science course offered to Dental Assistant students. Includes principles of general anatomy and physiology, anatomy and physiology of the head and teeth, microbiology, pharmacology and nutrition. Note: Dental Assistant program students take 6 class hrs/wk 4 credits the first term and 4 class hrs/wk 3 credits the second term of program.

### Bi 101, 102, 103 General Biology 5 - 6 class hrs/wk 4 cr. F/W/Sp

For NON-BIOLOGY MAJORS. The study of life from the cellular level of organization to the ecological level of organization. A variety of alternative courses (topics) are offered each term under the heading of General Biology. It may not be used to complete a previously begun sequence in Botany or Zoology.

**Bi 101:** The cellular level of life. Alternative courses include General Biology, Microbiology, Genetics and Evolution.

**Bi 102:** Structure and functions of organ systems. Alternative courses include General Biology, Human Biology, Behavior, and Reproduction and Development.

**Bi 103:** The ecological level of life. Alternative courses include General Biology, Aquatic Biology, Wildflowers, Gardening, and Ecology.

### Bi 221, 222, 223 Human Biology 7 class hrs/wk 4 cr. F/W/Sp

An integrated and individualized science course offered to students in the Health Sciences. Principles of the physical sciences, mathematics, microbiology, anatomy and physiology are included in the course. The objectives for this course supply the necessary scientific information and procedures for studying and understanding normal body functions.

### Bot 201, 202, 203 General Botany 6 class hrs/wk 4 cr. F/W/Sp

**Bot 201:** Survey of plant kingdom.

**Bot 202:** Anatomy, physiology, development and genetics of seed plants. Prerequisite: Bot 201.

**Bot 203:** Identification of native plants, use of taxonomic keys, and floral morphology.

### Z 201 General Zoology 5 class hrs/wk 3 cr. F

Introduction to animal physiology: The study of animal systems, with emphasis on control and behavioral manifestations.

### Z 202 General Zoology 5 class hrs/wk 3 cr. W

Introduction to genetics and ecology.

### Z 203 General Zoology 5 class hrs/wk 3 cr. Sp

Survey of the animal kingdom.

### 8.300 Food Micro I 4 class hrs/wk 3 cr. F

Types of food poisoning; transmission of food-borne diseases; sanitation measures for discouraging optimum condition for growth of microorganisms; storage conditions for certain foods as related to metal toxicity. Prerequisite: None.

### MB 130 Introductory Microbiology 4 class hrs/wk 3 cr. Sp

An introductory view of the field of microbiology. All forms of microbial life will be studied with emphasis on how micro-organisms are involved in every day. Medical, industrial, food, water, and sanitation aspects will be reviewed.

### 4.211 Nutrition I 3 class hrs/wk 3 cr. F

Importance and role of fuel nutrients, vitamins, and minerals in body functioning. Food sources and planning for adequate nutrition. Requirement for and recommended allowance of the various nutrients.

### 4.212 Nutrition II 3 class hrs/wk 3 cr. W

Principles of modifications in the diet to meet special needs of the body in disease. Prerequisite: 4.211.

### FN 225 Nutrition 4 class hrs/wk 3 cr. Sp

The relationship of food and its components to health with emphasis on the young adult. Current national and international concerns considered.



## drafting technology

The two-year Drafting Technology program is designed to provide students with experiences that will allow them to learn the basic attitudes, skills, knowl-

edge, and understanding necessary to successfully enter drafting occupations.

The first year will provide a sound general background with the second year providing a broad coverage of subject selection, but still permitting the student to work toward such specialties as architectural, mechanical, product design, technical illustration, electronics, and civil drafting.

All entering Drafting Technology students planning to complete the program within a two-year period are advised, as minimal requirements to have a ninth grade reading level and Tech Math I entry level math skills as indicated by the comparative guidance and placement test scores.

Students interested in Cooperative Work Experience should refer to the appropriate section of the catalog and consult with the Drafting department.

Freshman Year				
Course No.	Course Title	F	W	Sp
1.101-2	Communication Skills I, II	3	3	
3.494	Construction Meth. & Materials			2
4.109	Technical Sketching	1		
4.110-2	Drafting Lab	3	3	3
4.148	Practical Descrip. Geometry			2
4.300-2	Practical Physics		4	4
6.551-3	Tech Math I, II, III	4	4	4
4.102	Drafting Practices	3		
PE 180/190	Physical Education	1	1	1
		15	15	16

Sophomore Year				
Course No.	Course Title	F	W	Sp
1.112	Technical Report Writing	3		
2.589	D.P. Reading & Conf.		2	
3.490	Applied Mechanics		3	
3.498	Product Design		2	
4.103	Civil Drafting		3	
4.113	Surveying	2		
4.114	Architectural Drafting	3		
4.115	Presentation Drawing			2
4.116	Architectural Planning		3	
4.119	Machine Drafting	4		
4.121	Electronics Drafting		2	
4.123	Technical Illustration			3
4.125	Project Drafting			3
4.126	Mech. Design Principles	2		
4.134	Prototype & Model Construction			2
HE 250	Personal Health			3
	Elective			3
		14	15	16

**3.490 Applied Mechanics**  
3 class hrs./wk 3 cr. W

A course dealing with bodies in equilibrium under action by forces to develop an understanding of structural materials as subjected to conditions of tensile, compressive, and shearing forces. The magnitude and distribution of stresses are studied in materials common to the construction and manufacturing fields. Prerequisite: Technical Math III and Practical Physics.

**3.494 Construction Methods & Materials**  
3 class hrs./wk 2 cr. W

A study of the fundamental aspects of materials used in modern construction. The course is designed to familiarize the student with terminology, construction details, tools, equipment, and processes as related to the manufacturing and construction industries. A wide scope of methods and procedures will be studied utilizing a variety of reference materials.

**3.498 Product Design**  
2 class hrs./wk 2 cr. W

A course relating the humanistic elements of design to a product or a concept. The course involvement will be within the areas of designing for effective human use and for aesthetic human appreciation.

**4.100 Blueprint Reading & Sketching**  
4 class hrs./wk 2 cr. F

Emphasis in this basic course will be placed on the interpretation of scale drawings, symbols, and the preparation of "on-the-spot" explanation sketches.

**4.101 Blueprint Reading for Welders**  
4 class hrs./wk 2 cr. F

A beginning course in the fundamentals of drawing interpretation as applied in the welding trade. The course content will include such topics as basic views, dimensions, specifications, symbols, sections, assembly drawings, and technical sketching.

**4.102 Drafting Practices**  
3 class hrs./wk 3 cr. F

An introductory study of industry practices for student planning a drafting career. Orientation to the drafting program and occupational information will be presented through the lectures, films, discussions, and field trips.

**4.103 Civil Drafting**  
7 class hrs./wk 3 cr. W

An introductory course in drafting room problems related to various areas of civil engineering.

**4.109 Technical Sketching**  
3 class hrs./wk 1 cr. F

A course in freehand sketching designed to develop skills as they relate to technical and industrial applications.

**4.110 Drafting Lab**  
6 class hrs./wk 3 cr. F

**4.111 Drafting Lab**  
6 class hrs./wk 3 cr. W

**4.112 Drafting Lab**  
6 class hrs./wk 3 cr. Sp

An individualized course in drafting designed to provide the student with the basic skills and knowledge of drafting techniques. Students are placed within the curriculum content range at a performance level that compensates for previous drafting experiences. Course content includes application of drafting instruments, dimensioning techniques, sketching, lettering, pictorial drawings, auxiliary views, sectioning, tolerances, fasteners, detail drawings, assembly drawings, inking, architectural drafting, technical illustration, and design.

**4.113 Surveying**  
4 class hrs./wk 2 cr. F

A basic study of surveying techniques. Fundamentals of chaining and leveling, care and use of surveying instruments, and office procedures. Practical application is provided through appropriate field work. Prerequisites: Tech Math II or equivalent.

**4.114 Architectural Drafting**  
7 class hrs./wk 3 cr. F

An introductory course in architectural details. Emphasis will be placed on architectural lettering, symbols, and detail drawings. A wide variety of architectural reference materials will be utilized. Prerequisite: Drafting Lab or consent of instructor.

**4.115 Presentation Drawing**  
4 class hrs./wk 2 cr. Sp

A course involving the drawing of interior and exterior views of architectural subjects for display purposes. One and two-point perspective, basic rendering and presentation techniques will be studied. Various media will be employed.

**4.116 Architectural Planning**  
7 class hrs./wk 3 cr. W

An introductory course in residential and light commercial planning. A study will be made of architectural styles, orientation, site planning, kitchen planning, elevations, symbols and specifications. Prerequisite: Drafting Lab or consent of instructor.

**4.119 Machine Drafting**  
8 class hrs./wk 4 cr. F

An advanced course in the preparation of working drawings as related to shop processes. Emphasis within the course will be placed on precision dimensioning, tolerances, drafting standards, symbolic notations, speed and accuracy, as required by industry. Prerequisite: Drafting Lab, Tech Math II, or consent of instructor.

**4.121 Electronics Drafting**  
4 class hrs./wk 2 cr. W

An introductory course employing the drafting techniques and methods used in the electronics industry. Emphasis will be placed on the drawing and interpretation of electronics symbols, wiring diagrams, and schematics. Prerequisite: Drafting Lab or consent of instructor.

**4.123 Technical Illustration**  
7 class hrs./wk 3 cr. Sp

A course to introduce students to the techniques and skills involved in the graphic production of illustrations for brochures and catalogs, as well as service and training manuals. The production of detailed isometric drawings, exploded assembly drawings, pencil and ink shading, and color rendering will be covered in this course.

**4.124 Technical Drawing I**  
3 class hrs/wk 2 cr. F

A general introductory course providing instruction and drafting practice related to the basic graphic communication and interpretive needs of industrial, occupational and technical students.

**4.125 Project Drafting**  
7 class hrs./wk 3 cr. Sp

An advanced course offering the opportunity to study, in depth, in an area of interest. The student will select, or be assigned, problems which will require analysis, mathematical calculations, and the use of reference materials. Concurrent related employment may be substituted.

**4.126 Mechanical Design Principles**  
3 class hrs./wk 2 cr. F

A study of mechanical design as it relates to the draftsman. Emphasis will be placed on design considerations, analysis, procedures, calculations, processes, problem solving and evaluation. Prerequisite: Technical Math II.

**4.134 Prototype & Model Construction**  
4 class hrs./wk 2 cr. Sp

A course introducing students to the skills and techniques involved in the production of models and three-dimensional prototypes as used by industry.

**4.148 Practical Descriptive Geometry**  
4 class hrs./wk 2 cr. Sp

A practical course in spatial graphical problems as needed by the drafting technician. The course will include theory of auxiliary views, true lengths of lines, true size and shape of angles-planes, and points of intersection development from point-line-plane through the use of revolution and auxiliary projection. Prerequisite: Drafting Lab, Technical Math II or consent of instructor.

**0.850 Planning A Home**  
3 class hrs./wk 1 cr. On Demand

An introductory course for the person planning to build, which will introduce architectural styles, site planning, orientation, plan efficiency, kitchen planning, and basic architectural drafting procedures.

**9.634 Technical Drawing I**  
3 class hrs/wk 2 cr. On Demand

A general introductory course providing instruction and drafting practice related to the basic graphic communication and interpretive needs of industrial, occupational and technical students. People currently employed should enroll in this class.

**9.635 Technical Drawing II**  
3 class hrs/wk 2 cr. On Demand

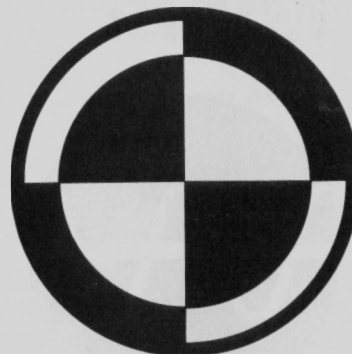
Emphasis in this intermediate course will be placed upon oblique and isometric projections, revolutions, fasteners, and the production of machine drawings. People currently employed should enroll in this class.

**9.636 Blueprint Reading for the Construction Trades**  
2 class hrs./wk 2 cr. On Demand

A basic course in architectural blueprint reading. Emphasis will be placed on the interpretation of blueprints of residential and light commercial structures.

**GE 101, 102, 103 Engineering Orientation**  
2 hrs/term 2 cr. F/W/Sp

Departmental engineering orientation. Prerequisite: Concurrent enrollment in Mth 101. To be taken in sequence.



# engineering technology

The new Engineering Technology program offers technician level training in civil and mechanical engineering fields and a freshman level engineering orientation sequence for transfer students.

Students enrolling in the two-year vocational program will learn drafting and surveying skills essential for technicians who work with civil and mechanical engineers in the planning, designing and construction of highways, bridges, dams and other industrial facilities.

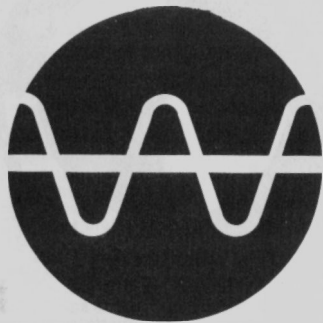
Tasks performed by persons with an engineering technology background include assisting with the estimation of costs, preparation of specifications for materials or actual drafting or surveying.

Engineering technicians working in construction may assist the contractor in scheduling construction activities or inspecting work to insure conformance to specifications.

According to U.S. Bureau of Labor projections it is becoming increasingly important that engineering technicians acquire post-high school training to help achieve good positions and advancement opportunities. Excellent opportunities exist for both men and women.

Students completing the two-year vocational program will receive an Associate of Science degree. For those interested in obtaining a bachelors degree in engineering, LBCC offers a freshman-level orientation sequence. Students completing the freshman engineering and general studies classes at Linn-Benton may then transfer to a four-year school.

Complete curriculum guides and course descriptions were not available for this program when the catalog was printed. For more specific information contact the Admissions and Career Information Office, the Guidance Services Office or the Dean of Instruction's Office, all located on the first floor of the College Center.



# electricity and electronics technology

The Electricity and Electronics program is divided into three sub-programs:

**CAREER ELECTRICITY AND ELECTRONICS** — Prepares students for occupations as electrical or electronics technicians. This is primarily an Associate Degree program with a one-year certificate option. Typical job opportunities open to qualified personnel include installation, maintenance and engineering technician positions in the computer, communications, electro-mechanical and instrumentation fields.

**GENERAL ELECTRICITY** — Designed to support other curriculums at the community college. Students that need a basic knowledge and practical skills in electricity and its measurements will benefit from this program. Some of the curriculums this course supports are Heating and Air Conditioning, Environmental Technology, Automotive Technology, Welding, and Drafting Technology.

**ELECTRICITY AND ELECTRONICS (Evening)** — This program has been set up to serve the various needs of persons working in business and industry who want to begin or continue an educational program in Electricity and Electronics.

All of the Electricity and Electronics programs at Linn-Benton Community College are provided with a variety of learning resources which back up an individualized learning process.

### Freshman Year

Course No.	Course Title	F	W	Sp
6.551-2 or Mth 101-2	Tech Math I, II, or College Algebra, Trigonometry	4	4	
1.101-2 or Wr 121-3	Communication Skills I, II or English Composition	3	3	
6.320-2	Electricity/Electronics I, II, III	6	6	8
4.100	Blueprint Reading & Sketching	2		
4.300-2	Practical Physics		4	4
4.130	Machine Processes			3
PE 180/190	Physical Education	1	1	1
		16	18	16

### Sophomore Year

Course No.	Course Title	F	W	Sp
6.323-5	Electricity/Electronics IV, V, VI	10	10	10
HE 252	First Aid	3		
	Humanities Elective		3	
	Social Science Elective			3
	General Elective	3	3	3
		16	16	16

### 6.320 Electricity/Electronics I 9 Class hrs/wk 1 - 5 cr. F

An introductory course in electricity and electronics designed to give the student knowledge and use of basic theories and laws relating to DC electricity. The student will also acquire basic skills in hand tool use, soldering, electrical wiring and multimeter use. The course is individualized and offered with variable credit, allowing the student to proceed at his/her own pace. Co-requisites: Tech Math I or Mth 101 and Tech Physics I or Ph 201. Prerequisite: High school Algebra and Geometry.

### 6.321 Electricity/Electronics II 9 class hrs/wk 1 - 6 cr. W

A continuation of Electricity/Electronics I giving the student knowledge and use of basic theories and laws relating to AC electricity. Basic skills in oscilloscope function, generator and power supply use are also acquired. The course is individualized and offered with variable credit, allowing the student to proceed at his/her own pace. Co-requisites: Tech Math II or Mth 102 and Tech Physics II or Ph 202. Prerequisite: Electricity/Electronics I or consent of instructor.



**6.322 Electricity/Electronics III**  
12 class hrs/wk 1 - 8 cr. Sp

A course in the theory and application of electric motors and generators; and electronic devices such as semiconductor diodes, transistors, and vacuum tubes. Skills in recorder use, component testing, trouble shooting; printed circuit layout and fabrication will also be acquired. The course is individualized and offered with variable credit, allowing the student to proceed at his/her own pace. Prerequisite: Electricity/Electronics II or consent of instructor.

**6.323 Electricity/Electronics IV**  
15 class hrs/wk 1 - 10 cr. F

A course in circuit theory and practical applications. Digital and linear circuits will be analyzed and experimented with. Some circuits will be composed of discrete components and some will be integrated circuits (ICS). The course is individualized and offered with variable credit, allowing the student to proceed at his/her own pace. Prerequisite: Electricity/Electronics III or consent of instructor.

**6.324 Electricity/Electronics V**  
15 class hrs/wk 1 - 10 cr. W

A course designed to give the student theoretical and practical experience with electrical/electronic systems. Student teams will design, build and test each of four different systems: logic, instrumentation, communication, and electro-mechanical. Prerequisite: Electricity/Electronics IV or consent of instructor.

**6.325 Electricity/Electronics VI**  
15 class hrs/wk 1 - 10 cr. Sp

Designed to give students depth in specialized area. Using Electricity/Electronics V as a background, the student will select one of four areas to study in depth. The areas are: Communications technology, Computer technology, Instrumentation technology and Electro-mechanical technology. Prerequisite: Electricity/Electronics V or consent of instructor.

**6.330 General Electricity I**  
4 class hrs/wk 3 cr. F/W

A course in general electricity designed to service other vocational-technical programs. The student will acquire a basic working knowledge of electrical theories and laws. Also the student will acquire basic skills in hand tool use, soldering, multimeter and oscilloscope use. This course is general in nature without the depth and detail of a career electricity/electronics course.

**6.331 General Electricity II**  
4 class hrs/wk 3 cr. Sp

A course designed to follow General Electricity I, giving the student a working knowledge of semi-conductors and basic circuits. As with General Electricity I, this course is general in nature without the depth and detail of a career electricity/electronics course.

**6.316 Introduction to Electricity/Electronics**  
1 class hr/wk 1 cr. Sp

This is a preparatory course designed to help the student better understand his/her role in electricity/electronics. The E/E program at LBCC, co-operative work experience and job placement will be outlined and discussed. All electricity/electronics career students are required to take this course.



# farm management- records analysis

Farm Management-Records Analysis is a specialized adult program designed for a minimum of three years for local farm families—including all members of the farm unit—who are now actively farming or ranching on a full-time basis. The program is a service as well as an educational program. Enrollment will be on a term-by-term basis for a period of one year.

The three-year program will consist of:

- Scheduled class meetings
- Scheduled farm visits by the instructor
- Keeping basic farm records for each farm business
- Annual computer analysis for each completed record, including group averages
- Application of analysis information to improving the management and organization of each business. (Individual records are confidential)

Individual enrollment may extend beyond three years on a seminar basis if desired, providing continued analysis of farm records and assistance with management decisions. The frequency of class sessions and instructor visits would be reduced for an advanced group.

#### Program Prerequisites

- (1) The family unit is engaged in full-time farm operation and is making the family living from the operation.
- (2) The farm operation is financially stable for continued operation.
- (3) The family unit has the ability to maintain basic farm records.

**9.835 Farm Management - Records Analysis I**  
**10 lec hrs/month**  
**20 lab hrs/month 8 cr/yr F/W/Sp**

The participating farm or ranch family - including both husband and wife - will attend a series of scheduled class sessions. These class sessions will be supplemented by scheduled farm visits by the instructor. Subject matter for this first year will be keeping basic farm records.

**9.836 Farm Management - Records Analysis II**  
**20 lab hrs/month 8 cr/yr F/W/Sp**

Same as 9.835 - Subject matter for this second year will be farm business analysis.

**9.837 Farm Management - Records Analysis III**  
**10 lec hrs/month**  
**20 lab hrs/month 8 cr/yr F/W/Sp**

Class meetings and instructor visits will continue as for the preceding two-years - 9.835 and 9.836.

**9.838 Farm Management - Records Analysis Seminar IV**

To be arranged when demand arises.



# fire science

The Fire Science program is a part-time curriculum designed to meet the specific needs of students currently employed in fire service. Many of the courses in this curriculum are offered only in the evening and only on demand. However, courses in related areas such as communication skills, humanities, and mathematics are offered during the day as well as in the evening.

Satisfactory completion of the requirements of the program will lead to the Associate Degree in Fire Science.

It may be helpful for students interested in Fire Science to obtain interviews with prospective employers to help them plan their careers. Some municipal fire departments may have certain requirements that must be satisfied for employment.

### Freshman Year

Course No.	Course Title	On Demand
1.101-2	Communication Skills I, II	
1.606	Intro. to Psy. & Human Relations	
4.100	Blueprint Reading & Sketching	
4.202-4	Math II, III	
5.250	Fire Fighting Skills I	
5.251	Fire Fighting Skills II	
5.253	Fire Apparatus & Equipment	
5.254	Introduction to Fire Protection	
5.245	Rescue & Emergency Care for Fire Science	
5.264	Building Const. for Fire Prevention	
HE 250	Personal Health	
PE 180/190	Physical Education	

### Sophomore Year

Course No.	Course Title	On Demand
1.112	Technical Report Writing	
1.124	American Institutions	
5.260-1	Hazardous Materials I, II	
5.262	Fund. of Fire Prevention	
5.263	Hydraulics & Pump Operation	
5.265	Fire Dept. Organ. & Management	
5.272	Fire Protection Systems	
5.273	Fire Investigation	
9.500	Elements of Supervision	
	Electives	

**5.245 Rescue & Emergency Care for Fire Science**  
**3 class hrs/wk 3 cr.**

A combination of First Aid and rescue practices, standard procedures in the aid and care of victims of the most common emergencies. First Aid emphasis will be on the handling of respiratory, burn, cardiac, fracture and shock victims. Practical methods of carrying out rescues in a number of types of emergencies will be covered.

**5.250 Fire Fighting Skills I**  
**9 class hrs/wk 3 cr.**

Individual skills using small tools and minor equipment, practice in forcible entry, use of masks, and other activities generally performed by the individual. A course in practical chemistry I and physics II covering the chemistry of fire, hydraulics, matter, measurements, machines, and energy. Laboratory time is provided for demonstrations and experiments to help clarify the principles and procedures covered in class.

**5.251 Fire Fighting Skills II**  
**7 class hrs/wk 3 cr.**

Practice in team skills used in fire ground operation including hose and ladder evolutions, salvage, overhaul, rescue, fire attack and other activities requiring a team effort.

**5.253 Fire Apparatus & Equipment**  
**5 class hrs/wk 3 cr.**

Familiarization with different types of fire apparatus; principles of application, care, and preventive maintenance; safe operating procedures, emergency and non-emergency; National Board standards.

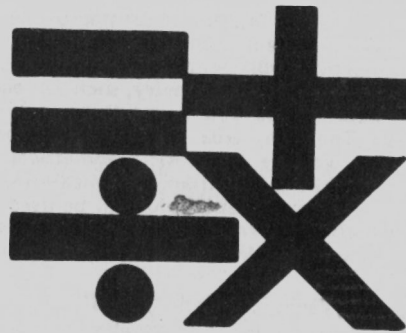
**5.254 Intro to Fire Protection**  
**3 class hrs/wk 3 cr.**

Philosophy and history of fire protection, history of loss of life and property by fire; role and responsibility of the fire department in the community; organization and function of local, county, state, federal and private fire protection agencies and allied organizations; sources of professional literature; survey of professional career opportunities.

**5.260 Hazardous Materials I**  
**5 class hrs/wk 3 cr.**

Review of basic chemistry; identification of hazardous materials by color, symbol, and marking; recommended safe practices for storage and handling of solids, liquids and gases; methods of fire control of these materials.

- 5.261 Hazardous Materials II**  
5 class hrs/wk 3 cr.  
Methods for combating fires involving hazardous chemicals and other materials; radiation hazards of the fire service; space age fuel; highway transportation of explosives, and other hazardous materials.
- 5.262 Fundamentals of Fire Prevention**  
3 class hrs/wk 3 cr.  
Organization and function of a fire prevention bureau; fire prevention codes; state and local laws and ordinances; familiarization with principles of fire prevention; the inspector's job; public relations.
- 5.263 Pump Operation and Practical Hydraulics**  
5 class hrs/wk 3 cr.  
Principles of fire apparatus pumping operations, fire ground water supply; construction and operation of fire service pumps and accessories; pump operation under emergency conditions; rule-of-thumb hydraulics.
- 5.264 Building Construction for Fire Prevention**  
5 class hrs/wk 3 cr.  
Classification of buildings; structural features, affecting fire spread, effect of fire on structural strength; fire stops and ratings of materials, fire retardants; Sanborne maps.
- 5.265 Fire Dept. Organization and Management**  
3 class hrs/wk 3 cr.  
This course covers the duties and responsibilities of a department officer and the methods of organizing, maintaining and operating a fire department. Discussed are department communication, fire equipment, training, fire prevention and fire fighting, records and reports.
- 5.272 Fire Protection Systems**  
5 class hrs/wk 3 cr.  
Portable extinguisher equipment; sprinkler systems; protection systems for special hazards; fire alarm and detection systems; ventilating systems.
- 5.723 Fire Investigation**  
3 class hrs/wk 3 cr.  
Effect on fire prevention by isolating cause of fire; interpreting clues and burn patterns leading to point of origin; identifying sources of ignition and materials ignited; preservation of the fire scene.



# mathematics

- 1.109 Pre-Business Mathematics**  
4 class hrs/wk 3 cr. F/W/Sp  
Designed as a preparatory course for 2.515, Business Mathematics. Topics include a review of the fundamental operations with whole numbers, fractions, decimals and percentages.
- 1.110 Elements of Algebra**  
4 class hrs/wk 4 cr. F/W/Sp  
Introduction to the field properties for the real numbers. Development of the basic operations with algebraic expressions and methods for solving linear equations. The course also introduces rational expressions, factoring, and graphing and develops the solution of quadratic equations by factoring.  
The course is designed for the student who has no previous instruction in algebra, needs a review of elementary algebra, or has had previous algebra, but has not been exposed to the "modern" concepts.
- 1.127 Study Skills Seminar - Mathematics**  
0 - 3 cr. F/W/Sp  
The purpose of the seminar is to fulfill the objectives of the student which are developed in conjunction with the instructor. After the objectives and level of instruction are determined, a schedule is developed to provide optimum instruction and opportunity to practice and improve in the specific math area. The objectives and the programs to meet the objectives vary greatly, which determines to a great extent the amount of time needed to correct a student's deficiency area.
- 4.200 Math I**  
4 class hrs/wk 4 cr. F/W/Sp  
This course is designed as a thorough review of the arithmetical processes and provides a basis for the study of algebra or Math II and Math III. Topics include fundamental operations with whole numbers, fractions, decimals, percentages, and measurement.
- 4.202, 4.204 Math II, III**  
5 class hrs/wk 4 cr. F/W/Sp  
The purpose is to assist the student in developing mathematical skills necessary for problem solving associated with occupational careers.  
**4.202:** An emphasis will be placed on measurement and conversion, integers, introduction to algebra, solving simple equations and introduction to Geometry. The Algebra and Geometry will also be used to solve typical occupational formulas and related applied problems.

Prerequisite: Math I (4.200) or satisfactory arithmetic score or consent of the instructor.

**4.204:** Emphasis will be placed on Basic Algebra, Geometry, and Basic Trigonometry, such as: equations, formulas, graphs, ratio and proportions, polynomials, Pythagorean Theorem, area of circles and polygons, constructions, volume of basic geometrical shapes, logarithms, trig. ratios, and triangle applications. The Algebra, Geometry and Trig. will be used to solve typical occupational formulas and related applied problems. Prerequisite: Math II (4.202) or consent of instructor.

#### Technical Math I, II, III

These courses are designed to develop general mathematical and computational skills that assist technicians in their training and on their jobs. The emphasis is on problem solving. Because of the emphasis and expected level of competency of this course, it is necessary for an entering student to have had two years of Algebra and a year of Geometry in high school. An entering student not meeting these criteria should complete Elements of Algebra (1.110) and Pre-Tech Mathematics (6.550) before beginning the Tech Math I, II, III sequence.

#### 6.550 Pre-tech Mathematics 4 class hrs/wk 4 cr. F

The course will use algebra as a tool to solve basic problems in geometry and will emphasize both the metric and the coordinate approach.

Prerequisite: At least a 'B' in high school Algebra I, Elements of Algebra (1.110) and/or consent of the instructor.

#### 6.551-3 Technical Math I, II, III 4 class hrs/wk 4 cr. F/W/Sp

This course is designed to develop general mathematical and computational skills that assist technicians in their training and on their jobs. The emphasis is on problem solving.

**6.551:** Review basic algebra and geometry; a study of algebraic functions, systems of linear equations, quadratic equations, exponents and radicals, logarithms, and exponential function. Emphasis on technical applications and problem solving. Prerequisite: Algebra I and Geometry, Pre-Tech Math (6.550) or consent of instructor.

**6.552:** Trigonometric functions and identities with applications, vectors, conditional equations, and complex numbers with applications. Prerequisite: 6.261.

**6.553:** Analytic Geometry, intuitive introduction to differential and integral calculus. Emphasis placed on functions and applications to technical areas. Prerequisite: 6.552.

#### 6.554 Technical Project - WWT 1 - 3 class hrs/wk 1 - 3 cr. Sp

Activity designed to acquaint the student with course related field problems. The student will undertake a special study of activity in his field of interest. The course is designed to develop skill in gathering, sorting, finding solutions in logical, mathematical concepts to field problems and use of a programmable calculator. Prerequisite: Tech Math II 6.552.

#### Mth 95 Intermediate Algebra 4 class hrs/wk 4 cr. F/W/Sp

The study of basic operations on algebraic, rational, and radical expressions. Solution of first and second degree equations and equations involving radicals, algebraic and graphical solutions for inequalities and absolute values, linear and quadratic functions. Stated problems and applications are studied throughout the course.

This course is recommended for students having high school algebra and geometry with above average grades or those with lower grades and more math in high school.

Prerequisite: Must demonstrate the knowledge of the stated objectives for Elements of Algebra course.

#### Mth 101 College Algebra 4 class hrs/wk 4 cr. F/W/Sp

Development of the real and complex number systems. Introduction to functions; graphs of relations and functions; linear, quadratic, exponential and logarithmic functions. Polynomials; theory of equations. Prerequisite: Mth 95 and /or consent of instructor.

#### Mth 102 Trigonometry 4 class hrs/wk 4 cr. F/W/Sp

Introduction to circular functions, trigonometric functions, curve sketching, complex numbers, polar coordinates, and matrices. Prerequisite: Mth 101 and/or consent of instructor.

#### Mth 103 Probability & Statistics 4 class hrs/wk 4 cr. Sp

A general one term introductory course in probability and statistics. The objective is to acquaint the student with the concepts and language of the probability models and statistical inference. Prerequisite: Mth 95.

#### Mth 110 Analytic Geometry 4 class hrs/wk 4 cr. F/Sp

Vectors, rectangular and polar coordinate systems, linear transformation, loci in two and three-dimensional spaces. Analytic background essential for study of the calculus. Prerequisite: Mth 101, 102.

#### Mth 161-162-163 Mathematics for Non-Science Majors 4 class hrs/wk 4 cr. F/W/Sp

This course is designed to provide a mathematical foundation and computation skills for the non-science major. The course contains selected topics from the broad field of mathematics relevant to business and social science courses with the usefulness of mathematical concepts stressed. Prerequisite: Mth 95 and/or consent of instructor.

#### Mth 191, 192, 193 Math for Elementary Teachers 3 class hrs/wk 3 cr. F/W/Sp

An introduction to mathematical language and logic; a major emphasis is on the properties of an ordered field and their relations to whole numbers, integers, rational, and real numbers. Introduction to elementary plane geometry, i.e. incidence, measurement, congruence, and similarity. The student will be expected to write simple proofs for conjectures and compare mathematical systems. Prerequisite: Elements of Algebra or equivalent and/or consent of instructor. Psy 201, 202, are prerequisites for Mth 193.

#### Mth 200, 201, 202, 203 Calculus 4 class hrs/wk 4 cr. F/W/Sp

Standard sequence for students in mathematics, science, and engineering.

**Mth 200:** Functions and graphs, limits, continuity, differentiation, applications of differentiation, related rates and extrema, anti-differentiation.

**Mth 201:** The definite integral, fundamental theorem of calculus, applications of integration, differentiation and integration of transcendental and trigonometric functions.

**Mth 202:** Techniques of integration, approximate integration, vectors in the plane, hyperbolic functions, improper integrals, vectors and analytic geometry in three dimensional space.

**Mth 203:** The calculus of functions of several variables, infinite series, Taylor's theorem, differentiation and integration of power series.

Prerequisite for Mth 200: Mth 110 or consent of the instructor. Terms must be taken in sequence.

**Mth 213** Introduction to Symbolic Language  
Programming FORTRAN  
3 class hrs/wk 4 cr. W/Sp

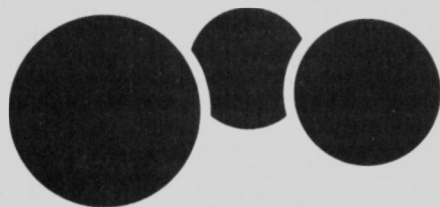
Basic principles of computation; programming a computer in an algebraic language. Prerequisite: Mth 95 or consent of the instructor.

**Mth 221, 222** Applied Differential Equations  
4 class hrs/wk 4 cr. F/W

Ordinary differential equations, systems of differential equations, Laplace transforms, series solutions, boundary-value problems. Must be taken in sequence. Prerequisite for Mth 221: Mth 203.

**Mth 241** Elementary Linear Algebra  
4 class hrs/wk 4 cr. W/Sp

Vector spaces, linear transformation, matrices and determinants, characteristic roots. Prerequisite: Mth 110.



# physical sciences

**4.205, 206** Basic Chemistry I, II  
5 class hrs/wk 4 cr. F/W

An introductory two-quarter sequence for vocational students or students needing preparation prior to entering Ch 104. Topics include inorganic and organic chemistry with practical laboratory experiments integrated with discussion material. No previous chemistry course work required. Prerequisite: Concurrent enrollment in Mth 1.110, 4.202 or consent of instructor.

**Ch 104, 105, 106** General Chemistry  
7 class hrs/wk 5 cr. F/W/Sp

Introduction to atomic structure and the interactions of atoms, ions and molecules. Includes inorganic and organic chemistry. Students planning to take advanced chemistry lab courses at Oregon State University must also take Ch 107. Co-requisite: Mth 95. Prerequisite: High school chemistry desirable.

**Ch 107** General Chemistry Lab  
6 class hrs/wk 2 cr. W

Extends laboratory experience from Ch 104, 105 and 106 to prepare students for advanced laboratory training in chemistry. Prerequisite: Ch 106 or consent of instructor.

**Ch 201, 202, 203** General Chemistry  
6 class hrs/wk 4 cr. F/W/Sp

A year sequence for chemistry, science and engineering students. Introduces the physical and chemical aspects of inorganic and organic chemistry. Students intending to take advanced chemistry lab courses at Oregon State University must supplement this course with Ch 207. Co-requisite: Mth 101. Prerequisite: High school chemistry or Basic Chemistry I and II.

**Ch 207** General Chemistry Lab  
6 class hrs/wk 2 cr. W

Extends laboratory experience from Ch 201, 202, and 203 to prepare students for advanced laboratory training in chemistry. Prerequisite: Ch 203 or consent of instructor.

**Ch 226, 227, 228** Organic Chemistry  
3 class hrs/wk 3 cr. F/W/Sp

The chemistry of the carbon compounds: aliphatic, aromatic, heterocyclic and compounds of biochemical importance. Prerequisite: Ch 106.

**Ch 229** Organic Chemistry Lab  
6 class hrs/wk 2 cr. Sp

A laboratory course taken concurrently with Ch 228. Prerequisite: Ch 107.

**Ch 234** Quantitative Analysis  
8 class hrs/wk 4 cr. Sp

Service course on classical and instrumental analytical techniques for students in biological and physical sciences.

**4.300, 302** Practical Physics  
5 class hrs/wk 4 cr. W/Sp

DRAFTING TECHNOLOGY, ELECTRONICS TECHNOLOGY, WASTEWATER TECHNOLOGY, METALLURGY TECHNOLOGY: A two-term introductory course in practical physics for vocational students meeting three times a week for lecture, and one two-hour lab.

4.300: Measurement, matter, mechanics, machines, and heat.

4.302: Light, sound, magnetism, electricity, electronics, and nuclear energy. Co-requisite: Tech Math II or Mth 102. Prerequisite: Tech Math I or Mth 95.

**GS 104, 105, 106** Physical Science  
5 class hrs/wk 4 cr. F/W/Sp

Survey course in physical science intended to provide a broad background in physical science for the liberal arts student and the non-science major. No previous science background is required. May not be taken for credit if the student has completed six or more hours in a college-level course in chemistry or physics. Students may enter any term.

**GS 104:** Fundamental principles of physics.

**GS 105:** Principles of chemistry.

**GS 106:** Nuclear energy, astronomy, and earth science. Prerequisite: 1.110 Elements of Algebra or equivalent.

**Ph 201, 202, 203** General Physics  
6 class hrs/wk 4 cr. F/W/Sp

First year college physics for science majors. The study of energy and physical phenomena, including the fundamental principles of mechanics, heat, light, sound, electricity, magnetism, and a brief introduction to modern physics. Co-requisite: Tech Math II or Mth 102. Prerequisite: Tech Math I or Mth 95.



# refrigeration heating and air conditioning technology

Refrigeration, Heating and Air Conditioning is an individualized program aimed at developing the background of each student in the wide variety of aspects in any or all of the three areas of the domestic and/or commercial refrigeration, heating and air conditioning industry. The student may option to follow the program to any level from parts counter to technical mechanic design technician. The program offers a two-year Associate of Science Degree requiring additional wide-spectrum math, English and business skills.

### Freshman Year

Course No.	Course Title	F	W	Sp
4.202	Math II	4		
3.530	Refrigeration, Air Conditioning and Heating Fundamentals	5		
3.535	Refrigeration Systems I	6		
1.101	Communication Skills I	3		
4.204	Math III		4	
1.112	Technical Report Writing		3	
3.540	Heating Systems I		4	
3.536	Refrigeration Systems II		4	
6.330	General Electricity		2	
4.100	Blueprint Reading & Sketching			2
1.200	Cooperative Work Experience			4
3.550	Control Systems I			4
3.551	Control Systems II			4
HE 252	First Aid			3
		18	17	17

### Sophomore Year

Course No.	Course Title	F	W	Sp
3.545	Air Conditioning Systems I	4		
3.537	Refrigeration Systems III	4		
2.530-1	Practical Accounting I, II	3	3	
1.606	Intro. to Psychol. & Human Relations	3		
4.300	Practical Physics		4	
3.546	Air Conditioning Systems II		4	
3.541	Heating Systems II		4	
4.302	Practical Physics			4
3.531	Environmental Comfort Systems Anal.			4
1.200	Cooperative Work Experience			4
PE 180/190	Physical Education	1	1	1
		15	16	13

**3.530 Refrigeration, Air Conditioning and Heating Fundamentals**  
6 class hrs/wk 5 cr. F

A general lecture/lab course designed to familiarize the student with the theory, terminology, tools, materials and skills necessary to understand the basics of refrigeration, air conditioning and heating. Prerequisite: Basic math background, mechanical aptitude.

**3.531 Environmental Comfort System Analysis**  
6 class hrs/wk 4 cr. Sp

Design and development of a multi-temperature air conditioning system for residential and/or industrial application. Prerequisite: Refrigeration Systems III, Air Conditioning Systems III, and Control Systems II.

**3.535 Refrigeration Systems I**  
6 class hrs/wk 6 cr. F

Introduction to domestic and small commercial refrigeration systems. Fundamental refrigeration theory is applied in general operation and repair of sealed systems. Instruction in preliminary troubleshooting. Prerequisite: Basic Math and mechanical aptitudes.

**3.536 Refrigeration Systems II**  
6 class hrs/wk 4 cr. W

Introduction to commercial refrigeration systems and control circuits. Instruction in methods of trouble shooting and specific repairs and in use of basic charts and graphs. Prerequisite: Refrigeration Systems I and Math II.

**3.537 Refrigeration Systems III**  
6 class hrs/wk 4 cr. F

Advanced course in applying theory of refrigeration in practice. Trouble shooting and repair of problems in commercial and industrial refrigeration is emphasized. Design of refrigeration systems for home and industrial application. Prerequisite: Refrigeration Systems II.

**3.540 Heating Systems I**  
6 class hrs/wk 4 cr. W

A lab/lecture course in the usage, repair and maintenance of residential heating systems. Introduction to trade related sheet metal layout and tools. Prerequisite: Fundamentals of Refrigeration, Air Conditioning and Heating.

**3.541 Heating Systems II**  
6 class hrs/wk 4 cr. W

Instruction in types of fuels, controls, burners and coils used in commercial heating. Advanced trouble shooting and repair. Prerequisite: Heating Systems I.

**3.545 Air Conditioning Systems I**  
6 class hrs/wk 4 cr. F

A basic theory course analysing the relationships of refrigeration to air conditioning. Introduction to handling units and methods of sizing and installation. Prerequisite: Fundamentals of Refrigeration, Air Conditioning and Heating; Refrigeration Systems I and Math II.

**3.546 Air Conditioning Systems II**  
6 class hrs/wk 4 cr. W

Instruction and experience in methods of sizing systems. Application of charts, graphs, and calculation in air conditioning. Basic trouble shooting of

existing systems and guidelines for purchasing components. Introduction to designing systems. Prerequisite: Air Conditioning Systems I.

**3.550 Control Systems I**  
6 class hrs/wk 4 cr. Sp

Introduction to operation of various control systems in heating, air conditioning and refrigeration: temperature, pressure, pneumatic, hydraulic, electric. Prerequisite: Refrigeration Systems II, Heating Systems II and Air Conditioning Systems I.

**3.551 Control Systems II**  
6 class hrs/wk 4 cr. Sp

Operation and repair of Electro-mechanical pneumatic-hydraulic control systems. Prerequisite: Controls Systems I.

**6.235 Hydraulics and Pneumatics**  
5 class hrs/wk 4 cr. Sp

A study of the basic concepts of hydrostatics, fluid mechanics, metering devices, pressure control and flow rate controllers, as well as principles of pump operation.



## science lab technology

The new Science Lab Technology program at Linn-Benton is expanding career options for students interested in environmental and science related work.

Course work for students in the two-year vocational program covers biological and science laboratory operation. Additionally, lower division transfer courses can be taken at LBCC and transferred later to an Oregon four-year college.

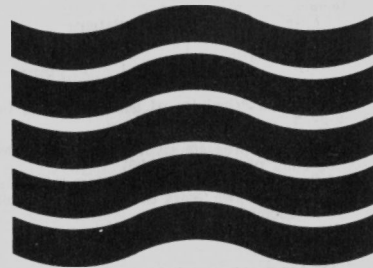
The vocational science lab curriculum prepares students for positions as laboratory technicians in chemical and biological labs and wastewater treatment plants.

Specific job openings would be available in treatment plants, medical labs and state and federal agency laboratories associated with environmental concerns.

Technicians are needed to work with scientists and engineers on numerous current areas of research including energy sources, pollution control environmental monitoring and food production.

Graduates of the two-year vocational program will receive an Associate of Science degree upon completion of their course work.

Complete curriculum guides and course descriptions were not available for this program when the catalog was printed. For more specific information contact the Admissions and Career Information Office, the Guidance Services Office or the Dean of Instruction's Office, all located on the first floor of the College Center.



## wastewater technology

The Wastewater Technology curriculum is structured to develop graduates who will be qualified for employment as Wastewater Technology Plant Operators. A firm foundation in the sciences of chemistry, hydraulics and practical physics, and technical math is offered; followed by specialized courses in sanitary microbiology and chemistry where the student performs the actual tests used in the control of treatment plant processing.

Further courses cover all phases of treatment plant operation including maintenance, administration, budget preparation, public relations, purchasing, and report writing. Hands-on-training is provided in which the student works full time in a wastewater treatment plant.

Students may qualify for a one-year certificate by completing the curriculum for the first year or an Associate of Science Degree by completing the full two-year curriculum.

Freshman Year				
Course No.	Course Title	F	W	Sp
6.101	Intro. to Environmental Tech.	3		
6.114	Sanitary Microbiology I	4		
6.151-3	Wastewater Technology I, II, III	4	4	4
4.202	Math II* or	4		
6.551	Tech Math I			
4.204	Math III* or		4	
6.552	Tech Math II			
6.161	Wastewater Management I			3
6.180	Wastewater Mechanics I			3
6.168	OJT—In Plant Practicum I		7	7
6.173-4	Sanitary Chemistry I, II	4	4	7
		19	19	17

Sophomore Year				
Course No.	Course Title	F	W	Sp
4.205-6	Basic Chemistry I, II	4	4	
MB 130	Introduction to Microbiology			4
6.154-5	Wastewater Technology IV, V	4	4	
6.156	Wastewater Technology VI		4	
6.162	Wastewater Management II	3		
6.181	Wastewater Mechanics II	2		
1.124	American Institutions			3
1.101	Communication Skills I	3		
1.112	Technical Report Writing			3
1.606	Intro. to Psychol. & Human Relations		3	
PE 180/190	Physical Education	1	1	1
HE 250	Personal Health			3
		17	16	14

Suggested electives include Principles of Ecology, spring term and Sanitary Microbiology II, winter term.

\*Mathematics—In Certificate program student enters with the equivalent background of Math I (4.200).  
 —In A.S. program the student enters with the equivalent background of two years of high school Algebra and one year of Geometry.

**6.101 Introduction to Environmental Technology I**  
 3 class hrs/wk 3 cr. F

An introductory course which surveys environmental problems. Topics include water, sewage, solid waste management, swimming pool sanitation, vector borne diseases and environmental control.

**6.114 Sanitary Microbiology**  
 6 class hrs/wk 4 cr. F

This course will enable the student to identify and describe the characteristics of microorganisms associated with Wastewater Technology processes and describe how microorganisms are used as indicators of water quality. The student will also learn to perform the microbiological tests associated with Wastewater Technology processes.

**6.115 Sanitary Microbiology II**  
 4 class hrs/wk 2 cr. W

Continuation of 6.114 Sanitary Microbiology I. Material will include sample collection techniques, theory and evaluation of microbiological tests performed on wastewater. The laboratory portion will be used to develop competence in performing these microbiological tests. Prerequisite: Sanitary Microbiology I.

**6.120 Principles of Ecology**  
 3 class hrs/wk 3 cr. Sp

A study of the basic fundamentals of ecology and some inter-relationships of man and his environment.

**6.151 Wastewater Technology I**  
 6 class hrs/wk 4 cr. F

This is an introduction to the processes within a wastewater treatment plant and its collection systems. Co-requisite: Enrollment in 4.202 or 6.551.

**6.152 Wastewater Technology II**  
 6 class hrs/wk 4 cr. W

Wastewater Technology II treats the processes of Activated Sludge, Trickling Filters and Digester controls. Prerequisite: Wastewater Technology I.

**6.153 Wastewater Technology III**  
 6 class hrs/wk 4 cr. Sp

Wastewater Technology III includes wastewater treatment related to physical, chemical and tertiary processes. Prerequisite: Wastewater Technology II or consent of instructor.

**6.154 Wastewater Technology IV**  
 6 class hrs/wk 4 cr. F

Wastewater Technology IV includes wastewater treatment process interaction and total systems design. Prerequisite: Wastewater Technology III, In-Plant Practicum or consent of instructor.

**6.155 Wastewater Technology V**  
 6 class hrs/wk 4 cr. W

A continuation and culmination of previous wastewater technology courses stressing the interaction of plant processes. Prerequisite: Wastewater Technology IV.

**6.156 Wastewater Technology VI**  
 6 class hrs/wk 4 cr. W

A study of the treatment of potable water and advanced wastewater technology processes.

**6.161 Wastewater Management I**  
 4 class hrs/wk 4 cr. Sp

This course will enable the student to prepare orders for supplies, service and parts, operations reports, and annual budgets, as well as list manpower requirements and needed capital improvements in the operation of wastewater treatment plants.

**6.162 Wastewater Management II**  
 3 class hrs/wk 3 cr. F

This course will enable the student to establish procedures for hiring, orienting, disciplining and discharging wastewater treatment plant personnel, promote plant operations, and recognize a major disaster in wastewater treatment plant operation and exercise the judgement required to perform the procedure to rectify it.

**6.168 In Plant Practicum I**  
 6 - 40 class hrs/wk 2-16 cr W/Sp

Practicum consists of full time work in a wastewater treatment plant. Skills and knowledge developed in prerequisite courses will be combined with on the job training by both plant supervisory personnel and LBCC visiting instructors. Prerequisite: Consent of instructor.

**6.173 Sanitary Chemistry I**  
 5 class hrs/wk 4 cr. F

This course will enable the student to perform the following tests on wastewater: settleable solids, suspended and volatile solids, pH, dissolved oxygen, biochemical oxygen demand, chlorine residual, and temperature. Prerequisite: None.

**6.174 Sanitary Chemistry II**  
 5 class hrs/wk 4 cr. W

This course will enable the student to perform the following tests on wastewater and wastestream: chemical oxygen demand, sludge tests - volatile, suspended, and settleable solids, sludge volume index, sludge density index, sludge age, sludge filterability, total acidity on wastestreams, alkalinity, volatile acids, chloride ion, and chlorine requirement. Prerequisite: None.

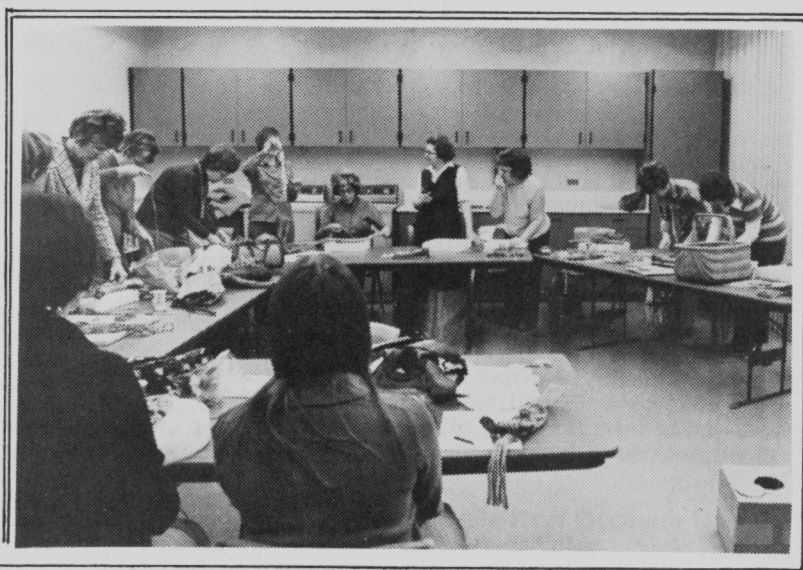


**6.180            Wastewater Mechanics I**  
**6 class hrs/wk    3 cr.                    Sp**

This course will give the student a better understanding of the equipment used in a treatment plant. The student will be able to identify the component parts of the equipment when shown a drawing of the part. The student will disassemble and reassemble the pumps, flow level measuring devices and chlorinators. Prerequisite: Concurrent enrollment in Wastewater Technology III.

**6.181            Wastewater Mechanics II**  
**4 class hrs/wk    2 cr.                    F**

This course will teach the student how to set up a parts inventory and extensive preventive maintenance file system. The students will learn about air compressors and the important role they play in equipment operations. The student will be assigned a major mechanical project which he or she will work on during the entire term. Prerequisite: Wastewater Mechanics I.



Linn-Benton Community College is your college. The Community Education Division is designed to offer you a wide variety of educational, cultural and recreational programs to meet the interests of you and your community.

Flexibility in timing and subject matter is maintained in order to respond to the needs of the college district. Open communication with the community, the college, its students, the staff and other educational institutions is maintained to identify and fulfill these needs.

# community education division

**STAFF:**

W. A. Jordan, Asst. Director, Apprenticeship  
 Melvin Gilson, Coordinator, Special Education Programs  
 James Waggoner, Director, East Linn Center  
 O. W. Zielaskowski, Director, Benton Center  
 Mona Waibel, Coordinator, Santiam Center  
 Carolyn Miller, Job Developer for the Handicapped

**NON-CREDIT/CREDIT CLASSES**

The majority of classes offered through the Community Education program are non-credit classes. There are some exceptions however, with vocational classes. In instances where credit is applied, these credits may be used toward the completion of vocational degrees or certificate programs as required courses or as electives. Community Education credit classes may also be applied to a general studies degree. (Degree programs explained on page 10).

**COMMUNITY EDUCATION CENTERS**

The staff and facilities of the Community Education Division are separated geographically into four centers in order to better serve the community needs.

The Albany Center is located on the main LBCC campus in the College Center Building and serves the general populations of Albany, Tangent, Shedd, Halsey and Brownsville. Bill Jordan, assistant director.

The Benton Center is located at 1235 N.W. Pierce Way, in Corvallis, adjacent to Corvallis High School, and serves the areas of Corvallis, Philomath, Monroe, Blodgett and Alsea. Orville Zielaskowski, director.

The East Linn Center is located at 1715 Fifth St., Lebanon, across from Lebanon High School, and serves the communities of Lebanon, Scio and rural East Linn County. James Waggoner, director.

The Santiam Center is located at 1314 Long Street in Sweet Home directly behind "Mollies" Restaurant. The Santiam Center serves the communities of Sweet Home, Foster and Cascadia. Mona Waibel, coordinator.

**ADULT GENERAL EDUCATION**

Linn-Benton Community College has several programs designed to meet the needs of persons over 16 years of age who have not finished high school. These programs are:

**ADULT BASIC EDUCATION**

To provide for students 16 years of age or older who have not had the opportunity to complete their education through the eighth grade, LBCC offers free classes in Adult Basic Education. These classes offer instruction in the basic skills of reading, writing, English, vocabulary, spelling and mathematics.

**GENERAL EDUCATION DEVELOPMENT (GED)**

GED Test Preparation classes are offered free to the student over the age of 16 who has not completed high school and who desires to prepare for the high school equivalency exams (English Expression, Mathematics, Reading and Comprehension of Literature, Social Studies, and Natural Sciences).

Instruction in adult basic education and GED classes includes such information as getting and keeping a job, consumer buying practices, health habits, relationships with other members of the family and community, homemaking and citizenship responsibilities. Free classes are held in many locations throughout the area and are offered both during the day and at night. A student may start at any time.

**ADULT HIGH SCHOOL DIPLOMA**

In cooperation with local high schools, LBCC has two programs for the student who wishes to obtain his high school diploma: 1) **High School Completion** — High school students 16 years of age and older can obtain a high school diploma by attending classes at LBCC with the permission and approval of the high school (Simultaneous Enrollment). The high school will evaluate the student's educational records and determine which courses the student must take to meet the high school's graduation requirements. The diploma will be issued by the local school district. 2) **Adult high school diploma** — The primary purpose of this program is to assist those individuals 18 years of age or older or those high school age students who have been released from compulsory attendance under ORS 339.30, in completion of the credits required of all high school graduates in Oregon. LBCC will evaluate the student's educational records and experience and will assist the student in planning a study program that will meet his individual needs.

**HIGH SCHOOL CONTINUATION**

This program is offered in cooperation with the high schools located in the LBCC district and is designed for presently enrolled high school students who need to make up deficiencies in high school credits. Instruction is offered at night and is based on individual requirements and individual study. Only students officially referred by their high schools may participate in this program. There is a tuition charge for this program.

**VOCATIONAL TRAINING FOR THE HANDICAPPED**

This is a special program containing two broad areas. One area is designed to offer vocational and related training to those disadvantaged and handicapped people who are being aided by public and private agencies such as Vocational Rehabilitation and the Associations for Retarded Citizens, and who, because of their disadvantage or handicap, are unable to benefit from the regular college curriculum. The training programs are developed for each individual to help himself reach his training potential with the eventual goal of self-support and employment. The second area is a training program for work supervisors of disadvantaged and handicapped persons.

Contact the Coordinator of Special Programs for further information, 928-2361 ext 234.

**APPRENTICESHIP**

Apprenticeship is a two-fold program; the indentured apprentice is employed as a learner of skills through

on-the-job work experience and receives related training in the classroom. Classes are currently being offered at Linn-Benton Community College for the following crafts and trades: Inside Wireman, Machinist, Carpenter, Industrial Maintenance Mechanic, Industrial Millwright, Industrial Pipefitter, Industrial Welder, Manufacturing Plant Electrician, and Power Lineman.

Being an indentured apprentice is a condition for entering related training classes. Information on entrance procedures and requirements for apprenticeship is available from the Oregon State Bureau of Labor, Oregon State Employment Service or Apprentice Coordinator.

Upon completion of the required training program, the apprentice is moved to journeyman status, and is eligible to take a licensing examination if required. Linn-Benton Community College also offers the journeyman an opportunity for an Associate of Science Degree in Crafts and Industrial Trades.

Recognized journeymen will be granted 45 credits towards the Crafts and Industrial Trades degree. An additional 45 credits must be earned. Specific course descriptions are outlined in the Community Education catalog.

### PARENT EDUCATION

Parent and Child Education involves Parent/Child/Teacher interaction in a home/school setting. This is accomplished with two courses:

- Living With Your Pre-schooler
- Living With Your Kindergartner

Living With Your Pre-schooler/Kindergartner consists of seminars and labs. The seminars and labs are designed to help parents learn to be more effective teachers of their children. This program is based on the latest knowledge of teaching methods involving scientific teaching techniques concerning physical, mental and emotional growth of the child. This program also shows parents how to systematically use learning activities and tools related to the child's learning for future academic success, and its relationship to the family and society.

The Parent Education Program also offers classes in the following:

1. Creative Arts for adults who work with children.
2. Understanding your child (Dreikurs approach).
3. R.E.A.D. Read, Evaluate and Discover.
4. Puppetry.

### RETIRED SENIOR VOLUNTEER PROGRAM (RSVP)

The Retired Senior Volunteer Program attempts to provide a meaningful role in retirement for those over sixty.

There are openings for tutors and teachers aides on all school levels, office jobs, a need for instructors in crafts, knitting, crocheting and other skills. Visitors for the elderly in homes and nursing homes are needed. A wide variety of other community activities are also available.

RSVP can provide transportation for volunteers and a meal if they work through the meal period. On the job insurance is also provided.

### GOLDEN AGE PROGRAM

Persons sixty-five years of age and older are entitled to take classes sponsored by LBCC on a tuition free space available basis. A Golden Age card can be obtained on the main LBCC campus in Albany or at any one of the unity education centers. If the class selected requires a special "lab fee" for materials, this amount must be paid by all students.

### HOME AND FAMILY LIVING/ HOME ECONOMICS

Courses offered help individuals improve their daily lives in relating to others, in managing the home, in consumer education, in preparing nutritious as well as taste tantalizing meals and in other related home and family living areas. Classes come from the following major areas: housing, home furnishings, home management and equipment, textiles, clothing, nutrition, and food preparation.

#### CT 210 Beginning Clothing Construction 1 lec/2 lab 3 cr.

Basic skills and techniques of clothing construction. Fundamentals of pattern and fabric selection and preparation. Unit construction of simple garments.

#### CT 250 Textiles 3 class hrs/wk 3 cr.

Properties, identifications, selection, use, and care of textile fibers and fabrics.

#### HE 101 Orientation to Home Economics 2 class hrs/wk 1 cr.

An introduction to the development of Home Economics and current roles of Home Economists in society.

#### 9.901 Tailoring 3 class hrs/wk 2 cr.

The tailoring class is designed for people working for people working in the field of tailoring. It will include approximately one hour of lecture and demonstration by the instructor with the rest of the class period left for sewing by the students. The course is designed to promote construction of a well-fitted tailored garment, using a combination of techniques as found in retail and home custom finished clothing.

#### 9.911 Dressmaking as a Business 3 class hrs/wk 3 cr.

A course designed primarily for people already engaged in a small dressmaking business, who desire to increase their knowledge of modern small dressmaking business operation. This course is a basic overview of the major functional areas of the dressmaking business such as finance, legal requirement, government requirements, insurance, marketing, advertising, and personnel management.

## OCCUPATIONAL SUPPLEMENTARY COURSES (Partial Listing)

### 9.271 Transportation Principles I 3 class hrs/wk 3 cr.

Basic Traffic and Transportation Management is an introduction to all modes of transportation, as well as the basic principals of transportation economics and traffic management. It is suitable for both economics and business administration students, and would be of particular benefit to persons presently working in the field in beginning positions, in addition to those interested in entering transportation management. The course will provide a general understanding of transportation and its relationship to our economy.

### 9.272 Transportation Principles II 3 class hrs/wk 3 cr.

An intermediate course on transportation fundamentals that will cover such topics as the role of domestic transportation, carrier services in domestic transportation, and transportation aspects of physical distribution. This course is suitable for both economic and business students but will be of particular benefit to persons presently working in the transportation field.

### 9.273 Transportation and Traffic Management I 3 class hrs/wk 3 cr.

For the junior traffic man and those preparing to enter the field of Transportation Management. Provides the technical background and knowledge of fundamental procedures basic to all traffic. Heavy emphasis is placed on freight rates and tariffs for rail and motor carriers.

### 9.274 Transportation and Traffic Management II 3 class hrs/wk 3 cr.

The course will cover the more advanced aspects of traffic practice bringing to broader application the fundamental principles covered in the work of the semester.

### 9.275 Transportation and Traffic Management III 3 class hrs/wk 3 cr.

An advanced course in transportation and traffic management that involves further study in rail and motor rates, commodity rates, routing tariff rules, diversion and re-consignment and various other meaningful topics dealing with traffic management competencies.

### 9.100 Land Surveyors Review 3 class hrs/wk 3 cr.

A review of materials covered on the Oregon State Board of Engineering Examiners Professional Land Surveyors Exam. Topics include: Basic Math, errors in surveying, traverse and level computations, curves and earthwork, topographic mapping and coordinate systems, Oregon Land Survey Law, photogrammetry, field astronomy, U.S. Public Land Survey, introduction to Geodesy, and principles of the profession.

### 9.210 School Bus Driving 9 class hrs/term 1 cr.

This course is for school bus drivers and is a state approved course developed by A. Harvey Wright, director of pupil transportation, Oregon State Department of Education. It is taught from the manual for training school bus drivers in Oregon.

### 9.211 NSC Defensive Driving 9 class hrs/term 1 cr.

The practice of defensive driving to avoid a collision with a vehicle behind, an oncoming vehicle, an

intersection collision and other types of collisions will be covered.

### 9.268 Real Estate Lic. Preparation 3 class hrs/wk 3 cr.

Basic course in real estate for salesmen interested in preparing to pass the state Real Estate Examination.

### 9.620 Basic Fundamentals of Radio and Electricity 3 class hrs/wk 2 cr.

Basic course in electricity and electronics fundamentals which would be applicable to beginning students in either vocational or avocational areas.

### 9.621 Intermediate Fundamentals of Radio and Electronics 3 class hrs/wk 2 cr.

Intermediate course in the fundamentals of electricity and electronics which would be of value to intermediate students with either vocational or avocational interest. Includes operation of tubes and transistors, circuitry, audio amplifiers and equipment, proper supplies and related areas.

### 9.622 Advanced Theory of Radio and Electronics 3 class hrs/wk 2 cr.

Advanced theory course in electronic circuitry and applications which would be of interest to advanced students with either vocational or avocational interest. Course content includes modulation, detection and frequency conversion, measurement, transmission, and receiving equipment.

### 9.645 Scientific Glass Blowing 3 class hrs/wk 3 cr.

An introductory course for persons interested in scientific glass blowing. Topics will include a discussion of the properties of glasses, working with glass tubing and making glass-metal seals. The instruction will be valuable for students in science and laboratory technicians interested in the repair and fabrication of laboratory apparatus.

### 9.828 Tractor Safety 12 hrs/term 1 cr.

Tractor safety and operation in accordance with federal regulations for under-age farm workers. Class is also open to Adults. Class is developed and operated with the cooperation and assistance of the Agriculture Extension program.

### 9.832 Farm Machinery Safety 12 hrs/term 1 cr.

Farm machinery safety in accordance with federal regulations for under-age farm workers. Class is also open for Adults. Class is developed and operated with the cooperation and assistance of the Agriculture Extension program.

### 9.304 School Industrial Safety 3 class hrs/wk 3 cr.

The course programs: eye safety, fire, hearing, housekeeping, lifting, etc., depending on class inclination; could include bicycle safety, playgrounds, etc.

### 9.305 Industrial Safety 3 class hrs/wk 3 cr.

The Industrial Safety Course will give a practical approach to safety codes, program development, committees, codes, communications and special problem areas; guarding, hearing, eyes, shoes, hats, etc.

For a complete Community Education course listing contact a Community Education Center.

**OREGON BOARD OF EDUCATION**

W. Warren Maxwell, Chairman  
 Eugene H. Fisher, Vice-Chairman  
 Dr. Eleanor Beard  
 Richard F. Deich  
 Francis I. Smith  
 Kenneth L. Smith  
 Frank M. Warren

Lakeview  
 Oakland  
 Lake Oswego  
 Portland  
 Portland  
 Warm Springs  
 Portland

Vern Duncan, Superintendent of Public Instruction  
 Carol deBroekert, Associate Superintendent for  
 Community Colleges & Career Education

**LBCC BOARD OF EDUCATION**

Dr. Kenneth H. Haevernick, Chairman  
 Dr. Virgil H. Freed  
 H. L. Hammond Jr.  
 Earl S. Hirsheimer  
 Elizabeth Howe  
 Russell W. Tripp  
 Ethel B. Yocum

Lebanon (Zone 6-7)  
 Corvallis (Zone 4)  
 Corvallis (Zone 6-7)  
 Sweet Home (Zone 1)  
 Blodgett (Zone 5)  
 Albany (Zone 2-3)  
 Albany (Zone 2-3)

**LBCC ADMINISTRATION AND PROFESSIONAL SUPPORT STAFF**

Dr. Raymond J. Needham

President

Dr. O. R. Adams  
 A. Lee Archibald  
 Vernon E. Farnell

Dean of Instruction  
 Dean of Students  
 Dean of Business Affairs

D. Jon Carnahan  
 Kenneth D. Cheney  
 Philip V. Clark  
 Barbara J. Dixon  
 Raymond A. Jean  
 Wilfred A. Jordan  
 William D. Maier  
 H. Richard McClain  
 Dr. Robert A. Miller  
 Michael W. Patrick  
 Stan Ruckman  
 Dr. Peter C. Scott  
 William Siebler  
 Robert D. Talbott  
 James V. Waggoner  
 O. W. Zielaskowski

Director of Admissions and Registrar  
 Director of Humanities & Social Services Division  
 Director of Business & Industrial Division  
 Assistant to Dean of Instruction  
 Director of Facilities  
 Assistant Director of Community Education  
 Director of Accounting Services  
 Director of Allied Health & Physical Education Division  
 Director of Student Activities  
 Director of Financial Aids and Placement  
 Asst. Director Learning Services and Head Librarian  
 Director of Science & Technology Division  
 Director of Learning Resource Center  
 Director of Guidance Services  
 Director of East Linn Center  
 Director of Benton Center

Sue Cripe  
 David B. Haugen  
 Mel Gilson  
 Judith Green

Assistant Registrar  
 Coordinator of Veterans Affairs  
 Coordinator of Special Education Programs  
 Coordinator of Student Clubs and Organizations and  
 Affirmative Action

Doug Hurst  
 James E. Preston  
 Clarice A. Scheffler  
 Stephen M. Shelton  
 Derwood Smith

Manager of Food Services  
 Coordinator of Duplicating Services  
 Bookstore Manager  
 Manager Data Systems  
 Purchasing Agent

# administration and staff

## FACULTY

- ALVIN, JOHN**, Welding; B.S., Oregon State University; State of Oregon Welding Certifications.
- ANDREASON, REGINA**, Sociology-Psychology; B.A., Northern Illinois University.
- ARASMITH, EVERETT**, Wastewater Technology; A.A., Oregon Institute of Technology.
- ATWOOD, ILLA**, Business Skills; B.S., M. Ed., Oregon State University.
- AYERS, MARTHA**, Language Arts; B.A., M.A., Western Michigan University.
- BAKER, JAMES**, Biology; B.A., M.S., University of Wyoming; Ph.D., Oregon State University.
- BAKLEY, DAVID**, Health & Physical Education; B.S. Westmar College; M.Ed., Oregon State University.
- BERVIN, ARTHUR**, Language Arts; B.A., Portland State College; M.A., University of Redlands.
- BOWLER, VIRGINIA**, Reference Librarian; Ed.B., University of California at Los Angeles; M.L.S., University of Oregon.
- BREM, JANET**, Counselor; B.S., M.S., Oregon State University.
- BRICK, WALTER**, Art; B.A., University of Washington; M.S., University of Oregon.
- BROOKS, GARLAND**, Business Management; A.A., San Jose City College; B.S., M.Ed., Oregon State University.
- BURKE, MICHAEL**, Machine Technology; A.A., Santa Ana College.
- CALL, SHIRLEY**, Language Arts; B.A., Goshen College; M.A., University of Oregon.
- CARTER, DAVID**, Automotive Technology; Eugene Technical Vocational School; General Motors Training School; Toyota Training School; IGOA Master Technician Certificate.
- CHAMBERS, MAYNARD**, Business Management; B.S., M.B.A., Oregon State University.
- CHASE, THOMAS**, Language Arts; B.A., University of Colorado; M.A., California State College, Hayward.
- CHESTER, PATSY**, Business Skills; B.S., Idaho State University; M.Ed., Oregon State University.
- CLARK, DOUGLAS**, Political Science; B.A., M.A. University of Oregon.
- CLEMONS, MARVIN**, Cooperative Work Experience; B.S., University of Wisconsin at Stout; M.S., University of Oregon.
- CONNERS, GERALD**, Business Management; B.A., Park College; M.B.A., University of Oregon.
- COPE, MARIAN**, Study Skills; A.A., B.S., Western Montana State University.
- CROSSMAN, ARLENE**, Physical Education; B.S., M.Ed., Oregon State University.
- CUSHMAN, JOHN**, Farm Records Management; B.S., EdM, Oregon State University.
- DALLMANN, CHARLES**, Food Services; Cooking Certificate, Laney Community College; Community College Teaching Certificate - Food Services, California; B.A., University of Connecticut.
- DAY, HENRY**, Construction Technology; B.S., Oregon State University.
- DURHAM, RUSSELL**, History; B.A., M.A., Arizona State University.
- EASTON, JOYCE**, Health Counselor; R.N., Methodist Hospital School of Nursing, Los Angeles; B.S., Oregon State University, M.S., Oregon State University.
- FELTON, JAMES D.**, Wastewater Technology; A.S., Linn-Benton Community College.
- FORNELLI, LINDA**, Nursing Assistant; B.S.N., University of Kansas.
- GILSON, MELVIN**, Adult Basic Education; B.S., Willamette University.
- GREENE, GAYLE**, Associate Degree Nursing; R.N., Jackson Memorial Hospital, School of Nursing, Miami, Florida; B.S., Florida State University; M.A., Columbia University.
- GRIFFITHS, JOHN**, Machine Tool Technology; B.S., M.Ed., Utah State University; Professional Counseling Certificate; Journeyman Machinist Certificate.
- HANKEY, RICHARD**, Criminal Justice Studies; A.B., University of California; M.A., Fresno State College; D.P.A., University of Southern California; Advanced Certificate California Peace Officers Standards Training Commission.
- HANSEN, KENT**, Electricity and Electronics Technology; A.S., Oregon Institute of Technology; B.S., Oregon State University.
- HANSEN, LEROY C.**, Small Engine Repair; Attended University of Wisconsin; Montana State; Northern Montana College; University of Montana.
- HAZEL, DOROTHY**, Business Skills; B.S., University of South Dakota; M.B.A., University of Denver; Ed.D., University of Kentucky.
- HYSMITH, EUGENE**, Auto Body Repair; Long Beach City College, general courses; Lane Community College.
- JOHNSON, HAL**, Agriculture-Business; B.S., M.S., Washington State University.
- KIMPTON, VERLUND 'BUTCH'**, Physical Education; B.S., M.S., University of Oregon
- KRAFT, JOHN**, Chemistry; B.A., Willamette University; M.S., Oregon State University.
- LAMBERT, RITA**, Financial Aid Counselor; B.S., Mt. Angel College; M.S., Oregon State University.
- LAWRENCE, DOROTHY**, Business Skills; B.S., Oregon State University.
- LEDBETTER, ELMO**, Business Management; B.S., University of Tulsa; M.Ed., Indiana University.
- LEE, YVONNE**, Cataloging Librarian; B.A., Ewha Women's University, Korea; B.A., Oregon State University; M.L.S., University of Oregon.
- LIEBERMAN, MAX**, Sociology; B.S., Defiance College; M.A., Miami University.
- LOVE, CARL L.**, Metallurgy Technology; San Diego Vocational School Welding Certification; Egberts Electronic Institute, one year certificate; B.S., M.S., Oregon State University; Ph.D., Laurence University.

- MANN, CHARLES**, Study Skills; B.S., M.A., Oregon State University.
- MCCRAW, VIRGINIA**, Associate Degree Nursing; R.N., Mercy Hospital, Nampa, Idaho; B.S., University of Oregon.
- MILLER, DAVID**, Drafting; B.S., M.Ed., Oregon State University.
- MILLER, RAYMOND**, Guidance Counselor; B.A., California State College at Los Angeles; M.S., University of Oregon.
- MILLS, ANNE**, Nursing Assistant; R.N., St. Mary's Hospital, Minneapolis, Minnesota; B.S., St. Louis University; M.A., Oregon State University.
- MINNICK, DONALD**, Language Arts; B.A., Cornell College; M.A., State University of Iowa.
- MONTGOMERY, MARIBEL**, Psychology; B.A., M.A., University of California.
- MORAN, JAMES**, Data Processing; B.S., Montana State University; M.S., Utah State University.
- MOREIRA, JOYCE**, Business Skills; B.S., M.Ed., Oregon State University.
- MORGAN, GERALD**, Dental Assistant, United States Air Force.
- MORGAN, MICHAEL**, Mathematics; B.S., Oregon College of Education.
- MOVIUS, EDWARD**, Business; Thirty-five years experience in sales and public relations work.
- NELSON, SANDRA Z.**, Art; B.A., Kearney State College; M.A., University Northern Colorado.
- NIELSEN, GALEN**, Mathematics; B.S., Oregon College of Education; M.S., Oregon State University.
- OSTERLUND, BLAIR**, Guidance Counselor; B.S., University of Washington; M.S., University of Oregon; Ph.D., University of Missouri.
- OTTO, RICHARD**, Guidance Counselor; B.S., M.S., Oregon State University.
- PAULSON, JACQUELINE**, Associate Degree Nursing; B.S., M.A., B.A., University of Washington.
- PERKINS, RAYMOND**, Physical Science and Math; B.A., M.Ed., Central Washington State College; M.S., Oregon State University.
- POND, KEITH**, Automotive Technology; Air Force Mechanics School; Master Technician Certificates from Ford Motor Company; MTC Board; Ford & General Motors Training School Certificates.
- PRESTON, PEGGY**, Associate Degree Nursing; R.N., B.S., University of North Dakota.
- RASMUSSEN, STEVE**, Physical Science and Math; B.S., University of Utah; M.S., Oregon State University.
- REED, WALLACE**, Mathematics; B.S., M.A., Oregon State University.
- REYNOLDS, JAMES**, Drafting; B.S., B.A., M.A., California State University.
- ROSS, ROBERT**, Biology; B.S., M.S., University of Oregon.
- ROSSBERG, STEPHEN A.**, Speech - Drama; B.A., University of Minnesota; M.S., Kansas State Teachers College.
- SCHREIBER, JEAN**, Human Services; B.S., University of Oregon; Public Administration Certificate, University of Oregon.
- SNYDER, PAUL**, Media; B.S., Portland State University; M.S., Oregon College of Education.
- STEWART, ELWYN**, Welding; State of Oregon Welding Certification; Eugene Vocational School.
- STRINGER, DAVID**, Business Management-Marketing; B.S., San Jose State College; M.B.A., Golden Gate University.
- SWEARINGEN, DELL**, Mathematics; B.S., Oregon College of Education; M.S., University of Oregon. (On leave 1975-76.)
- SWEET, WILLIAM T.**, Creative Writing; B.A., University of Oregon; M.F.A., University of Oregon.
- THORNTON, LARRY**, Auto Body Repair; Associate Degree, University of Oregon; Training School Certificates from General Motors, Chevrolet, Buick, Pontiac, Oldsmobile, Cadillac, and Ford Motor Divisions; DeVilbiss Paint School; Martin-Senour Paint School; Washington State Patrol, collision losses; Allstate Insurance Company.
- TOBEY, EUGENE**, Art; A.A., College of Eastern Utah; B.F.A., M.F.A., Utah State University.
- VINCENT, MICHAEL**, Heating, Air Conditioning and Refrigeration Technology; A.S., Los Angeles Trade Technical College.
- WALCZAK, ALBERT**, Business Skills; B.S., Portland State College; M.Ed., Oregon State University.
- WALKER, ANN MARIE**, Guidance Counselor; B.A., M.S., California State University.
- WEST, RICHARD**, Performing Arts; B.S., Oregon State University; M.M., University of Oregon.
- WILLIAMS, BARBARAJENE**, Language Arts; B.S., Wisconsin State University; M.A., Arizona State University.
- WOOD, ADELLA**, Associate Degree Nursing; R.N., Trinity Hospital School of Nursing, Minot, North Dakota; B.S., University of Missouri.
- WOOLEY, JOHN**, Environmental Technology; B.S., M.S., Oregon State University; Environmental Protection Agency Water Pollution Control.
- WRIGHT, DWAIN**, Graphic Communications; A.A., Pierce Junior College; B.S.P.A., Woodbury College; M.A., University of California at Los Angeles.



## CLASSIFIED STAFF

- ANDERSON, THOMAS  
Custodian, Facilities
- ANDREWS, SUSAN  
Graphics Clerk, Learning Services
- ANNICKER, VIRGINIA  
Key Punch Operator, Data Processing
- BALLWEBER, JACOB  
Maintenance, Facilities
- BARCLAY, JANICE  
Secretary, Facilities
- BEALL, COLLEEN  
Secretary to Asst. To Dean of Instruction
- BENNETT, ROSEMARY  
Library Assistant, Learning Services
- BENSON, VERLA  
Admissions and Information Assistant
- BOYD, LYNN  
Assistant, Public Information
- BROWN, MARC  
College Center Aide
- BURKE, LINDA  
Secretary, Community Education
- BURRES, CAROL  
Switchboard Operator
- CARLIN, LINDA  
Secretary, Santiam Center
- CASIS, SALLY  
Instructional Asst., Study Skills Ctr., Learning Services
- CHAMBERS, MARTHA  
Clerk, Bookstore
- CLARK, JILL  
Accounting Clerk, Business Office
- CLARK, KATHERINE  
Instructional Asst., Study Skills Ctr., Learning Services
- CLIFTON, MARY  
Custodian, Facilities
- COLLINS, DIANE  
Secretary, College Center
- CONNELL, CLAUDE  
Custodial Supervisor, Facilities
- CONNER, DAN  
Groundsman, Facilities
- CORN, CECIL  
Maintenance, Facilities
- CURTIS, GLENDA  
Secretary, College Center
- DECKER, JOCELYN  
Secretary to the President
- DELAIR, CAROLYN  
Services Aid, College Center
- DIRKS, RUBY  
Printing Assistant, Learning Services
- DOTSON, GEORGE  
Custodian, Facilities
- EPPSTEIN, LINDA  
Secretary, Dean of Business Affairs
- FARGHER, INA  
Secretary, Media Services, Learning Services
- FARRINGTON, ANNIE  
Secretary, Director of Humanities and Social Services Division
- FICK, MIKE  
Custodian, Facilities
- FISHER, FLOYD  
Accountant, Business Office
- FREDRICKSON, BOB  
Maintenance Supervisor, Facilities
- GRAHAM, DUANE  
Maintenance, Facilities
- GRAY, ALICE  
Accounts Payable Clerk, Business Office
- GREEN, JUNE  
Clerk, Bookstore
- GUPTON, DICK  
Maintenance, Facilities
- HAINZ, MELVIN  
Maintenance, Facilities
- HARRINGTON, HARRY  
Custodian, Facilities
- HARRIS, PROCTOR  
Maintenance, Facilities
- HARRIS, RUTH ANN  
Lab Technician, Community Education
- HAYNES, DON  
Custodian, Facilities
- HEATON, LEROY  
Biology Lab Preparator, Science & Technology Division
- HEINS, JEAN  
Secretary, Business and Industrial Division
- HENDERSON, IVAN  
Custodian, Facilities
- HERRLING, CURTIS  
Custodian, Facilities
- HERROLD, PAULETTE  
Secretary, Allied Health & P.E. Division
- HORTON, LOUIS  
Computer Programmer, Business and Industrial Division
- HUANG, LOUISE  
Admissions Clerk, Admissions and Registration
- HUGHES, JUNE  
Groundskeeper, Facilities
- HULSHOF, BILL  
Accountant, Business Office
- JAMES, DONNA  
Registration Coordinator, Admissions and Registration
- JIMMERSON, SUE  
Secretary, Director of Admissions and Registration
- JORDAN, NADINE  
Bookkeeper, Business Office
- KEITH, JUDY  
Guidance Assistant, Guidance Services
- KEMP, JEAN  
Secretary, Learning Services
- KERNS, BETTY  
Mail Clerk, Facilities
- KIMPTON, FORD  
Laundry Supervisor - Allied Health and P.E. Division
- KNABE, ELSIE  
Fry/Baker Cook, College Center
- KRAMER, MARY JO  
Secretary, Community Education
- LIEBERMAN, DAVID  
Custodian, Facilities
- LIEBERMAN, MARILYN  
Programmer, Business and Industrial Division
- LINDSAY, LARRY  
Head Groundskeeper, Facilities
- LONG, RAYMOND  
Computer Operator
- LOE, SHIRLEY  
Bookkeeper, Food Services, College Center
- MABRY, CHARLIE  
Custodian, Facilities
- MACK, SALLY  
Secretary, Director of Science and Technology
- MAIER, ANNE  
Secretary, Purchasing
- MARLER, PAULINE  
Payroll Clerk, Business Office
- MC CLOY, BERT  
Custodian, Facilities
- MC KAIG, CATHY  
Clerk, Financial Aid & Placement
- MC NEIL, EVELYN  
Custodian, Facilities
- MILLS, TOM  
Equipment Technician, Learning Services
- MINEGAR, HELENA  
Custodian, Facilities
- MILLER, JOAN  
Instructional Assistant, Science & Technology
- NELSON, MARY  
Clerk, Learning Services
- NUNNEMAKER, NANCY  
Clerk, Bookstore
- ORSI, MARGARET  
Secretary, Dean of Students
- PAULL, RICHARD  
Graphic Artist, Learning Services
- PEARSON, CLARENCE  
Groundskeeper, Facilities
- PFEL, MELVIN  
Food Services Cook, College Center
- POSTMA, BETTY  
Secretary, Dean of Instruction
- RAKE, NORMAN  
Custodian, Facilities
- RASOR, JEAN  
Chemical Storekeeper, Science and Technology Division
- RAY, SANDEE  
Secretary, Director of Allied Health and P.E. Division
- REEDER, DARLENE  
Secretary, Director of Accounting Services
- REID, CAROL  
Clerk, Veteran's Affairs
- RODGERS, WANDA  
Records Clerk, Admission and Registration
- ROSS, JANE  
Secretary, Director of Learning Services
- ROTHROCK, MEG  
Printing Assistant, Learning Services
- RUNCKEL, JACQUELYN  
Clerk, Financial Aid & Placement
- SCHMIDT, DIANE  
Secretary, Humanities and Social Services Division
- SMITH, CONNIE  
Secretary, Guidance Services
- SOLLARS, GEORGE  
Custodian, Facilities
- STAATS, MOLLY  
Clerk, Admissions and Registration
- STEELE, LORRAINE  
Secretary, Director of Community Education
- STOLSIG, EDNA  
Secretary, East Linn Center
- SUBERT, JOHN  
Graphic Artist, Learning Services
- THOMPSON, CHRIS  
Production Coordinator, Learning Services
- TRANSUE, DEBBIE  
Accounts Payable Clerk, Business Office
- TRENT, IRENE  
Secretary, Director of Financial Aid and Placement
- TREICHLER, ALBERT  
Auto Body Instructional Assistant, Business & Industrial Division
- WAGNER, NANCY  
Math/Media Coordinator, Learning Services
- WALLACE, SALLY  
Secretary, Benton Center
- WHITE, JOAN  
Photographer, Learning Services
- WOLD, SANDRA  
Custodian, Facilities
- WURM, GENEVIEVE,  
Custodian, Facilities
- WYMAN, BARBARA  
Secretary, Director of Business & Industrial Division
- WENGER, NORMA  
Inventory Clerk, Facilities

Academic Regulations . . . . .	8	Electricity & Elect. Tech . . . . .	86
Accounting Technology . . . . .	32	Engineering Technology . . . . .	85
Accreditation . . . . .	5	English . . . . .	65
Administration and Staff . . . . .	100	Faculty . . . . .	101
Admission Regulations . . . . .	5	Farm Management . . . . .	87
Adult Basic Education . . . . .	97	Fees . . . . .	7
Adult High School Diploma . . . . .	97	Financial Aids . . . . .	11
Advising . . . . .	14	Fire Science . . . . .	88
Agriculture Business . . . . .	79	Foods Service . . . . .	15
Air Conditioning . . . . .	92	Food Service Program . . . . .	41
Allied Health & Physical Ed Dv . . . . .	22	Foreign Language . . . . .	65
Animal Technology . . . . .	82	Foreign Students . . . . .	6
Anthropology . . . . .	72	Full-Time Student . . . . .	5
Apprenticeship . . . . .	97	General Business . . . . .	36
Art . . . . .	61	General Ed. Devel. (GED) . . . . .	97
Associate Degree Nursing . . . . .	23	General Industrial Tech . . . . .	50
Athletics . . . . .	15	Geography . . . . .	73
Auto Body Repair . . . . .	51	Graduation Requirements . . . . .	9
Automotive Technology . . . . .	52	Grading Standards . . . . .	9
Banking & Finance . . . . .	33	Graphic Communications . . . . .	67
Biological Sciences . . . . .	83	Golden Age Group . . . . .	98
Bookstore . . . . .	15	Guidance Services . . . . .	14
Business & Industrial Dv . . . . .	30	Health . . . . .	27
Business Management . . . . .	35	Health Services . . . . .	14
Business Transfer Courses . . . . .	31	Heating . . . . .	92
Carpentry . . . . .	53	History . . . . .	73
Certificates . . . . .	9	History & Development of the College . . . . .	3
Chemistry . . . . .	91	High School Continuation . . . . .	97
Classified Staff . . . . .	103	Home Economics . . . . .	98
Clubs . . . . .	15	Housing . . . . .	15
Community Education . . . . .	96	Humanities & Social Science Division . . . . .	60
College Center . . . . .	15	Human Services . . . . .	69
College Transfer Curricula Gds . . . . .	18	Industrial Programs . . . . .	50
College Work Study . . . . .	12	Job Placement . . . . .	13
Construction Technology . . . . .	53	Journalism . . . . .	65
Cooperative Work Exp . . . . .	17	Law Enforcement . . . . .	62
Cosmetology . . . . .	17	Learning Services . . . . .	76
Counseling . . . . .	14	Library . . . . .	77
Creative Writing . . . . .	67	Literature . . . . .	66
Credit Limit Rule . . . . .	8	Lower Division Curricula Gds . . . . .	18
Credit by Examination . . . . .	8	Machine Tool Technology . . . . .	54
Criminal Justice . . . . .	62	Marketing . . . . .	37
Data Processing . . . . .	40	Mathematics . . . . .	89
Degrees . . . . .	9	Math Lab/Media Center . . . . .	77
Dental Assistant . . . . .	25	Media Services . . . . .	77
Diplomas . . . . .	9	Metallurgical Technology . . . . .	55
Disadvantaged & Handicapped St . . . . .	97	Music . . . . .	71
Drafting Technology . . . . .	83	Nondiscrimination . . . . .	3
Drama . . . . .	64	Nursing Assistant . . . . .	26
Economics . . . . .	73	Nurse Refresher Course . . . . .	24
Education . . . . .	74		

# index

Occupational-Technical Programs . . . . .	17
Parent Education . . . . .	98
Part-time Students . . . . .	5
Philosophy . . . . .	72
Philosophy of the College . . . . .	3
Physical Education . . . . .	27
Physical Sciences . . . . .	91
Physics . . . . .	91
Political Science . . . . .	74
Programs of Study . . . . .	16
Psychology . . . . .	74
Recreational Vehicle Repair . . . . .	56
Refrigeration, Heating & Air Conditioning Technology . . . . .	92
Refunds . . . . .	8
Registered Nursing . . . . .	23
Registration Procedures . . . . .	7
Religion . . . . .	72
Reserve Officers Training Corps. ROTC . . . . .	18
Residency . . . . .	6
Retired Senior Volunteer Program . . . . .	98
Science and Technology Division . . . . .	78
Science Lab Technology . . . . .	93
Secretarial Sciences . . . . .	44
Selective Admissions Program . . . . .	6
Small Engine Repair . . . . .	56
Social Sciences . . . . .	72
Sociology . . . . .	75
Speech . . . . .	64
Student Activities . . . . .	14
Student Grants . . . . .	11
Student Loans . . . . .	11
Student Organizations . . . . .	15
Student Personnel Services . . . . .	4
Student Rights . . . . .	15
Study Skills Center . . . . .	77
Supervisory Training . . . . .	38
Testing . . . . .	14
Transcripts . . . . .	9
Transfer Programs Curricula Gds . . . . .	18
Transfer Students . . . . .	6
Tuition & Fees . . . . .	7
Veterans . . . . .	13
Vocational Training for Disadv. and Handicapped . . . . .	97
Wastewater Technology . . . . .	93
Welding . . . . .	58
Wood Technology . . . . .	53
Writing . . . . .	67

