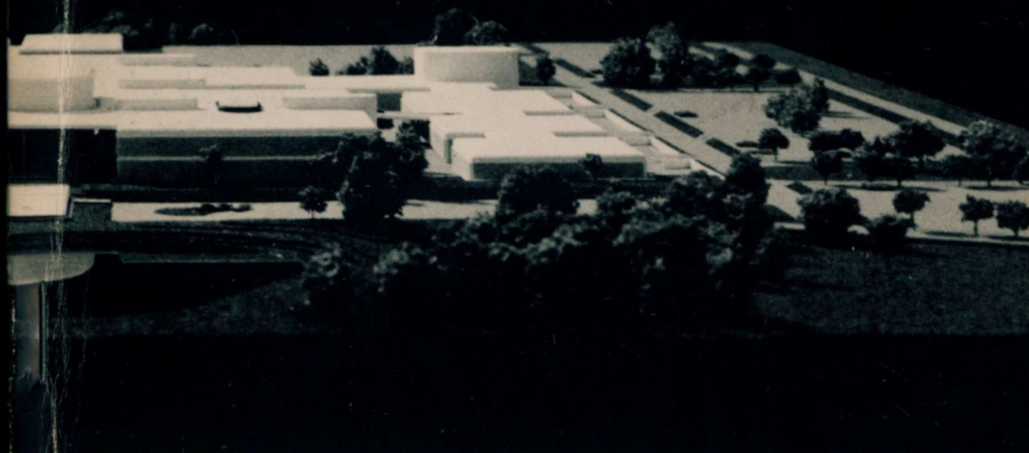




# CATALOG 1969



SERVING THE HEART OF THE WILLAMETTE VALLEY

**Linn-Benton  
Community  
College**



ELDON G. SCHAFER, Ph.D.  
College President and  
Clerk of the Board



# Introduction

Welcome to LBCC, Oregon's youngest community college, where the action is. We need your assistance to build LBCC into an exciting institution where learning a trade carries equal status with preparation for a four-year college education. We believe that all education is vocational—some vocations require one or two years of post-high school education; others require four or more.

While LBCC does not yet have a permanent campus, you will find excellent equipment and instructors interested in your welfare as an individual and a student. Do not hesitate to ask for assistance from a counselor, instructor, or administrator because we are all here to assist you in obtaining the skill and knowledge you desire.

Best wishes for a challenging and profitable year.

Eldon G. Schafer  
President

## BOARD OF EDUCATION

Mr. Dan L. Ashton .....	Zone 1
Mr. Russell W. Tripp .....	Zone 2
Mr. James C. Goode .....	Zone 3
Mr. Glenn Huston .....	Zone 4
Mr. J. M. Lambert, Vice-Chairman .....	Zone 5
Dr. Virgil H. Freed .....	Zones 6 & 7
Mr. Herb Hammond, Jr., Chairman .....	Zones 6 & 7

## BUDGET COMMITTEE MEMBERS

Mr. Roy Collins  
Dr. Harold Hagerty  
Mr. Dick Manion  
Mr. Jack Buchanan  
Mr. Dean Davis  
Mr. Charles Root  
Mr. LaVern Ratzlaff

# Administration



ELDON G. SCHAFER, Ph.D.  
College President and  
Clerk of the Board



LEE ARCHIBALD  
Director of Student  
Personnel Services



ROBERT ADAMS  
Dean of Instruction



VERNON E. FARNELL  
Business Manager and  
Chairman of Business  
Education Division



ORVILLE ZIELASKOWSKI  
Director of Adult and  
Vocational Education



# Table of Contents

FOREWORD .....	3
ADMINISTRATION .....	5
TABLE OF CONTENTS .....	6-7
COLLEGE CALENDAR 1969-70 .....	8
THE COLLEGE .....	11
Philosophy .....	13
History and Development .....	15
Accreditation .....	15
ADMISSION PROCEDURE .....	17
Application .....	17
Admission Testing .....	17
Requirements .....	17
Physical Examination .....	18
REGISTRATION .....	18
Procedure .....	18
Pre-College Counseling .....	18
Program Changes .....	19
Auditing .....	19
Fees and Expenses .....	19-20
Tuition Schedule .....	20
Fees Schedule .....	20
Refunds .....	20
ACADEMIC REQUIREMENTS AND SCHOOL STANDARDS	21
Class Credit .....	21
Credit Load .....	21
Credit by Examination .....	21-22
Advanced Placement .....	22
Grading System .....	22
Honor Roll .....	23
Probation .....	23
Class Attendance .....	23
Transcripts of LBCC work .....	23
Transferring to other institutions .....	23
Degrees, diplomas, certificates, graduation requirements .....	23-24
Student Conduct .....	25
STUDENT SERVICES .....	26
Counseling .....	26
Financial Aids .....	26

College Work Study .....	26
College Board Grants .....	27
Educational Opportunity Grants .....	27
Part-Time Student Employment .....	27
Guaranteed Student Loan .....	27
Emergency Loan .....	27
Scholarships and Grants .....	28
Deferred Tuition .....	28
Placement Office .....	28
Housing .....	29
Student Activities .....	29
<b>LEARNING RESOURCES CENTER .....</b>	<b>30</b>
Audio Visual Services .....	30
Library .....	30
Study Skills Center .....	30
<b>PROGRAMS AND COURSES OF STUDY .....</b>	<b>33</b>
(See Index for specific programs)	
Introduction .....	35
Occupational and Technical .....	37
Agriculture Technology .....	39-40
Business Division .....	41
Business Management .....	41-42
Bookkeeping - Clerical .....	43
Secretarial Studies—Office Administration .....	44
Data Processing .....	45
Fire Science Technology .....	46
Health Occupations .....	47
Industrial Division .....	48
Auto Mechanics .....	48
Industrial Mechanics .....	49
Drafting Technology .....	50
Supervisory Training .....	51-52
Welding .....	53
Law Enforcement .....	54
<b>ADULT EDUCATION DIVISION .....</b>	<b>55</b>
Philosophy .....	57
Registration and Tuition .....	57
Course Offerings .....	57-58
Adult Basic Education .....	58
Apprenticeship .....	58-59
High School Completion .....	59
<b>TRANSFER CURRICULAR PATTERNS (See Index) .....</b>	<b>61</b>
<b>COURSE DESCRIPTIONS (See Index for specific course) ....</b>	<b>87</b>
<b>PROGRAMS AND COURSES INDEX .....</b>	<b>124</b>

# Calendar for 1969-70

## FALL TERM

Registration	August 4 to September 26
Classes begin	September 29
Last day to Register or add courses	October 3
Last day to drop with the automatic "W"	November 7
Thanksgiving	November 27-30
Final Exams	December 15-18
Last day of Fall Quarter	December 20
Christmas Vacation	December 21- January 4

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## WINTER TERM

Registration begins	December 1
Classes begin	January 5
Last day to Register or add courses	January 9
Last day to drop with the Automatic "W"	February 13
Final Exams	March 16-19
Last Day of Winter Quarter	March 21
Spring Recess	March 22-29

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## SPRING TERM

Registration begins	March 2
Classes begin	March 30
Last day to Register or add courses	April 3
Last day to drop with the Automatic "W"	May 8
Memorial Day	May 30
Final Exams	June 8-11
Last Day of Spring Quarter	June 13

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## SUMMER TERM

Registration	June 16-19
Classes begin	June 22
Last day to Register or add courses	June 26
Independence Day	July 4
Last day to drop with the Automatic "W"	July 17
Final Exams	August 11-12-13
Last day of Summer School	August 15

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## 1970-71 FALL TERM

Registration	August 3
Classes begin	September 28
Thanksgiving	November 26-29
Fall Term Ends	December 19

1969

CALENDAR

1970

## JULY

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

## AUGUST

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

## SEPTEMBER

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

## OCTOBER

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

## NOVEMBER

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

## DECEMBER

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

## JANUARY

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

## FEBRUARY

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28

## MARCH

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

## APRIL

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

## MAY

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

## JUNE

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				



# **The College**

## THE PHILOSOPHY OF THE COLLEGE

Linn-Benton Community College is dedicated to providing educational opportunities at minimum cost to the student because of the conviction that the fullest possible development of each individual's abilities is essential to the welfare of the community, the state, and the nation.

Linn-Benton Community College is dedicated to offering opportunities for the nurture and development of the mind—the mind free to create and innovate, to move from mental adolescence to intellectual maturity.

This dedication commits the College to offer opportunities to every student to develop his unique potential and to explore his abilities and talents. It commits the College to present diversified programs and to experiment with instructional methods within the limit of its resources. It commits the College to promote the idea that students pursue education beyond the curriculum, to widening horizons, and throughout their lifetime. It commits the College to offer its resources to the entire community and, likewise, to enhance and exploit the resources of the community. It commits the College to evaluate continuously the quality of its offerings, the standards of achievement, the effectiveness of its instruction, and the relevance of its programs.

### IMPLEMENTATION OF PHILOSOPHY

In view of its nature, its role, and its philosophy, Linn-Benton Community College designs its educational program to meet five purposes, singly or in combination:

1. **General Education:** Throughout all courses in the College, emphasis is placed on developing the student's power of analysis and synthesis and to increase his ability to use his mind creatively. The College offers to all of its students, and requires of its graduates, a pattern of courses designed to produce an awareness of self and to provide: (a) a basic competence in the English language in its written and spoken forms; (b) a basic competence in mathematics; (c) a knowledge of American history and government; (d) regard for physical and mental health; (e) an understanding of the principles of the major divisions of human studies, humanities and science; and (f) knowledge in depth of one subject area.
2. **Occupational-Vocational-Technical Education:** The Vocational-Technical Division provides curricula designed to prepare the student for employment. This division of the College serves the community, providing business, industry and the various trades with competent workers who have learned basic skills and knowledge in their special field.  
The objectives of the division are to:
  - a. Provide pre-employment instruction in the development of manipulative skills and technical knowledge, including job orientation, business standards and ethics, safety, customer relations, and responsibilities of good citizenship.

- b. Assist those requiring re-training and advanced technology by providing vocational-technical offerings to meet changing demands of the industrial community.
  - c. Provide apprenticeship and intensive training necessary for further development of trade skills and technical knowledge of those currently employed in business and industry.
  - d. Provide the vocational-technical student with the opportunity to further his educational objectives through participation in a program leading to an Associate in Science, Associate in Arts Degree, or Certificate of Achievement.
  - e. Contribute to the economic and general welfare of the community by providing conscientious, productive and intelligent employees.
3. **Transfer of Lower Division Education:** The College provides courses paralleling those of the lower division of the Oregon state colleges and universities so that qualified students may transfer to four-year institutions.
4. **Counseling and Guidance Services:** Because Linn-Benton Community College recognizes the importance of counseling, a comprehensive counseling program is provided. To the extent that the teaching of the community college is directed toward serving the needs of every student, each faculty member is conceived of as a counseling and guidance worker. Counselors work with the staff, students, the community-at-large, business and industry, state welfare agencies, and with high schools and four-year colleges. Since many students enter the College with aspirations beyond their capabilities, a major function of counseling and guidance is to help such students evaluate their goals and enter upon possible and useful programs.
5. **Continuing and Adult Education:** The general purpose of adult education is to provide learning opportunities for those who wish to improve themselves on the job, to prepare for a new position, or simply for avocational interests. The explosion of knowledge in the past few decades has made obsolescence a problem for even highly skilled workers. The adult program offered will reflect the needs and demands of the community. Increased leisure will broaden the demands for services for adults and the range of services offered generally constitute an index of the level of community culture.

Included within the adult education program are trade apprenticeship, occupational extension classes and a high school completion program in cooperation with district high schools.

Quality within diversity is the hallmark of the comprehensive community college and is the approach to which Linn-Benton Community College subscribes. An open door offers a wide range of programs each at its proper level of rigor and each of high quality for its intended purpose. Extensive guidance, counseling, and testing procedures insure students being placed in appropriate curricula so that the "open door" policy will not become a "revolving door" for students.

Linn-Benton Community College adheres to the principles of an open-door college. Entry is unrestricted to graduates of accredited high schools; to non-high school graduates, 18 years of age or older, satisfactorily completing the GED tests; and to older non-high school graduates who may be admitted as special students.

Many courses and curricula are available—some within the range of the student's interest and abilities, some outside his interests, and some beyond his abilities. He need not choose what lies outside his interests, but on the other hand, he cannot choose that which clearly lies beyond his abilities. The "open door" policy is not synonymous with "open door" curriculum. Appropriate standards of performance must be maintained within each course.

#### **THE HISTORY AND 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 West First Avenue, Albany.

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

#### **ACCREDITATION:**

Linn-Benton Community College is fully accredited by the Oregon State System of Higher Education and Oregon State Department of Education, Technical and Vocational Division, and the Veterans' Administration. Linn-Benton Community College is recognized as a "Candidate" by the Northwest Association of Secondary and Higher Schools.





# Admission Procedure

## APPLICATION

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

1. An Application for Admission
2. A copy of high school transcript or copies of all college work. It is the student's responsibility to secure transcripts for his LBCC file.

Students who register for 12 or more credits must also file with the Admissions Office:

3. A completed physical examination form available through the Admissions Office.

When a student has provided the college with the required application, transcript, and completed physical examination form, the applicant will receive a letter of acceptance.

Students enrolling for 7 or fewer credits may make application at the time of registration and are not required to secure transcripts until they have accumulated 30 or more credits.

## TESTING

In cases where students have taken college entrance tests such as the College Entrance Examination Board Tests and/or the American College Testing Examination, such scores should be filed with the Admissions Office. It is to the student's advantage to provide the counseling office with available test scores. These tests are used for counseling purposes only and not for admissions screening. In several occupational-technical areas aptitude tests are sometimes recommended.

A variety of interest tests are available through the counseling center. The state employment service also provides general aptitude testing. The college counselors will sometimes recommend this special test-battery for placement and counseling purposes.

## ADMISSION REQUIREMENTS

Linn-Benton Community College is organized to serve the educational needs of all the citizens of the college district who can benefit from instruction at the college.

Graduates of high schools of the State of Oregon will be admitted as regular students. Non-high school graduates, 18 years of age and older, may be admitted as regular students upon satisfactory completion of the General Education Development (GED) tests. Non-high school graduates may establish eligibility by submitting evidence of appropriate work experience or other types of training gained beyond the high school years.

Students applying to enter one of the occupational programs must be 18 years of age and must, in the judgment of the administration, be able to benefit from the instruction offered. Since enrollment in the occupational programs is limited by class size, students will be admitted to these programs on a first-come, first-serve basis. The administration reserves the right to give priority to district residents in specific occupational and vocational programs.

## **HIGH SCHOOL STUDENT POLICY**

Linn-Benton Community College, working in cooperation with the local school districts, will accept some selected high school students on a part-time basis in selected LBCC programs. Approval for attendance must be obtained from the high school prior to acceptance by LBCC.

### **ADMISSION OF SPECIAL STUDENTS**

Persons qualified by maturity and ability to do satisfactory college work 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. Transcripts for full-time special students will not be forwarded to another institution until the deficiency has been removed.

Persons enrolled on a non-credit basis, or persons enrolled in a program of less than seven credits shall also be classified as special students. Students in this category may be admitted without application and without presenting a transcript of previous high school or college work.

### **PHYSICAL EXAMINATION REPORT**

A physical examination by a licensed physician is required of all full-time students (12 or more credits) or students enrolled in physical education and nursing courses. The physical exam forms are available in the Registrar's Office.

## **Registration**

1. Check with Records and Admissions Office to be sure that all records and materials are on file as explained under "Admission Procedure."
2. Pre-registration counselor conferences are available for those students desiring advice and assistance in planning their program. Make an appointment with a counselor for a schedule-planning session. Fall quarter counseling and registration begins August 4.
3. When your program has been approved by a counselor, complete registration at the Records and Admissions Office. Fees must be paid at the time of registration unless prior arrangements have been made with the Dean of Student Personnel Services. Near the end of each school quarter, a new schedule of classes is available. Registration for the following quarter begins on that date. Each student taking 8 or more credits must register in person and is not officially registered until tuition and fees are paid.

### **PRE-COLLEGE COUNSELING**

All students planning a full-time program must arrange a conference with the counseling department. With assistance from a counselor the student will plan a full year's schedule using the "Planning Booklet." At this meeting the counselor will interpret the placement test scores (if available) and school transcripts. By using these sources of information and the student-stated preference, a schedule of classes is planned.

Students entering fall quarter should call the college for a counseling appointment. Fall quarter counseling and registration begins August 4. (The summer counseling-registration period allows the student to make several appointments and be free from the usual pressure of college registration.)

## PROGRAM CHANGES

**Adding a course:** Students may add courses during the first week of class.

**Withdrawal:** A student who requests official withdrawal during the first six weeks will automatically be assigned a W.

When an individual requests official withdrawal after the first six weeks and prior to the last two weeks of the quarter including final week, the instructor will determine whether the student is passing or failing the course. If the student is receiving a "D" or higher in the course, he will be assigned a "W". If he is failing the course, he will be assigned a WF.

During the last two weeks of any regular quarter, including final week, a student may withdraw only with special permission of the Dean of Student Personnel Services.

## AUDITING CLASSES

Students regularly enrolled may request admittance to a class as an auditor. Auditors will be accepted only if space is available in the class. Charges for auditing will be the same as regular credit enrollment.

## FEEES AND EXPENSES

Tuition and special fees must be paid in full at the time of registration unless special arrangements have been made with the Dean of Student Personnel Services.

Programs offered by Linn-Benton Community College are approved or in the process of review by the State and Federal Veterans' Administrations and the Oregon Division of Vocational Rehabilitation.

## QUARTERLY FEE SCHEDULE

Credit Hours	Resident Students*	Non-Resident Students	Out of State
1	\$ 6.00	\$ 10.20	\$ 18.00
2	12.00	20.40	36.00
3	18.00	30.60	54.00
4	24.00	40.80	72.00
5	30.00	51.00	90.00
6	36.00	61.20	108.00
7	42.00	71.40	126.00
8	48.00	81.60	144.00
9	54.00	91.80	162.00
10	60.00	102.00	180.00
11	66.00	112.20	198.00
12 or more	72.00	122.40	216.00



**\*Residency**

A student is considered a resident of the district if:

1. His parents are bona fide residents of the Linn-Benton Community College District.
2. The student is over 21 years of age or married and can present evidence that he has established permanent residency in the district at least 90 days prior to registration.

All other students are required to pay non-resident or out-of-state tuition.

**FEES**

Change of Program (After classes begin) .....	\$1.00
Credit by Examination .....	5.00
Student Accident Insurance (optional) .....	4.50 per quarter

**Late Fees:** Individuals registering late must pay an additional \$1.00 per day up to a maximum of \$5.00 during the late registration period. (See school calendar, P. 8.)

**REFUNDS**

A full-time student withdrawing from school by the end of the third week will receive a full refund of tuition less \$10.00. Part-time students with seven or fewer credits will receive a full refund less \$5.00. Withdrawals after that date will receive no refund.

# Academic Requirements and School Standards

## **CREDITS**

In general, a class which meets one hour per week for one term will yield one hour of credit; a class meeting three hours per week, three hours of credit. A lab class usually yields one credit for each three 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 may be acceptable to technical institutions.

Questions regarding transferability of courses should be referred to the Dean of Student Personnel Services.

## **STUDENT CREDIT LOAD**

You are considered a full-time student if you register for 12 or more term hours. You may mix your schedule by registering for some general studies courses and some vocational-technical courses. If you must work part time while attending the community college, you 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 many areas, there are suggested curricula to cover one or two years of study. Students who must work can schedule a two-year curriculum over a longer period of time.

Lower division studies students should schedule an average of 15 credit hours a term in order to accumulate 90 hours after two years, for junior standing upon their transfer to a four-year college. No more than 18 hours may be taken in any single term without approval of the Dean of Student Personnel Services.

## **CREDIT LIMIT RULE**

A student may not transfer more than 93 hours of lower division collegiate work to a state institution of higher education, nor may a student who has received 93 or more credit hours in any other university or college use the courses taken at LBCC as transferable credit to a state four-year college or university.

## **CREDIT BY EXAMINATION**

If a student believes that he has mastered the material presented in a certain course, or has had equivalent work experience, he may make application to be excused from the course and to receive credit by following this procedure:

- a. Check with a counselor so that a decision to continue or not to continue with the request can be made. Transcripts and other

evidence of experience should be reviewed by the counselor and student.

- b. Fill out a credit by examination form which is available in the Admissions Office.
- c. Go to the appropriate department chairman for approval or referral.

After the examination has been taken, the student will receive a "Pass" or "Fail" grade. At any step in this process, the right of appeal to the Administrative Council remains open.

Cost: \$5.00 test fee

Plus: \$3.00 per credit earned

### ADVANCED PLACEMENT

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 in examinations administered by the Board may, on admission to LBCC, be granted credit toward an Associate in Arts Degree in comparable courses. Amount of credit will be determined by the appropriate LBCC department. Grades will be recorded as pass grades (P). Advanced Placement Scores should be forwarded to the LBCC Admissions Office.

### GRADING SYSTEM

#### 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
- WF—Withdraw failing
- I—Incomplete work (did not take final)
- W—Official withdrawal
- P—Pass
- TW—Technical withdrawal

**Incomplete Rule:** Incompleted work must be completed by the beginning of the next grade reporting period or it is automatically considered F.

**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
- WF—0 grade points per credit, no hours attempted
- I—0 grade points per credit, no hours attempted
- W—0 grade points per credit, no hours attempted
- P—credit earned, not computed in GPA
- TW—0 grade points per credit, no hours attempted

## HONOR ROLL

**President's Honor List:** At the conclusion of each quarter, every student's grade point average is computed and those students who obtain a grade point average of 3.33 or better and have carried a 10 credit load or more are placed on the President's Honor List for the quarter.

## ACADEMIC PROBATION

Non-transfer 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 quarter their grade point average drops below 2.0, or at the end of their third quarter their accumulative grade point average for all three quarters is not 2.00. This rule would only apply to those students who are carrying eight or more credits or who have accumulated 30 or more credits.

Any student suspended or on probation who is transferring from another institution of higher education to Linn-Benton Community College will be automatically placed on probation at Linn-Benton Community College.

## CLASS ATTENDANCE

Students are expected to attend each class meeting for which they have registered, since there is no official means of excusing absence.

When absence for some unavoidable reason does occur, it is the obligation of the student to arrange for make-up work with the instructor.

## LBCC TRANSCRIPTS

Student transcripts may be secured through the Registrar's Office. The first request for a transcript will be honored without charge. Additional transcripts will be provided at a cost of \$.50 each.

## TRANSFER TO OTHER INSTITUTIONS

Lower division students may transfer a maximum of 93 credit hours to a four-year college or university. 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.

We encourage students who are planning to transfer to contact a counselor so that appropriate transfer plans can be made.

## DEGREES, DIPLOMAS, CERTIFICATES, GRADUATION REQUIREMENTS

The following degrees will be awarded by Linn-Benton Community College:

### **The Associate in Arts and the Associate in Science**

The requirements for these degrees, which are presented below are subject to approval of the Board of Education as well as the State Department of Education, Division of Community Colleges.

**The Associate in Arts:** This degree is awarded to students who complete the requirements of the Lower Division Liberal Arts Program.

**The 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.

## General Requirements for Associate In Arts Degree

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, 6 credits (Wr 111-112)
  - b. Physical Education activity courses, 5 credits—1 per term.
  - c. A course in Health.
  - d. A 9-credit sequence in each of the three following areas: Humanities, Social Sciences, Science or Mathematics; plus another 9-credit sequence in any one of these areas. In the case of Science and Math, the sequence will ordinarily be 12 credits.
3. Attend at least two terms, including the last term, and earn at least 24 credits at Linn-Benton Community College.

The Humanities group includes such courses as Art, Foreign Language, Literature, Music Literature, 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 in Science Degree

The Associate in Science Degree will be awarded to students who satisfy the following requirements:

1. The Degree will be awarded to those who complete the required courses and credit hours prescribed by any structured occupational program of at least 90 credits.
2. Attend at least two terms, including the last term, and earn at least 24 credits at Linn-Benton Community College.
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—1 per term.
  - c. A course in Health.
  - 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 3 credits in each of two areas.

Minor deviations from specific course requirements may be allowed for students who offer sufficient evidence or just cause and who have the approval of the administration. All students are expected to participate in commencement exercises.

## Certificates of Completion and Diplomas

Diplomas will be awarded to those students who do not meet the requirements of the A.A. or A.S. Degree but have completed any 90 hours of credit courses with a cumulative grade point of 2.00 and who have attended at least two terms, including the last term, and who have earned at least 24 credit hours at Linn-Benton Community College.

## **STUDENT CONDUCT**

Linn-Benton Community College expects that students who enroll in the college accept certain responsibilities as would be expected of any adult. The conduct and behavior of our students either in class or in and around college facilities is of interest to the college. All school property is to be used with intelligence and care. The use of intoxicants or having such in one's possession is strictly forbidden by public law and college regulations. Gambling is also prohibited by state and local regulation.

### **Smoking**

Smoking is not permitted in any of the present college classroom facilities by either staff or students. Since smoking would jeopardize the college's use of these facilities, students and staff are requested to adhere faithfully to this rule.

Smoking is permitted in the Student Center.

# Student Services

## COUNSELING

Because Linn-Benton Community College recognizes the importance of counseling, a comprehensive counseling program is provided. Professional college counselors are available to assist students in establishing or modifying vocational goals and for solving problems of a social or personal nature. Assisting students who plan to transfer to a four-year college or university is also an important phase of the counseling program. Students who have not made a vocational choice may seek assistance through the counseling center. (See Pre-College Counseling).

A vocational information and catalog library for institutions of higher education is provided in the Learning Resources Center. Students are encouraged to make use of these available resources.

## FINANCING YOURSELF AT LINN-BENTON COMMUNITY COLLEGE

It is the philosophy of Linn-Benton Community College that the prime responsibility for financing the student's education lies with the parents and the student. There are sometimes circumstances which cause the student to need special financial assistance. It is the goal of Linn-Benton Community College to provide financial help for all students who need it. This assistance is in the form of loans, scholarships, grants, and work-study employment.

Individuals who are planning to attend LBCC in 1969-70 and will need financial assistance in the form of a grant, loan, or campus employment should carefully read the following. Since the college has limited funds for providing financial assistance, applicants are asked to observe the deadlines as specified for each type of financial aid.

**College Work Study (CWS):** This is for on campus, part-time employment. Student financial need is used to determine eligibility.

Application:

1. Complete "Parent's Confidential Statement" (PCS) of the College Scholarship Service, **or** if financially independent or married the "Student's Confidential Statement" (SCS). Allow two weeks for processing and return to LBCC.
2. Send completed PCS or SCS to: Box 1025, Berkeley, California 94701 with a \$2.50 processing fee.
3. Contact the Financial Aid Officer for an appointment.

\*Deadline for applications and PCS to be received by LBCC:

May 1 for **Fall** 1969 — will be notified by July 1.

November 14 for **Winter** 1970 — will be notified by December 15.

February 16 for **Spring** 1970 — will be notified by March 16.

\*Individuals may apply after these deadlines as alternates or as funds are available.

## College Board Grants

Tuition free grants are available in all high schools within the college district and a limited number through the LBCC Student Personnel Office.

**Application:** Presently enrolled high school students should apply through their high school principal or counseling office.

**Deadline:** Before May 1 or as specified by your high school. Students no longer enrolled in high school should apply directly through the Student Personnel Department of LBCC. **Deadline:** before September 1 through LBCC.

## Educational Opportunity Grants (EOG)

This is a federally supported program established for students with exceptional financial need.

**Application:**

1. Complete "Parent's Confidential Statement" (PCS) of the College Scholarship Service, **or** if financially independent or married the "Student's Confidential Statement" (SCS). Allow two weeks for processing.
2. Send completed PCS or SCS to: Box 1025, Berkeley, California 94701 with a \$2.50 processing fee.
3. Contact the Financial Aid Officer for an appointment.

\*Deadline for application and PCS or SCS to be received by LBCC:

May 1 for **Fall** 1969 — will be notified by July 1.

November 14 for **Winter** 1970 — will be notified by December 15.

February 16 for **Spring** 1970 — will be notified by March 16.

\*Individuals may apply after these deadlines as alternates or as funds are available.

## Part-Time Student Employment

**Application:** Complete an application in the **Student Employment Office** for on or off-campus employment.

**Deadline:** September 15 for fall quarter on-campus employment; and anytime after this date for other employment.

## Guaranteed Student Loan (GSL)

The G.S.L. program is a cooperative effort of the student's home bank and LBCC. The student's loan interest and repayment is deferred until attendance is terminated.

**Application:** Complete a G.S.L. application form which is available through the Student Personnel Office.

**Deadline:** None

## Emergency Loan

Emergency, short-term loans are available through the Student Personnel Office.

**Application:** Apply through the Student Personnel Office.

**Deadline:** None (when funds are available)



## Scholarships and Grants

Scholarships have been and will be made available to both incoming and returning students by various civic and business organizations in the community. Some of these scholarships are awarded directly by the high school scholarship committee.

## Deferred Tuition Payment

The College offers a deferred payment for tuition charges to students carrying 12 or more credit hours. Books and special laboratory fees are specifically excluded. The terms of payment are a minimum of one-third down at the time of registration and the balance within 30 days from the beginning of the quarter.

## ESTIMATING EXPENSES

Students commuting from home:

Tuition and Fees .....	\$216.00
Books and Materials .....	150.00
Transportation .....	300.00
Clothing .....	150.00
Personal .....	100.00
Three Term TOTAL .....	\$916.00

Students **not** living at home:

Tuition and Fees .....	\$ 216.00
Books and Materials .....	150.00
Room and Board .....	900.00
Transportation .....	225.00
Clothing .....	150.00
Personal .....	100.00
Three Term TOTAL .....	\$1741.00

**Married or Independent:** Estimate family budget — See Dean of Student Personnel Services for information.

Application forms and additional information on financial aids can be obtained through the Student Personnel Office.

## PLACEMENT OFFICE

In an effort to assist students in finding employment a placement service will be provided for those seeking immediate employment following the completion of their work at Linn-Benton. The Admissions Office will follow-up each placement to determine the needs and successes of the former students.

## **HOUSING**

The college cannot assume responsibility for the housing of students who live away from home while attending this institution. The college assumes no responsibility in negotiating housing agreements between the students and landlords, as this is the direct responsibility of the student and parents. The college does not issue an approved housing list, but does maintain a list of available housing in the Registrar's Office.

## **STUDENT ACTIVITIES**

During the 1969-70 year, the college administration will encourage the development of extra-curricular activities in student government, clubs, publications and plan for the development of athletics. Because the greatest share of the development of student activities must be by student effort, the college will be seeking student leaders who might be willing to assist in this development. Interested individuals should contact the Dean of Student Personnel Services or Activities Coordinator.

# Learning Resources Center

Audio visual, Library, and Study Skills facilities are housed in the Learning Resources Center.

## **AUDIO VISUAL SERVICES**

Slides, tapes, and other materials useful to learning are housed with the necessary equipment to provide the best use. Listening or viewing assignments can be accomplished here. Students may receive assistance in preparing their materials for class presentation.

## **LIBRARY**

A growing collection of books to support instruction supplements a strong collection of reference books. The collection of current and back issue periodicals, both in paper and microform is expanding to meet student needs.

Additional services being offered include a pamphlet collection, a large reprint collection, maps, and a very comprehensive vocational collection. In addition to the classified vocational vertical file hundreds of occupations are included in books giving specific information on them.

## **STUDY SKILLS CENTER**

This center has been established to assist students acquire knowledge on an individual basis. Facilities are supplied for instruction in several subjects using programmed books, television, machines and other devices. New programs are in the planning stages.

## **Programs and Courses of Study**

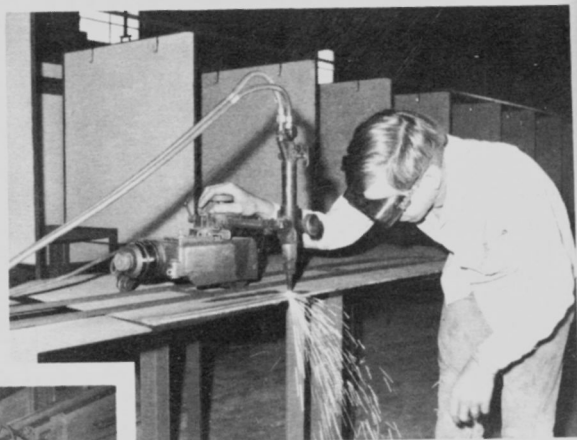
# Introduction

On the pages which follow are courses which the Board of Education has authorized. Whether or not they are given in any particular college year depends upon prospective enrollment, the availability of finances, instructors, and physical facilities. Consult the fall, winter, spring and summer schedule of classes for courses actually offered.

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. Courses which have been approved for transfer by the Oregon State System of Higher Education are numbered from 51 to 299. Generally, courses numbered 100-110, 200-210, are survey or foundation courses that satisfy group requirements in the language and literature, science, and social science groups. Courses numbered 111-199 are considered freshman level courses and those numbered 200-299 are considered sophomore courses.

Terminal (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.

# **Occupational and Technical**



# Agriculture Technology

Agriculture provides more jobs and careers than any other industry. It is a business, a profession, an industry, a science, and a way of life. Because agriculture is a science, careful preparation becomes essential to a successful career in any of the aspects of this dynamic industry. Courses offered within this division are the outgrowth of cooperative effort between industry, advisory committees, and educators, and are carefully designed to prepare the students for an exciting and rewarding career in the many aspects of Ag Technology.

## **Agriculture Services Technology**

The Agriculture Services Technology curriculum has been specially designed by industry and educational representatives for the proper training to develop the skills, abilities and understanding needed in the preparation for technical positions in this vital and growing area of off-farm agriculture. This associate degree 2-year curriculum is approved by the State Board, Division of Community Colleges and Vocational Education, with full cooperation, support and guidance from active state and local advisory committees.

Students enrolling in this program will have the opportunity of paid on-the-job experience during the summer months between their freshman and sophomore years.



### Freshman Year

Course No.	Course Title	Credits			Hours Per wk
		F	W	S	
8.100	Survey Grain, Feed, Seed and Farm Supply Industry	3			3
8.125, 8.126	Soils I, II	3	3		3
8.140	Soils & Fertilizers			3	3
8.160	Survey Crops & Livestock Industry	3			3
8.165	Crops II		3		3
8.225	Ag Econ. and Marketing		3		3
1.101, 1.104	Communication Skills I, II	3	3		3
8.150	Genetics			2	2
8.151	Nutrition			2	2
2.110	Principles of Salesmanship			3	3
PE 190	Physical Education	1	1		3
HE 250	Personal Health			2	2
1.124	American Institutions		3		3
8.230	Work Experience (Agriculture)			3	
	Electives	3			
		16	16	15	

### Summer

8.230	Work Experience (Agriculture)	9 Credits		
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### Sophomore Year

2.119	Business Management	3			3
8.130	Agriculture Chemicals			3	3
8.120	Seed Technology	6			8
2.518	Business Law		3		3
8.145	Feeds and Feeding		3		3
8.170	Feed Technology		3		3
8.122	Botany	4			6
8.175	Physical Facilities & Care of Equipment			3	3
8.180	Warehouse Practices			3	3
PE 190	Physical Education	1			3
8.230	Work Experience (Agriculture)	3	3	3	
	Electives		3	3	
		17	15	15	

Total — 103 Credits

# Business Division

## BUSINESS MANAGEMENT

The courses in this occupational curriculum are designed to meet the needs of persons preparing for immediate employment in the business management and distributive occupations.

The successful completion of the proposed course of study should afford the graduate a better entry level position and lead eventually to middle-management (junior executive level) and marketing positions. It is especially directed to business management and the duties of enterprises in the areas of selling goods and services.

The program also provides opportunities for those persons already engaged in business to obtain further training that will help them advance in their employment.

The following outline indicates the general course requirements for those seeking the Associate Degree in Business Management.

### Freshman Year

Course No.	Course Title	Credits			Hours Per wk
		F	W	S	
1.101, 1.104	Communication Skills I, II	3	3		3
2.530, 2.531, 2.532	Bookkeeping I, II, III	3	3	3	5
2.548	Business English			3	3
2.501	Typewriting I or proficiency		2		4
2.521	Office Machines		3		5
1.524	Applied Economics			3	3
2.515	Business Math	3			3
2.110	Principles of Salesmanship			3	3
PE 180 or 190	Physical Education	1	1	1	3
HE 250	Personal Health		2		2
	Electives, General Ed. and Others— Introduction to Business BA 101 is Suggested	4	4	3	3-4
		<hr/>	<hr/>	<hr/>	
		16	16	16	

**Sophomore Year**  
**Option I—Business Administration**

Course No.	Course Title	Credits			Hours Per wk
		F	W	S	
1.608	Psychology of Human Relations			3	3
1.610	Public Speaking	3			3
2.509	Introduction to Data Processing	4			5
2.119	Business Management	3			3
2.518	Business Law			3	3
2.516	Introduction to Business Statistics	3			3
2.222	Financial Management			3	3
2.710, 2.711, 2.712	On-the-Job-Training and Seminar	4	4	4	16
1.112	Technical Report Writing		3		3
	Electives, General Ed. and Others	5	3	3	3-5
		16	16	16	

Total — 96 Credits

**Option II—Distribution Management**

1.608	Psychology of Human Relations			3	3
1.610	Public Speaking	3			3
2.308	Principles of Advertising	3			3
2.119	Business Management	3			3
2.518	Business Law			3	3
2.131	Elements of Marketing		3		3
2.134	Retail Merchandising			3	3
2.710, 2.711, 2.712	On-the-Job-Training and Seminar	4	4	4	16
1.112	Technical Report Writing		3		3
	Electives	6	3	3	3-6
		16	16	16	

Total — 96 Credits

## BOOKKEEPING — CLERICAL

The two-year Associate Degree awarded to graduates of this program is widely recognized by the business community and provides a sound basis for entry into the field.

Those students who choose to complete only the first year of the program will be awarded a certificate indicating their successful completion of this phase.

The following outline indicates the general course requirements for those seeking the Associate Degree in Bookkeeping-Clerical.

Entry into the various skill courses will be based on prior training and proficiency.

### Freshman Year

Course No.	Course Title	Credits			Hours Per wk
		F	W	S	
1.101, 1.104	Communication Skills I, II,	3	3		3
2.548	Business English			3	3
2.515	Business Math	3			3
2.501, 2.502, 2.503	Typing I, II, (III is optional)	2	2		4
2.521	Office Machines			3	5
2.509	Introduction to Data Processing	4			5
2.510	Fundamentals of Unit Record Equipment		4		5
2.530, 2.531, 2.532	Bookkeeping I, II, III	3	3	3	5
PE 180 or 190	Physical Education	1	1	1	3
HE 250	Personal Health		2		2
	Electives, General Ed. and Others		1	6	1-6
		16	16	16	

### Sophomore Year

2.524, 2.525, 2.526	Office Procedures, I, II, III	2	2	2	3
2.119	Business Management	3			3
1.524	Applied Economics			3	3
1.608	Psychology of Human Relations			3	3
1.112	Technical Report Writing		3		3
1.610	Public Speaking		3		3
2.652	Filing and Records Control			2	3
	Electives (Business or Secretarial)	4	4	3	3-4
	Electives, General Ed. and Others	7	4	3	3-7
		16	16	16	

Total — 96 Credits

## SECRETARIAL STUDIES — OFFICE ADMINISTRATION

A two-year program designed to provide students with a background which will prepare them for positions of responsibility as executive secretaries, office managers, or administrative assistants.

Initial placement in the on-the-job portion of the program will be determined by the background of skills already possessed by each applicant.

(On-the-job training may be allowed for outstanding freshman students.)

A certificate of completion will be awarded those successfully completing the first year of the sequence.

An Associate in Arts Degree will be awarded those who also successfully complete the second year of the program.

### Freshman Year

Course No.	Course Title	Credits			Hours Per wk
		F	W	S	
1.101, 1.104	Communication Skills I, II	3	3		3
2.501, 2.502, 2.503	Typing I, II, III	2	2	2	4
2.541, 2.542, 2.543	Stenography I, II, III	3	3	3	5
2.548	Business English			3	3
2.530, 2.531, 2.532	Bookkeeping I, II, III	3	3	3	5
2.521	Office Machines	3			5
2.652	Filing and Records Control			2	3
PE 180 or 190	Physical Education	1	1	1	3
HE 250	Personal Health		2		2
	Electives, General Ed. and Others	1	2	2	1-2
		16	16	16	

### Sophomore Year

2.505, 2.506	Typing IV, V	2	2		4
2.524, 2.525, 2.526	Office Procedures I, II, III	2	2	2	3
2.545, 2.546, 2.547	Applied Stenography I, II, III	3	3	3	6
2.509	Introduction to Data Processing	4			5
1.610	Public Speaking		3		3
1.608 or 1.606	Psychology of Human Relations or Introduction to Psychology			3	3
1.121	Poise, Posture, Personality			2	3
2.613, 2.614, 2.615	On-the-Job Training and Seminar	4	4	4	16
	Electives, General Ed. and Others	1	2	2	1-3
		16	16	16	

Total — 96 Credits

## DATA PROCESSING

The courses in this curriculum are designed to meet the needs of persons preparing for employment in the data processing field and to provide opportunities for those already engaged in technical occupations in this field to obtain further training that will help them advance in their employment.

This program gives a broad theoretical and practical training for tabulator and calculator work, and for planning, program-trained persons will find many opportunities for employment in the field of data processing.

The one-year sequence of courses gives a person a basic background for entry into the electronic data processing field as a unit record equipment operator or a computer operator. The two-year sequence is designed to prepare the individual for employment of greater responsibility within the programming function.

An Associate in Arts Degree will be awarded those who successfully complete the second year of the program.

### Freshman Year

Course No.	Course Title	Credits			Hours Per wk
		F	W	S	
1.101, 1.104	Communication Skills I, II	3	3		3
	Mathematics	4	4		5
2.509	Intro. to Data Processing	4			5
BA 211, 212, 213	Principles of Accounting	3	3	3	3
2.510	Fundamentals of Unit Record Equip.		4		5
1.524	Applied Economics			3	3
2.511	Data Processing Systems			3	3
4.128	Computer Math and Logic			4	5
2.512	Computer Operation			2	3
HE 250	Personal Health		2		2
PE 180 or 190	Physical Education	1	1	1	3
	Electives	1			
		16	17	16	

### Sophomore Year

2.536	Analysis of Financial Statements	3			3
2.513, 2.514	Computer Program I, II	4	4		5
1.608	Psychology of Human Relations	3			3
2.554	Data Processing Mgt.		4		5
2.516	Business Statistics		3		3
2.555	Data Processing Field Project			6	
2.518	Business Law			3	3
2.548	Business English			3	3
	Electives, Gen. Ed., others	6	4	4	
		16	15	16	

Total — 96 Credits

# Fire Science

This curriculum is developed from state approved courses for employed and volunteer firemen. It is planned that these courses be supplemental to the basic instruction given to beginning firemen. The courses will be developed as recommended by the various fire stations and with approval of the State Department of Vocational Education. It is planned that these courses will broaden the knowledge and increase the skill of these firemen, thus increasing their potential in the field.

# Health Division

## HEALTH OCCUPATIONS

Plans for the development of an Associate Degree Nursing (ADN) program are underway and it is anticipated that the curriculum will be implemented in September, 1969. Students interested in the ADN program are urged to discuss this program with a counselor.

Offerings in the Health Occupations area are currently limited to the training of nursing assistants, orderlies and aides, though additional courses and curricula are under consideration by the college and the advisory committee.

### NURSING ASSISTANTS, ORDERLIES, AND AIDES

This course is designed to prepare students for employment as Nurses' Aides or Orderlies by hospitals or nursing homes, and is taught within a hospital.

Applicants must be between the ages of 18-62 and provide evidence of high school equivalency. They must be in good physical and mental health as determined by a doctor's examination, and they must have suitable personality and character traits necessary for this occupation. For admission, a personal interview will be required and a pre-test given by the State Employment Service. The final selection for admission to the program will be made by the Nursing Admissions Committee.

Theory of the course includes basic anatomy, basic physiology, nutrition, child care, care of medical, surgical, and elderly patients, care of patients in the home, first aid, some medical vocabulary and abbreviations.

Clinical experience is provided first in a Nursing Arts Laboratory, with demonstrations of procedures by the instructor, and an opportunity for the student to practice procedures before she is assigned to do them on the hospital stations. Experience at the bedside of patients is provided under the supervision of the instructor, in the hospital and in nursing homes.

Personal interviews are scheduled with the instructor to help solve any difficulties, and to evaluate the student's progress.

The course is one term (250 hours), conducted five days a week, Monday through Friday, five hours per day from 8:45 to 2:45 with a 30-minute lunch period.

### Registration Steps for Nurses' Aides Candidates

1. Fill out a **standard registration form**.
2. Ask your high school to send a copy of your transcript to Linn-Benton Community College Registrar. If you have a G.E.D. Certificate, present your certificate so that the college may make a duplicate copy.
3. Complete the standard **physical examination form**. These blanks are available from the Office of the Registrar.
4. Take the General Aptitude Test Battery at your local Oregon State Employment Office. Results of this test should be forwarded to Linn-Benton Community College, Records and Admissions Office.
5. Make an appointment with the Registrar of Linn-Benton Community College and the Nursing Instructor for an interview.



# Industrial Division

## AUTOMOTIVE MECHANICS

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 in Science Degree will be awarded those who successfully complete the second year of the program.

### Freshman Year

Course No.	Course Title	Credits			Hours Per Wk
		F	W	S	
3.304, 3.306	Internal Combustion Engines I, II	3	3		5
3.308	Fundamentals of Auto Electricity	3			3
3.310, 3.311	Automotive Electricity I, II	3	3		5
4.100	Blueprint Reading & Sketching	2			4
3.364	Fuels and Carburetion		3		5
4.151, 4.152	Welding I, II		2	2	4
3.370	Automotive Brakes			3	5
3.350	Service Station Operation			3	5
3.324	Tune-up and Diagnosis			3	5
4.145	Industrial Mathematics I			3	3
3.295	Hydraulics and Pneumatics			3	5
GS 104	Physical Science	4			5
1.124	American Institutions		3		3
1.606	Introduction to Psychology		3		3
PE 190	Physical Education	1			3
		<hr/>	<hr/>	<hr/>	
		16	17	17	

### Sophomore Year

3.290, 3.292	Chassis I, II	3	3		5
3.278, 3.280	Transmissions I, II	3	3		5
3.360	Automotive Machine Shop	3			5
3.329, 3.331	Auto Repair Practices I, II		3	3	7
3.332	Auto Service Management		2		2
3.375	Heat Exchangers & Air Control			3	5
3.425	Employment Techniques			1	1
4.146	Industrial Mathematics II			3	3
1.101, 1.104	Communication Skills I, II	3	3		3
2.110	Principles of Salesmanship	3			3
1.500	Employer-Employee Relations			3	3
PE 190	Physical Education	1		1	3
HE 250	Personal Health		2		2
	Elective (Industrial Safety suggested)			2	2
		<hr/>	<hr/>	<hr/>	
		16	16	16	

Total—98 Credits

## INDUSTRIAL MECHANICS

A student may elect to take a two-year program in Industrial Mechanics. This is a curriculum which combines courses in several areas of the industrial curriculum. Individuals who complete this Associate Degree program may work as troubleshooters, millwrights and mechanics for industry and government, as well as business.

### Freshman Year

Course No.	Course Title	Credits			Hours Per Wk
		F	W	S	
3.304, 3.306	Internal Combustion Engines I, II	3	3		5
3.308	Fundamentals of Auto Electricity	3			3
3.310, 3.311	Automotive Electricity I, II	3	3		5
4.100	Blueprint Reading & Sketching	2			4
3.380, 3.381, 3.382	Machine Tools I, II, III	3	3	3	6
4.151, 4.152	Welding I, II	2	2		4
3.364	Fuels and Carburetion			3	5
4.101, 4.105	Drafting & Blueprint I, II		2	2	4
4.145, 4.146	Industrial Mathematics I, II		3	3	3
3.458	Sheet Metal			3	5
HE 250	Personal Health			2	2
		16	16	16	

### Sophomore Year

1.101, 1.104	Communication Skills I, II	3	3		3
4.127	Industrial Practices I	3			5
GS 104	Physical Science	4			5
3.462	Industrial Electricity	3			5
4.108	Industrial Safety	2			2
PE 190	Physical Education	1	1	1	3
3.440	Industrial Carpentry		3		5
1.606	Introduction to Psychology		3		3
3.444	Metallurgy		4		6
3.448	Industrial Electronics		3		5
3.452	Plumbing and Pipe Fitting			3	5
3.455	Masonry & Concrete Fund.			3	5
3.295	Hydraulics and Pneumatics			3	5
1.124	American Institutions			3	3
3.425	Employment Techniques			1	1
9.500	Elements of Supervision			3	3
		16	17	17	

Total—98 Credits

## DRAFTING TECHNOLOGY (Proposed)

The 2-year Drafting Technology program is designed to provide a student with experiences that will allow him to learn the basic attitudes, skills, habits, knowledge and understanding necessary to successful entry into the Drafting occupations. An Associate in Science Degree will be awarded those who successfully complete the second year of the program.

### Freshman Year

Course No.	Course Title	Credits			Hours Per wk
		F	W	S	
4.110	Elements of Blueprint & Drafting	4			10
4.145, 4.146	Industrial Math I, II	3	3		3
4.300	Practical Physics	4			5
1.101, 1.104	Communication Skills I, II	3	3		3
4.127, 4.129, 4.131	Industrial Practices I, II, III	3	3	3	5
4.111	Fundamentals of Drafting		5		11
4.113	Elements of Surveying		2		6
4.151	Welding I		2		4
4.114	Structural & Architectural Drafting			4	8
4.148	Descriptive Geometry			2	4
Mth 102	Trigonometry			4	5
1.124	American Institutions			3	3
PE 190	Physical Education	1		1	3
		18	18	17	

### Sophomore Year

4.116	Architectural Planning	4			8
4.117	Sheet Metal & Pipe Drafting	4			8
4.118	Drafting Maps, Charts & Graphs	3			5
4.302	Practical Physics	4			5
2.110	Principles of Salesmanship	3			3
4.119	Machine Tool Drafting		4		8
3.444	Metallurgy		4		6
4.120	Fundamentals of Specifications		3		5
9.509	Industrial Economics		3		3
2.509	Introduction to Data Processing		4		5
4.121	Electrical & Electronic Drafting			4	8
4.122	Strength of Materials			3	5
4.123	Technical Illustration			3	7
4.124	Jig and Fixture Drafting			4	8
3.425	Employment Techniques			1	1
HE 250	Personal Health			2	2
PE 190	Physical Education			1	3
		18	18	18	

Total—107 Credits

## SUPERVISORY TRAINING

This program is designed as a series of courses in 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 three options which the student may follow. One requires the completion of four approved courses plus two electives for a Supervisory Certificate; another requires the completion of ten approved courses plus four electives for an Advanced Supervisory Certificate. The third allows the student in Supervision to graduate with the Associate Degree. These programs are described below. Some credit may be allowed for supervision experience.

### Certificate in Supervision

	(18 quarter credits)	Credits
9.500	Elements of Supervision	3
9.501	Written Communications for Supervisors	3
9.502	Basic Psychology for Supervisors	3
9.504	Developing Employees through Training	3
	Elective (1 course from List A, following page).	3
	Elective (1 course from Lists A or B)	3

### Certificate in Advanced Supervisory Development

	(45 quarter credits)	
9.500	Elements of Supervision	3
9.501	Written Communications for Supervisors	3
9.502	Basic Psychology for Supervisors	3
9.503	Oral Communications for Supervisors	3
9.504	Developing Employees through Training	3
9.506	Human Relations	3
9.508	Labor-Management Relations	3
9.509	Industrial Economics	3
	Occupational Courses	6
	1 course from List A, 3 credits, and 4 courses from Lists A or B, or 12 credits for supervision experience and courses totaling 12 term units.	15

## Associate in Science Degree\*

	<b>(90 quarter hours)</b>	<b>Credits</b>
9.500	Elements of Supervision	3
9.502	Basic Psychology for Supervisors	3
9.504	Developing Employees through Training	3
9.506	Human Relations	3
9.508	Labor-Management Relations	3
9.512	Methods Improvement for Supervisors	3
9.514	Cost Control for Supervisors	3
	Two Courses from List A	6
	Written Communications	3
	Oral Communications	3
	<b>OCCUPATIONAL COURSES</b>	<b>15</b>
	(15 credits with at least one sequence of three courses in a specific field)	

**ELECTIVE COURSES** 39

General Education courses (12 credits) from List B  
 General electives (27 credits) from Lists A or B  
 Credit for supervisory experience can be submitted for up to 24 credits of general electives. See Dean of Instruction for this information.

\*Candidates for the degree program must be high school graduates or its equivalent.

### **List A (Supervisory Development)**

Human Relations  
 Management Controls  
 Labor-Management Relations  
 Personnel Management for Supervisors  
 Methods Improvement (Work Simplifications)  
 Organization and Management  
 Cost Control  
 Written Communications  
 Job Analysis for Wage Administration  
 Safety Training and Fire Prevention  
 Leadership Seminar

### **List B (General Education)**

General Psychology  
 Sociology  
 Social Sciences  
 Literature  
 Economics  
 History (U.S. or Western Civilization, etc.)  
 Communications  
 Technical Report Writing  
 Reading Improvement

**Note:** Most courses offered by the Community College in the area of General Education can be included in List B.

## WELDING

### (one-year certificate)

Welding is taught at Linn-Benton Community College as a one-year program consisting of three quarters.

Classes and laboratory time are provided to develop a broad range of skills and related job information as required for successful employment in various job shops, auto production and maintenance shops.

Following completion of the course, the student will be awarded a certificate. Successful completion of this curriculum prepares the student for job opportunities in a great range of applications of welding processes.

Course No.	Course Title	Credits			Hours per wk
		F	W	S	
4.242	Basic Oxyacetylene Welding	4			8
4.240	Basic Arc Welding	6			14
4.100	Blueprint Reading & Sketching	2			4
4.145	Industrial Math I	3			3
4.108	Industrial Safety	2			2
4.243	Intermediate Oxyacetylene Welding		4		8
4.241	Intermediate Arc Welding		6		14
3.444	Metallurgy		4		6
2.110	Principles of Salesmanship		3		3
4.250	Advanced Oxyacetylene Welding			4	8
4.246	Advanced Arc Welding			6	14
4.101	Drafting & Blueprint Reading I			2	4
1.101	Communication Skills I			3	3
	Elective			3	3
		—	—	—	
		17	17	18	

Total—52 Credits

## OCCUPATIONAL LAW ENFORCEMENT

The Police Science curriculum is designed primarily for men and women employed in the various law enforcement agencies within the area. It provides opportunities for those persons engaged in Law Enforcement occupations to obtain further training for additional competency or retraining that will help them qualify for advancement.

The curriculum, which leads to an Associate in Science Degree, has been developed cooperatively by the State Department of Vocational Education and the State Advisory Board on Police Standards and Training. The program of studies covers basic police science knowledge, skills and technique.  
 First year only: Second year may be taken at another community college.

Course No.	Course Title	Credits			Hours per wk
		F	W	S	
5.200	Introduction to Law Enforcement	3			3
5.202	Administration of Justice	3			3
5.204, 5.206	Defensive Tactics I, II	1	1		2
5.212, 5.213	First Aid I, II	1	1		2
1.101, 1.104	Communication Skills I, II	3	3		3
2.501, 2.502	Typing I, II	2	2		4
5.208	Criminal Law I		3		3
5.210	Traffic Control			3	3
5.240	Police Report Writing			3	3
5.214	Emergency Care and Rescue			1	2
1.606	Introduction to Psychology			3	3
	Electives			6	
		16	13	16	

Total — 45 Credits

# **Adult Education**





# Adult Education

## PHILOSOPHY

The term "Adult Education" represents many areas of COMMUNITY EDUCATION. However, for purposes of identification Adult Education will refer to those classes not considered College Transfer or Credit classes.

Many courses develop through Adult Education and evolve into a meaningful pattern or cluster of courses representing an occupational need. These soon become an Occupational Credit Program.

The broad view of Adult Education represents the need of the community in personal improvement. These courses may be in the form of occupational extension, occupational diversion or recreation, cultural betterment, high school completion and many other areas too difficult to classify.

The courses are designed to meet the need of the individuals who progress at their own rate, generally on a non-graded basis. There may be a broad range of abilities within each class. Instructors are chosen for their teaching skills and experience in the trade or field.

Classes will be scheduled any time of the day or night providing there are twelve or more interested students and that facilities and a suitable instructor are available.

Class schedules are available prior to the start of each term. The basic program is similar from term to term, but with some changes from the previous terms based on expressions from interested citizens.

## REGISTRATION

**Pre-Registration** is encouraged whenever possible. This can be by mail, telephone, in class, or at the Linn-Benton Community College office. Call Adult Education, 926-6035 for specific information regarding classes.

**Registration** will be completed in the classroom, usually by the second week of class.

**Tuition** is based on 30 hours of instruction for \$10.00; however, additional fees may be charged as a laboratory fee for materials and supplies.

## COURSE OFFERINGS

**Agriculture** course offerings will be directed primarily to the interest of specialized groups. Examples are commercial farmers, their families, their employees, rural residents and their families. Courses will be offered in a local community if twelve or more persons enroll and if an instructor is available. Suggested courses are: farm accounting, ornamental horticulture, livestock health problems, tractor maintenance, and soils and fertilizers. Courses in welding (arc, acetylene, and heliarc) will be offered in local communities if facilities, equipment and instructors are available. Other courses will be offered on request of people interested in a specialized agricultural problem.

**Cultural Improvement** (non credit) classes are offered in the area of arts such as oil painting, water color painting, sketching and drawing, ceramics, metalcraft and enameling, jewelry making, and calligraphy. There are also language classes such as Spanish and French, and Music and Art Appreciation classes.

**Homemaking** classes are designed to aid the homemaker in improving the conditions in the home. Sewing classes which are offered include Bishop Sewing I, II, and III, Tailoring, Flat Pattern Design, Sewing Knit and Stretch Fabrics, and others as requested. Other classes offered may include Interior Decorating, Home Landscaping, Home Management, Knitting, Cake Decorating, Upholstery, Furniture Construction and Refinishing, etc. There are no special admission requirements for these classes, though some courses will need to be taken in their proper sequence.

**Office Occupations** classes are offered as non-credit classes and designed to improve a person's skills in occupation or to provide an opportunity to learn new skills related to the occupation. Many of the students will enroll to increase their skill or speed so they may attain a higher Civil Service rating. This type of class will include Typing I and II, Intermediate and Advanced Typing, Beginning and Advanced Shorthand, Bookkeeping, Brief-hand, Office Machines, Office Practice, and many others related to the clerical field.

**Recreation** classes are conducted throughout the area of Linn-Benton Community College and vary within each city depending entirely upon coordination with the city recreation program. Classes are generally limited to those specific classes where instruction is the most important part of the class. These classes may be courses like Boating Safety, Fishing Techniques, Fly Tying, Bridge and Golf.

## ADULT BASIC EDUCATION

Adult Basic Education classes will be held throughout the Community College District whenever it is determined that there is a need.

These classes will be free to the participants, and will consist largely of basic instruction in reading, writing, and arithmetic.

## APPRENTICESHIP

The **Apprenticeship** Program provides instruction in manipulative skills and technical or theoretical knowledge needed for competent performance in skilled occupations. The enrolled apprentice is employed as a learner of the skills of a trade through on-the-job work experience while related information is obtained in the classroom. New procedures for entrance into this program are regulated by Federal and State laws. A local trade committee consisting of labor and management assists the college with the instructional requirements.

Basic requirements for entrance in apprenticeship are:

1. Generally 16 years of age, preferably 18.
2. Good health and physical fitness for the trade.
3. High school graduation preferred.
4. Completion of aptitude test through the Oregon State Employment Office.
5. Willingness to work, study and attend classes.
6. Ability to maintain proper conduct in the school and on the job.
7. Successful completion of a probationary period of employment.
8. Acceptance after interview by the local joint apprenticeship committee.

Upon acceptance as an apprentice, the applicant enters into a contractual agreement with the local trade committee, the employer and the Oregon State Bureau of Labor. He becomes a paid employee, working to learn the trade through a combination of on-the-job experience and participation in related classes. Progress of the apprentice is reviewed each six months and the apprentice is re-rated accordingly.

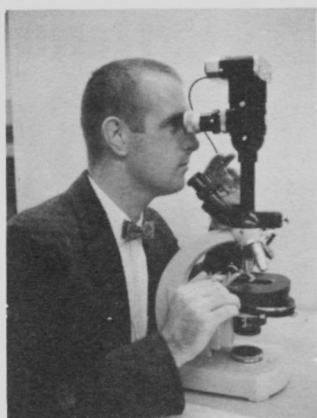
## HIGH SCHOOL COMPLETION

**High School Continuation** classes are offered throughout the area in coordination with the various high school programs. These classes are designed as night classes for students presently enrolled in a regular high school program. The purpose of these classes is to provide more instruction in a specific course so that the student may bring up his grade to a satisfactory level for high school completion. These classes are **not** designed as a full high school semester of work but as a continuation course through which students can make up high school grades.

**G.E.D.** The General Educational Development test is given at the Linn-Benton Community College Counseling Center.

G.E.D. Test Preparation Adult Education classes are offered in addition to counseling before and after completion of the Equivalency test.

# **Transfer Curricular Patterns**



# Transfer Curricular Patterns

The following pages contain important information for those who plan to transfer to a four-year college or university following one or two years at the community college.

Linn-Benton Community College offers most of the lower division courses required by colleges and universities in many fields. All work taken at the community college which follows the curricular patterns of the four-year institutions is transferable. However, students are cautioned to familiarize themselves with the requirements of the institution to which they plan to transfer. Students are also encouraged to discuss the requirements with a counselor, and contact the four-year college when problems arise.

In this section of the Linn-Benton Community College catalog are listed the current general requirements for most major fields in Oregon colleges and universities. It is suggested that electives be selected which will strengthen the students' major interests and meet the requirements of the university to which they plan to transfer.

This section concentrates on the general requirements for many major fields for transfer to Oregon colleges and universities and since it is not possible to list the over 50 separate majors one might pursue in institutions in this state, students are encouraged to contact counselors for details on majors not listed on the following pages.

Electives should be selected from: Language Arts, Creative Arts, Social Science, Science and Mathematics and in some cases General Business.

Students should refer to the Course Descriptions section for specific contents of courses listed in this section.

The courses listed in this section and their instructors have been approved by the Oregon State System of Higher Education. Courses marked with an asterisk (\*) are not offered during the 1969-70 college year.

(Oregon State University)

Freshman Year

Course No.	Course Title	F	W	S
Wr 111, 112	English Composition	3	3	
Ch 201, 202, 203	General Chemistry	4	4	4
Mth 101, 102, 200	College Alg, Trig, Calc.	4	4	4
PE 180 or 190	Physical Education	1	1	
HE 250	Personal Health			2
Sp 111	Fundamentals of Speech			3
	Electives	3	3	3
		<hr/>	<hr/>	<hr/>
		15	15	16

Sophomore Year

Bi 101, 102, 103 or *211, 212, 213	General Biology	4-5	4-5	4-5
*Ph 201, 202, 203	General Physics	4	4	4
Ec 201, 202, 203	Principles of Economics	3	3	3
PE 180 or 190	Physical Education	1	1	1
	Electives	3	3	3
		<hr/>	<hr/>	<hr/>
		15-16	15-16	15-16

Total — 93 Hours

\*Will not be offered in 1969-70.

ANTHROPOLOGY

Freshman Year

Course No.	Course Title	F	W	S
Wr 111, 112	English Composition and elective	3	3	3
Anth 101, 102, 103	General Anthropology	3	3	3
Bi 101, 102, 103	General Biology	4	4	4
	First-year foreign lang. or Literature sequence	3-4	3-4	3-4
PE 180 or 190	Physical Education	1		1
HE 250	Personal Health		2	
		<hr/>	<hr/>	<hr/>
		14-15	15-16	14-15



**Sophomore Year**

**(Anthropology)**

<b>Course No.</b>	<b>Course Title</b>	<b>F</b>	<b>W</b>	<b>S</b>
	Second-year foreign language or electives	4	4	4
	Second science sequence	3-4	3-4	3-4
	Social science sequence	3	3	3
	Literature sequence (if not taken in freshman year) or			
	Second humanities sequence	3	3	3
PE 180 or 190	Physical Education	1	1	1
	Electives to bring total hours to 93	0-3	0-3	0-3
		<hr/>	<hr/>	<hr/>
Total — 93 Hours		14-17	14-17	14-17

**ARCHITECTURE, INTERIOR ARCHITECTURE,  
AND LANDSCAPE ARCHITECTURE  
(One Year)**

**Freshman Year**

<b>Course No.</b>	<b>Course Title</b>	<b>F</b>	<b>W</b>	<b>S</b>
Wr 111	English Composition	3		
Hst 101, 102, 103	History of Western Civilization	3	3	3
Mth 101 and above	Mathematics (all students who have not completed mathematics through Trigonometry in high school), or	4	4	4
Science Sequence	For students not required to take mathematics			
Art 291	Drawing	2	2	2
Art 201, 202, 203	Survey of Visual Arts	3	3	3
PE 180 or 190	Physical Education	1		1
HE 250	Personal Health		2	
	Basic Design or Electives	2-3	2-3	2-3
		<hr/>	<hr/>	<hr/>
Total — 49-52 Hours		18-19	16-17	15-16

## Freshman Year

Course No.	Course Title	F	W	S
Wr 111, 112	English Composition	3	3	
	Science or Mathematics sequence	3-4	3-4	3-4
	Social Science sequence or foreign language	3-4	3-4	3-4
Art 291 sequence	Drawing (U of O)	2	2	2
Art 195, 196, 197	Basic Design	2	2	2
Art 290 sequence	Painting	2	2	2
PE 180 or 190	Physical Education	1		1
HE 250	Personal Health		2	
	Elective			3
		—	—	—
		16-18	17-19	16-18

## Sophomore Year

	Literature sequence	3	3	3
	Social Science sequence	3	3	3
	Second Science sequence or foreign language	3-4	3-4	3-4
Art 290 sequence	Painting	2	2	2
Art 201, 202, 203	Survey of Vis. Arts	3	3	3
PE 180 or 190	Physical Education	1	1	1
		—	—	—
		15-16	15-16	15-16

Total — 94 Hours

**BIOLOGY (UO, PSU, EOC, SOC)  
BOTANY, ENTOMOLOGY, MICROBIOLOGY, ZOOLOGY, BIOLOGY  
(GENERAL SCIENCE) (OSU)**

## Freshman Year

Course No.	Course Title	F	W	S
Wr 111, 112, 113**	English Composition	3	3	3**
Mth 200, 201, 202	Calculus with Analytic Geometry	4	4	4
Ch 201, 202, 203	General Chemistry Humanities or social science sequence	4	4	4
PE 180 or 190	Physical Education	3	3	3
HE 250	Personal Health	1		1
			2	
		—	—	—
		15	16	15

<b>Sophomore Year</b>		<b>(Biology-Gen. Sci.)</b>		
<b>Course No.</b>	<b>Course Title</b>	<b>F</b>	<b>W</b>	<b>S</b>
*Bi 211, 212, 213	Biology	5	5	5
*Ch 226, 227	Organic Chemistry	5	5	
	Social Science or Humanities sequence	3	3	3
PE 180 or 190	Physical Education	1	1	1
	Electives to bring total hours to 93	2	2	6
		<hr/>	<hr/>	<hr/>
		16	16	15

\*\*OSU only

\*Will not be offered in 1969-70.

Total — 93 Hours

### **BUSINESS ADMINISTRATION**

<b>Freshman Year</b>				
<b>Course No.</b>	<b>Course Title</b>	<b>F</b>	<b>W</b>	<b>S</b>
BA 101	Introduction to Business	4		
Sp 111	Fundamentals of Speech		3	
	Mathematics	4	4	4
Wr 111, 112	English Composition	3	3	
	Social Science sequence	3	3	3
PE 180 or 190	Physical Education	1		1
HE 250	Personal Health		2	
	Electives			6-7
		<hr/>	<hr/>	<hr/>
		15	15	14-15

<b>Sophomore Year</b>				
Ec 201, 202, 203	Principles of Economics	3	3	3
BA 211, 212, 213	Principles of Accounting	3	3	3
BA 226	Business Law		3	
BA 232	Int. to Business Statistics			3
	Lit. or Science sequence	3-4	3-4	3-4
	Electives	3-6	3	3
	Physical Education	1	1	1
		<hr/>	<hr/>	<hr/>
		13-17	16-17	16-17

Total — 93 Hours

### **BUSINESS EDUCATION**

See Page 84 for Business Education.

COMMUNITY SERVICE AND PUBLIC AFFAIRS

Freshman Year

Course No.	Course Title	F	W	S
Wr 111, 112	English Composition	3	3	
PE 180 or 190	Physical Education	1	1	1
	Literature sequence	3	3	3
Soc 204, 205, 206	General Sociology	3	3	3
PS 201	American Governments	3		
PS 205	International Relations			3
HE 250	Personal Health		2	
	Electives	2-3	2-3	5-6
		—	—	—
		15-16	14-15	15-16

Sophomore Year

PE 180 or 190	Physical Education	1	1	
Psy 201, 202, 203	General Psychology	3	3	3
	Science sequence (with laboratory or 12 hours of math numbered 101 or above)	4	4	4
Ec 201	Principles of Economics	3		
Anth 101, 102, 103	General Anthropology (any term)		3	
BA 232	Introduction to Business Statistics			3
	Elective	4-5	4-5	4-5
		—	—	—
		15-16	15-16	14-15

Total — 93 Hours

## DENTISTRY (Preprofessional Program)

The curriculum outlined below has been approved by the University of Oregon Dental School and the colleges and universities in the Oregon State System of Higher Education offering pre dental curricula as suitable for Oregon community college students interested in pre dentistry.

Admission to professional schools of dentistry is **highly competitive**. Students are advised to devote a minimum of three years to their preprofessional education. Students beginning a pre dentistry program at a community college should plan to transfer to an accredited, four-year institution experienced in pre dental education upon completion of their freshman year.

### Freshman Year

Course No.	Course Title	F	W	S
Wr 111, 112, 113**	English Composition	3	3**	3**
Ch 201, 202, 203	General Chemistry	4	4	4
Mth 101	College Algebra	4		
Mth 102	Trigonometry		4	
Mth 200	Calculus with Analytic Geometry			4
	Social Science sequence	3	3	3
PE 180 or 190	Physical Education	1		1
HE 250	Personal Health		2	
		<hr style="width: 100%; border: 0; border-top: 1px solid black; margin-bottom: 5px;"/> 15	<hr style="width: 100%; border: 0; border-top: 1px solid black; margin-bottom: 5px;"/> 16	<hr style="width: 100%; border: 0; border-top: 1px solid black; margin-bottom: 5px;"/> 15

\*\*OSU only

Total — 46 Hours

## EDUCATION (Elementary)

### Freshman Year

Course No.	Course Title	F	W	S
Wr 111, 112	English Composition	3	3	
Mth 191, 192, 193	Mathematics for Elementary Teachers	3	3	3
GS 104, 105, 106	Physical Science	4	4	4
	Literature sequence	3	3	3
PE 180 or 190	Physical Education	1		1
HE 250	Personal Health		2	
	Elective			3
		—	—	—
		14	15	14

### Sophomore Year

Psy 201, 202	General Psychology	3	3	
Sp 111	Fundamentals of Speech			3
Hst 201, 202, 203	History of the U.S. (UO, OSU, SOC, EOC)			
Hst 101, 102, 103	History of Western Civilization (OCE)	3	3	3
Bi 101, 102, 103	General Biology			
Geog 105, 106, 107	Introductory Geography	4	4	4
PE 180 or 190	Physical Education	3	3	3
	Electives to bring total hours to 93	1	1	1
		2-3	2-3	2-3
		—	—	—
		16-17	16-17	16-17

Total — 93 Hours

Note: Students planning to transfer to SOC or PSU should see counselor for additional information.

## EDUCATION (Secondary)

Students planning to become high school teachers should enroll in the transfer program for the subject they plan to teach, being sure to include Psy 201, 202 General Psychology and Sp 111 Fundamentals of Speech. Students planning to teach social studies should complete the transfer program in general social science. Admission to the professional program in education is based on several qualifications—academic, personal, social and ability to speak and write adequately. Application for admission should be made immediately upon transfer to the four-year institution.

**Freshman Year**

(For individuals not ready for advanced math and science)

Course No.	Course Title	F	W	S
Mth 95	Intermediate Algebra	4		
Mth 101	College Algebra		4	
Mth 102	Trigonometry			4
Ch 201, 202, 203	General Chemistry	4	4	4
Wr 111, 112, 113	English Composition	3	3	3
	Elective (social science)	3	3	3
PE 180 or 190	Physical Education	1	1	
HE 250	Personal Health			2
		15	15	16

**Sophomore Year**

(Regular first year)

*GE 101, 102, 103	Engineering Orientation	2	2	2
Mth 200, 201, 202	Calculus with Analytic Geometry	4	4	4
*Ph 207, 208, 209	Intro Classical Physics Social Science or Humanities sequence	4	4	4
PE 180 or 190	Physical Education	3	3	3
	Electives to bring total hours to 93	1	1	1
		0-3	0-3	0-3
		14-17	14-17	14-17

Total—93 Hours

Note: A student may combine courses from the above first and second year curriculum in a one-year Engineering program.

\*Will not be offered 1969-70.

## Freshman Year—Preforestry

Course No.	Course Title	F	W	S
Bi 101, 102, 103	General Biology	4	4	4
Ch 201, 202, 203	General Chemistry	4	4	4
Mth 101‡	College Algebra of Fundamentals of Speech	4-3		
Mth 102‡	Trigonometry		4	
Mth 200‡	Calculus with Analytic Geometry			4
Wr 111, 112, 113	English Composition	3	3	3
PE 180 or 190	Physical Education	1		1
HE 250	Personal Health		2	
		15-16	17	16

Total — 48-49 Hours

‡Students should enroll in mathematics at level recommended by counselor. Mathematics through 201 required.

## GENERAL ARTS AND LETTERS (U of O)

## Freshman Year

Course No.	Course Title	F	W	S
Wr 111, 112	English Composition	3	3	
	Literature sequence (English literature recommended)	3	3	3
	First year foreign language or Soc. Sci. sequence	3-4	3-4	3-4
	Science sequence (with lab or 12 cr. hours of math numbered 101 or above)	4	4	4
PE 180 or 190	Physical Education	1		1
HE 250	Personal Health		2	
	Elective			3
		14-15	15-16	14-15



<b>Sophomore Year</b>		<b>(Gen. Arts &amp; Letters)</b>		
<b>Course No.</b>	<b>Course Title</b>	<b>F</b>	<b>W</b>	<b>S</b>
Psy 201, 202, 203	General Psychology or Social Science	3	3	3
Hst 101, 102, 103	History of Western Civ- ilization or Social Science or Science sequence	3	3	3
Eng 253, 254, 255	American Literature	3-4	3-4	3-4
	Second year foreign lan- guage or Science se- quence	3	3	3
		3-4	3-4	3-4
<b>Select one:</b>				
*Eng 201, 202, 203	Shakespeare			
*Mus 201, 202, 203	Introduction to Music and Its Literature			
Art 201, 202, 203	Survey of the Visual Arts	3	3	3
PE 180 or 190	Physical Education	1	1	1
	Electives (philosophy or social science)	2	2	2
		<hr/>	<hr/>	<hr/>
		15-16	15-16	15-16

Total — 93 Hours

\*Will not be offered 1969-70

### GENERAL SCIENCE or GENERAL STUDIES IN SCIENCE

<b>Freshman Year</b>				
<b>Course No.</b>	<b>Course Title</b>	<b>F</b>	<b>W</b>	<b>S</b>
Wr 111, 112	English Composition	3	3	
	Literature sequence	3	3	3
	Mathematics	4	4	4
Bi 101, 102, 103	General Biology	4	4	4
PE 180 or 190	Physical Education	1		1
HE 250	Personal Health		2	
	Elective			3
		<hr/>	<hr/>	<hr/>
		15	16	15

Sophomore Year		(Gen. Science)		
Course No.	Course Title	F	W	S
	Social Science sequence	3	3	3
<b>Select two:</b>				
Ch 201, 202, 203	General Chemistry or			
Ch 101, 102, 103	General Chemistry	3-4	3-4	3-4
*Ph 201, 202, 203	General Physics or			
*G 201, 202, 203	Geology	3-4	3-4	3-4
	Foreign language or second Humanities sequence	3-4	3-4	3-4
PE 180 or 190	Physical Education	1	1	1
	Electives to bring hours to 93	0-3	0-3	0-3
		—	—	—
		15-16	15-16	15-16

Total — 93 Hours

\*Will not be offered 1969-70

## GENERAL SOCIAL SCIENCE

Freshman Year		F	W	S
Wr 111, 112	English Composition	3	3	
	Literature sequence	3	3	3
	Science sequence (with lab or 12 hours of math numbered 101 and above)	3-4	3-4	3-4
	History sequence	3	3	3
PE 180 or 190	Physical Education	1		1
HE 250	Personal Health		2	
	Elective	2		3-5
		—	—	—
		15-16	14-15	13-15

Course No.	Course Title	Sophomore Year		
		(Gen. Soc. Sci.)		
		F	W	S
	Second Humanities or Science sequence	3-4	3-4	3-4
	Social Science sequences (select three different: Anthropology, Sociology, Economics, Geography, Political Science, Psychology)	9	9	9
PE 180 or 190	Physical Education	1	1	1
	Electives to bring total to 93 hours	2-3	2-3	2-3
		<hr/>	<hr/>	<hr/>
	Total — 93 Hours	15-17	15-17	15-17

### GEOGRAPHY

Course No.	Course Title	Freshman Year		
		F	W	S
Wr 111, 112	English Composition	3	3	
Geog 105, 106, 107	Introductory Geography	3	3	3
Bi 101, 102, 103	General Biology	4	4	4
	First year foreign lang. or Mathematics thru Math 200	4	4	4
PE 180 or 190	Physical Education	1		1
HE 250	Personal Health		2	
	Elective			3
		<hr/>	<hr/>	<hr/>
		15	16	15

Course No.	Course Title	Sophomore Year		
		F	W	S
Ch 101, 102, 103	General Chemistry or	4	4	4
Ch 201, 202, 203	General Chemistry			
*G 201, 202, 203	Geology with lab	4	4	4
	Social Science sequence	3	3	3
	Literature sequence or second year foreign language or social science sequence	3-4	3-4	3-4
PE 180 or 190	Physical Education	1	1	1
		<hr/>	<hr/>	<hr/>
	Total — 93 Hours	15-16	15-16	15-16

Total — 93 Hours  
 \*Will not be offered 1969-70

## GEOLOGY

### Freshman Year

Course No.	Course Title	F	W	S
Wr 111, 112	English Composition	3	3	
	Literature sequence	3	3	3
	Mathematics	4	4	4
Ch 201, 202, 203	General Chemistry	4	4	4
PE 180 or 190	Physical Education	1		1
HE 250	Personal Health		2	
	Elective			3
		—	—	—
		15	16	15

### Sophomore Year

*Ph 201, 202, 203	General Physics	4	4	4
*G 201, 202, 203	Geology with lab	4	4	4
PE 180 or 190	Physical Education	1	1	1
	Electives to bring total hours to 93	6-7	6-7	6-7
		—	—	—
		15-16	15-16	15-16

Total — 93 Hours

\*Will not be offered 1969-70

## HISTORY

### Freshman Year

Course No.	Course Title	F	W	S
Wr 111, 112	English Composition	3	3	
Hst 101, 102, 103	History of Western Civilization	3	3	3
	Science sequence (with lab, or 12 hours of math)	3-4	3-4	3-4
	Foreign language or Humanities sequence	3-4	3-4	3-4
PE 180 or 190	Physical Education	1		1
HE 250	Personal Health		2	
	Electives	0-2	0-2	3-5
		—	—	—
		15	16	15

		<b>Sophomore Year</b>			<b>(History)</b>
<b>Course No.</b>	<b>Course Title</b>	<b>F</b>	<b>W</b>	<b>S</b>	
Hst 201, 202, 203	History of the U.S.	3	3	3	
	Literature sequence	3	3	3	
	Second Science sequence	3-4	3-4	3-4	
	Second Humanities sequence	3-4	3-4	3-4	
	Second year foreign language or social science sequence other than history	3-4	3-4	3-4	
PE 180 or 190	Physical Education	1	1	1	
		—	—	—	
		16-18	16-18	16-18	
Total — 93 Hours					

### **LAW (Preprofessional Program)**

		<b>Freshman Year</b>		
<b>Course No.</b>	<b>Course Title</b>	<b>F</b>	<b>W</b>	<b>S</b>
Wr 111, 112, 113	English Composition	3	3	3
Hst 101, 102, 103	History of Western Civilization	3	3	3
	Literature sequence	3	3	3
	Science sequence	3-4	3-4	3-4
PE 180 or 190	Physical Education	1		1
HE 250	Personal Health		2	
	Electives to bring total hours to 45	1-2		2
		—	—	—
		15-16	14-15	15-16

		<b>Sophomore Year</b>		
BA 211, 212, 213	Principles of Accounting	3	3	3
PS 201, 202, 203	American Governments	3	3	3
Ec 201, 202, 203	Principles of Economics	3	3	3
Hst 201, 202, 203	History of the U.S.	3	3	3
	Electives	3	3	3
PE 180 or 190	Physical Education	1	1	1
		—	—	—
		16	16	16

Total — 93 Hours

**Note:** See counselor for general requirements on acceptance to the University of Oregon Law School.

## LAW ENFORCEMENT

<b>Freshman Year</b>		<b>F</b>	<b>W</b>	<b>S</b>
<b>Course No.</b>	<b>Course Title</b>			
Wr 111, 112	English Composition	3	3	
Soc 204, 205, 206	General Sociology	3	3	3
	Humanities sequence	3	3	3
	Science sequence	4	4	4
PE 180 or 190	Physical Education	1		1
HE 250	Personal Health		2	
	Elective			3
		—	—	—
		14	15	14
<b>Sophomore Year</b>				
Psy 201, 202, 203	General Psychology	3	3	3
PS 201, 202, 203	American Governments	3	3	3
Hst 201, 202, 203	History of the U.S.	3	3	3
*LE 111, 112, 113	Law Enforcement and Society	3	3	3
	Humanities sequence	3	3	3
PE 180 or 190	Physical Education	1	1	1
		—	—	—
		16	16	16

Total — 91 Hours

\*Will not be offered 1969-70.

## MATHEMATICS

<b>Freshman Year</b>		<b>F</b>	<b>W</b>	<b>S</b>
<b>Course No.</b>	<b>Course Title</b>			
Wr 111, 112	English Composition	3	3	
	Literature Sequence	3	3	3
	Foreign Language or Biological Science sequence	4	4	4
	Mathematics	4	4	4
PE 180 or 190	Physical Education	1		1
HE 250	Personal Health		2	
	Elective			3
		—	—	—
		15	16	15
<b>Sophomore Year</b>				
	Mathematics	4	4	4
	Second year Foreign Language or Second Science sequence	4	4	4
	Social Science sequence	3	3	3
PE 180 or 190	Physical Education	1	1	1
	Electives to bring total hours to 93	3-4	3-4	3-4
		—	—	—
		15-16	15-16	15-16

Total — 93 Hours

## MEDICAL TECHNOLOGY (Preprofessional Program)

The curriculum outlined below has been approved by the University of Oregon Medical School and the colleges and universities in the Oregon State System of Higher Education offering curricula for students interested in medical technology.

Admission to professional schools of medical technology is **competitive**. Preprofessional studies must include stipulated courses in the basic sciences and general education courses required for a baccalaureate degree. The pre-professional program is three years in length. Students beginning the pre-professional program at a community college should plan to transfer to an accredited, four-year institution upon completion of the freshman year.

Course No.	Freshman Year			
	Course Title	F	W	S
Wr 111, 112**				
113**	English Composition	3	3**	3**
Ch 201, 202, 203	General Chemistry	4	4	4
Mth 95‡	Intermediate Algebra	4		
Mth 101‡	College Algebra		4	
Mth 102‡	Trigonometry			4
	Social Science sequence	3	3	3
PE 180 or 190	Physical Education	1		1
HE 250	Personal Health		2	
		15	16	15

Total — 46 Hours

\*\*OSU only

‡Students should enroll in mathematics at level recommended by counselor.

## MEDICINE (Preprofessional Program)

The curriculum outlined below has been approved by the University of Oregon Medical School and the colleges and universities in the Oregon State System of Higher Education offering premedical curricula as suitable for Oregon community college students interested in premedicine.

Admission to professional schools of medicine is **highly competitive**. Pre-professional studies must include stipulated courses in the basic sciences and general education courses required for a baccalaureate degree. A minimum of three years is required to complete the preprofessional program. Many students complete four years of study before applying for admission to a medical school.

Students beginning a premedical program at a community college should plan to transfer to an accredited, four-year institution **experienced in premedical education** upon completion of the freshman year.

Freshman Year		(Medicine)		
Course No.	Course Title	F	W	S
Wr 111, 112**				
113**	English Composition	3	3**	3**
Ch 201, 202, 203	General Chemistry	4	4	4
Mth 101‡	College Algebra	4		
Mth 102‡	Trigonometry		4	
Mth 200‡	Calculus with Analytic Geometry			4
	Humanities or Social Science sequence	3	3	3
PE 180 or 190	Physical Education	1		1
HE 250	Personal Health		2	
		15	16	15

Total — 46 Hours

\*\*OSU only

‡Students should enroll in mathematics at level recommended by counselor. Mathematics through Calculus 202 is required.

#### NURSING (Preprofessional Program)

Course No.	Course Title	F	W	S
Wr 111, 112, 113	English Composition	3	3	3
Ch 101, 102, 103	General Chemistry	3	3	3
	Literature sequence	3	3	3
	Social Science sequence	3	3	3
*HEc 225	Nutrition			3
Sp 111	Fundamentals of Speech	3		
PE 180 or 190	Physical Education	1	1	1
	Elective (Social Science recommended)		3	
		16	16	16

Total — 48 Hours

**Note:** See counselor for requirements for admission to 4-year schools of nursing.

#### PHARMACY (Preprofessional Program)

The pharmacy curriculum at Oregon State University is four years of professional study during which time courses in the humanities and social sciences are also taken. A total of five academic years, with 240 quarter hours, is required for the bachelor's degree.



Course No.	Course Title	Freshman Year		
		F	W	S
Wr 111, 112, 113	English Composition	3	3	3
Bi 101, 102, 103	General Biology or			
*Z 201, 202, 203	General Zoology (OSU)	3-4	3-4	3-4
Mth 101	College Algebra	4		
Mth 102	Trigonometry		4	
Mth 200	Calculus with Analytic Geometry			4
Ch 201, 202, 203	General Chemistry	4	4	4
PE 180 or 190	Physical Education	1	1	
HE 250	Personal Health			2
		—	—	—
		15-16	15-16	16-17

Total — 46-49 Hours

\*Will not be offered 1969-70

**Note:** See counselor for requirements for admission to 4-year schools of pharmacy.

### PHYSICAL EDUCATION

Health and Physical Education—One Year Preprofessional Program

Course No.	Course Title	F	W	S
Wr 111	English Composition	3		
Bi 101, 102, 103	General Biology	4	4	4
Ch 101, 102, 103 or				
Ch 201, 202, 203	General Chemistry	3-4	3-4	3-4
	Literature sequence	3	3	3
PE 180 or 190	Physical Education	1	1	1
	Social Science electives		3	3
		—	—	—
		14-15	14-15	14-15

Total — 42-45 Hours

### PHYSICS

The program outlined below is recommended for students who plan to transfer to a major program in physics at Oregon State University, the University of Oregon, Portland State University, or Southern Oregon College. Upon satisfactory completion of the two-year program outlined below, students should be ready to begin the **second** year of physics studies.

Freshman Year		(Physics)		
Course No.	Course Title	F	W	S
Wr 111, 112	English Composition	3	3	
	Literature sequence	3	3	3
Mth 101, 102, 200	Mathematics Courses	4	4	4
Ch 201, 202, 203	General Chemistry	4	4	4
PE 180 or 190	Physical Education	1		1
HE 250	Personal Health		2	
	Elective			3
		—	—	—
		15	16	15

Sophomore Year				
Mth 201, 202, 203	Mathematics courses	4	4	4
*Ph 207, 208, 209	Introductory Classical Physics	4	4	4
	Social Science sequence	3	3	3
PE 180 or 190	Physical Education	1	1	1
	Electives to bring total hours to 93	3-4	3-4	3-4
		—	—	—
		15-16	15-16	15-16

Total — 93 Hours

\*Will not be offered 1969-70.

## POLITICAL SCIENCE

Freshman Year				
Course No.	Course Title	F	W	S
Wr 111, 112	English Composition	3	3	
	Literature sequence	3	3	3
	Science or Math sequence	3-4	3-4	3-4
Hst 101, 102, 103	History of Western Civilization	3	3	3
PE 180 or 190	Physical Education	1		1
HE 250	Personal Health		2	
	Electives	2-3	2-3	3-5
		—	—	—
		15-16	15-16	15-16

Course No.	Course Title	Sophomore Year		
		F	W	S (Pol. Sci.)
PS 201, 202, 203	American Governments	3	3	3
	Humanities sequence	3	3	3
	Second Science sequence	3-4	3-4	3-4
	Second Humanities sequence or Science sequence	3	3	3
	Physical Education	1	1	1
PE 180 or 190	Social Science sequence (History of the U.S., Economics, Geography, Sociology, or Anthropology)	3	3	3
		<u>16-17</u>	<u>16-17</u>	<u>16-17</u>
Total — 93 Hours				

**PSYCHOLOGY**

Course No.	Course Title	Freshman Year		
		F	W	S
Wr 111, 112	English Composition	3	3	
	Literature sequence	3	3	3
	Science or Math sequence	3-4	3-4	3-4
	Social Science sequence	3	3	3
	Physical Education	1		1
PE 180 or 190 HE 250	Personal Health		2	
	Electives	0-2	0-2	3-5
		<u>15-16</u>	<u>15-16</u>	<u>15-16</u>
Course No.	Course Title	Sophomore Year		
		F	W	S
Psy 201, 202, 203	General Psychology	3	3	3
	Second Science sequence	3-4	3-4	3-4
	Second Humanities sequence	3	3	3
PE 180 or 190	Physical Education	1	1	1
	Electives (additional science or social science; foreign language if planning to graduate work)	5-6	5-6	5-6
		<u>15-16</u>	<u>15-16</u>	<u>15-16</u>
Total — 93 Hours				

## SECRETARIAL SCIENCE — BUSINESS EDUCATION

The program outlined below is recommended for students who plan to transfer to a major program in secretarial science or business education.

<b>Freshman Year</b>				
<b>Course No.</b>	<b>Course Title</b>	<b>F</b>	<b>W</b>	<b>S</b>
Wr 111, 112	English Composition	3	3	
SS 111, 112, 113	Stenography	3	3	3
SS 121, 122, 123	Typing	2	2	2
BA 101	Introduction to Business Literature or Science Sequence	4		
	Physical Education	3-4	3-4	3-4
PE 180 or 190	Personal Health	1		1
HE 250	Electives		2	
			2-3	5-6
		—	—	—
		16-17	15-17	14-16
<b>Sophomore Year</b>				
Ec 201, 202, 203	Principles of Economics	3	3	3
BA 211, 212, 213	Principles of Accounting	3	3	3
SS 211, 212, 213	Applied Stenography	3	3	3
PS 201	American Governments (Secretarial Science majors)	3		
Hst 203	History of the U.S. (Secretarial Science majors)			3
Psy 201, 202	General Psychology (Business Ed. majors)	3	3	
Sp 111	Fundamentals of Speech (Business Ed. majors)			3
BA 224	Business Communications	3		
PE 180 or 190	Physical Education	1	1	1
	Electives		2-5	
		—	—	—
		16	15-16	16
Total — 93 Hours				

## SOCIOLOGY

<b>Freshman Year</b>				
<b>Course No.</b>	<b>Course Title</b>	<b>F</b>	<b>W</b>	<b>S</b>
Wr 111, 112	English Composition	3	3	
	Literature sequence	3	3	3
	Science or Math sequence	3-4	3-4	3-4
	Social Science sequence (History of West. Civ. Recommended)	3	3	3
PE 180 or 190	Physical Education	1		1
HE 250	Personal Health		2	
	Electives	0-2		3-5
		—	—	—
		15-16	15-16	15-16

Sophomore Year		(Sociology)		
Course No.	Course Title	F	W	S
Soc 204, 205, 206	General Sociology	3	3	3
Ec 201, 202, 203	Principles of Economics	3	3	3
	Second Science sequence	3-4	3-4	3-4
	Foreign lang. or second Humanities sequence or second Science sequence	3-4	3-4	3-4
PE 180 or 190	Physical Education	1	1	1
	Electives to bring total hours to 93	0-2	0-2	0-2
		<hr/>	<hr/>	<hr/>
		15-16	15-16	15-16
Total — 93 Hours				

**SPEECH (UO, OSU)  
SPEECH AND THEATER ARTS (PSU)**

Freshman Year		F	W	S
Wr 111, 112	English Composition	3	3	
	Literature sequence	3	3	3
	First-year foreign language or Science or Math sequence	3-4	3-4	3-4
Sp 111, 112, 113	Fundamentals of Speech	3	3	3
PE 180 or 190	Physical Education	1		1
HE 250	Personal Health		2	
	Electives	2		5
		<hr/>	<hr/>	<hr/>
		15-16	14-15	15-16

Sophomore Year		F	W	S
Sp 229	Social science sequence	3	3	3
	Interpretation	2		
	Second-year foreign language or Second humanities sequence	3-4	3-4	3-4
	Science sequence or Second social science sequence	3-4	3-4	3-4
PE 180 or 190	Physical Education	1	1	1
	Electives	0-4	3-6	3-6
		<hr/>	<hr/>	<hr/>
		14-16	15-16	15-16
Total — 93 Hours				

## ***Course Descriptions***

## AGRICULTURE

- 8.100 Survey of Grain, Feed, Seed and Farm Supply Industry**      **3 class hrs/wk 3 credits**  
This course provides information on the total industry, dealing with historical factors, trends and problems of the industry, and particular facts and figures which will lead to a comprehensive understanding of the field. Students will become acquainted with the function of the agriculture supply and service center in the total industry. The types of business organization, the place of the terminal elevator, the processor, and the exporter are included. Transportation, as it affects the industry, is also presented. Several field trips will enhance the classroom instruction phase.
- 8.120 Seed Technology**      **4 class - 4 lab hrs/wk 6 credits**  
A comprehensive course in seed cleaning, weed and seed identification, laws and regulations. Grain testing and grading. Lab work consisting of actual seed plant operation and grain testing.
- 8.122 Botany**      **2 class - 4 lab hrs/wk 4 credits**  
Plant environments and interrelationships. Diversity among the plants. Plant structures and functions. Heredity and evolution.
- 8.125 Soils I**      **3 class hrs/wk 3 credits**  
This is a basic course in soil science designed to provide necessary background for work in the fertilizer department of the agriculture supply center, and directly supports the fertilizers and chemicals option. Included is instruction leading to understanding of soil classification and crop adaptability, productivity characteristics of soil, environmental factors, plant nutrients, both macro and micro, liming and soil tests and interpretation.
- 8.126 Soils II**      **3 class hrs/wk 3 credits**  
Included in the second phase of soils instruction are units on fertilizer requirements, soil moisture and plant growth, fertilizers of the soil, soil microorganisms, the nature and properties of organic matter, sources of raw materials, and use of micronutrients.
- 8.130 Agriculture Chemicals**      **3 class hrs/wk 3 credits**  
The course deals with the use of herbicides, insecticides, fungicides and nematocides, external and internal parasites of livestock and poultry, identification of important animal and plant pests and diseases. The types of materials, safety in handling and storage, methods of use and application are emphasized throughout the course. Emphasis will be placed on student development of ability to interpret and to explain to customers the directions

for use and cautions to be observed with the chemical products. Attention will also be given procedures used in keeping current with new products continually being introduced on the market.

**8.140 Soils and Fertilizers 3 class hrs/wk 3 credits**

Third course 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. Fertilizer recommendations, methods of application, loss of fertilizer and storage and handling.

**8.145 Feeds and Feeding 3 class hrs/wk 3 credits**

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 Genetics 2 class hrs/wk 2 credits**

Designed to help students develop a basic knowledge and working skill of animal and plant genetics as utilized by the industry. Subjects include a review of animal and plant breeding, role of male and female in reproduction, fertility and viability, reproduction, sterility, basic principles of heredity and variation, sex determination and systems of breeding.

**8.151 Nutrition 2 class hrs/wk 2 credits**

The course is designed to give students sufficient background to enable them to understand the principles of nutrition and the chemistry of digestion. Units of instruction will include digestibility of feedstuffs, storing and releasing of energy and the role of essential elements.

**8.160 Survey of Crops and Livestock Industry 3 class hrs/wk 3 credits**

This course presents an overview of the crops and livestock industries, with attention to scope, place in production agriculture, classification and identification, and basic factors of production. Included in the crops phase are units in food production, classification, factors affecting selection of species and variety, management practices, harvesting, certified seed, and plant growth factors. The livestock phase will include units in classification, production, disease prevention and control, scope of the industry, relationship to crops and forages, and additional background information to assure a general understanding of the livestock industry.



- 8.165 Crops II** **3 class hrs/wk 3 credits**  
 Deals with management practices of field crops with special emphasis on the grass seed family. Units will be highly related to soils and plant growth factors, and will include environmental factors affecting crop selection; soil preparation and seeding; fertilization; weed, disease and insect control; and modern harvesting techniques.
- 8.170 Feed Technology** **3 class hrs/wk 3 credits**  
 Designed to acquaint the student with processing methods and equipment, plant layout, production and inventory control procedures, and bulk and packaged handling. Field trips will be utilized to acquaint the student with the most modern production methods and facilities.
- 8.175 Physical Facilities and Care of Equipment** **3 class hrs/wk 3 credits**  
 The course will acquaint students with the facilities and equipment commonly found in the grain, feed, seed, and farm supply centers typical of the area. Emphasis is placed on arrangement of facilities for the efficient and safe operation, and on the adjustment, maintenance and operation of equipment.
- 8.180 Warehouse Practices** **3 class hrs/wk 3 credits**  
 The course will deal with procedural aspects of warehouse and elevator operation, state and federal licensing requirements, warehouse receipts, inventory control, safety, fire prevention and sanitation.
- 8.225 Ag Economics and Marketing** **3 class hrs/wk 3 credits**  
 The course is designed to help students understand the application of basic economic principles to agricultural marketing and distribution. Units of instruction include the study of laws of supply and demand, price determinants, and the role of the middleman in the market. Also included are elements of production, analysis of cost factors affecting production and marketing, effect of government policies, the need for grades and grading, and an analysis of agricultural commodities.
- 8.230 Work Experience (Agriculture)** **3 credits**  
 Employment in positions providing practical experience in the various aspects of agriculture suited as nearly as possible to the student's wants and capabilities. Supervised by employer and college coordinator.

## BUSINESS

- BA 101 Introduction to Business** **4 class hrs/wk 4 credits**  
 A survey course in business with emphasis placed on organization, operation, and management. It is intended to orient the student to the field of business and to help him determine his field of major concentration.

- BA 211 Principles of Accounting I** 3 class hrs/wk 3 credits  
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 credits  
Accounting systems and management control, concepts and principles of depreciation, merchandise inventory, evaluation, partnership and corporate accounting, capital stock, investments, dividends.
- BA 213 Principles of Accounting III** 3 class hrs/wk 3 credits  
Control accounting for departments and branches, cost accounting for manufacturing plants, income taxes and their effect on business decisions, and analysis of financial statements.
- BA 214 Business Communications** 3 class hrs/wk 3 credits  
Study of the purpose and effectiveness of communications in business. Analysis and writing in simulated situations.  
**Prerequisite:** Wr 112.
- BA 226 Business Law** 3 class hrs/wk 3 credits  
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 232 Introduction to Business Statistics**, 3 class hrs/wk, 3 credits  
Modern business decision theory, and statistics as a tool for business decision making. Primary emphasis on statistical description (tables, charts, and frequency distributions) and the elements of probability; consideration also of modern data processing, index numbers, and time series analysis (trend, cyclical, and seasonal adjustments) of business data.
- SS 111 Stenography I** 5 class hrs/wk 3 credits  
Introduction to theory and Gregg shorthand, including the alphabet, brief forms, phrasing and abbreviating principles.
- SS 112 Stenography II** 5 class hrs/wk 3 credits  
Completion of shorthand theory and review of all principles. Development of ability to construct new outlines rapidly from dictation and to lay solid foundation for further development of dictation and transcription skill.  
**Prerequisite:** SS 111 or equivalent.

- SS 113 Stenography III**                      **5 class hrs/wk 3 credits**  
 Emphasis on further development of speed and accuracy in dictation and transcription. Intensive practice in refining shorthand skills and in producing mailable letters. Personal qualifications covered.  
**Prerequisite:** SS 112 or equivalent.
- SS 211 Applied Stenography**                      **6 class hrs/wk 3 credits**  
 A thorough and extensive review of Gregg Shorthand, advanced principles, phrases and short cuts, dictation covering vocabularies representative of various types of businesses, legal forms, newspapers, and magazine articles. Basic skills of office work are stressed.  
**Prerequisite:** SS 113 or equivalent.
- SS 212 Applied Stenography**                      **6 class hrs/wk 3 credits**  
 A continuation of 211 with emphasis on speed, accuracy and secretarial standards.
- SS 213 Applied Stenography**                      **6 class hrs/wk 3 credits**  
 A continuation of 212 with emphasis on speed, accuracy and secretarial standards.
- SS 121 Typing I**                                      **4 class hrs/wk 2 credits**  
 A beginning course in typing for those with no previous typing instruction. It covers the basic techniques of the touch system, speed and accuracy, manuscript writing, composition at the machine, tabulation, letter writing and centering.
- SS 122 Typing II**                                      **4 class hrs/wk 2 credits**  
 Continued practice in the mastery of the keyboard with emphasis on speed, accuracy, and secretarial standards. Review and advanced work in manuscripts, business forms, rules that govern word division, correspondence, courtesies, and similar typing technicalities.  
**Prerequisite:** SS 121 or equivalent.
- SS 123 Typing III**                                      **4 class hrs/wk 2 credits**  
 Continued units on letter writing, business forms, manuscripts, plus secretarial projects such as credit follow-up, sales promotion, financial analysis, conference arrangements, employment interviews, and promotion planning.  
**Prerequisite:** SS 122 or equivalent.
- SS 124 Typing Skill Building**                      **3 class hrs/wk 2 credits**  
 Speed, accuracy, figures and remedial techniques. Use of wide variety of special drills and electric typewriters.  
**Prerequisite:** SS 121 or equivalent.
- 1.121 Poise, Posture and Personality**                      **3 class hrs/wk 2 credits**  
 This course covers the principles of fashion, fashion cycles and fashion coordination. It also covers the study of line, design and color as they relate to clothing and accessories; the study of the individual silhouette in posture, walking and standing, stage and stair stance; grace in sitting,

leaving and entering a room and car; hair care, shape and style most flattering to the person. Emphasis will be placed on personality.

- 0.660 Personal Finance**                      **3 class hrs/wk**   **3 credits**  
A thorough study of home financing, installment buying, insurance, investments, wills, and other phases of managing family finances.
- 2.110 Principles of Salesmanship**           **3 class hrs/wk**   **3 credits**  
Course includes characteristics of the customer, buying motives, approach, presentation, demonstration, overcoming objections and excuses, closing the sale, and objective selling. Each student is given the opportunity to develop a sales approach and present and analyze a sales presentation.
- 2.119 Business Management**                **3 class hrs/wk**   **3 credits**  
A course designed to allow the student an opportunity to study the management essentials of both merchandising and industrial organizations. Emphasis will be placed on the complex problems of marketing policies, purchasing procedures, financial requirements, budgeting, human relations, physical facilities, and government regulations.
- 2.131 Elements of Marketing**                **3 class hrs/wk**   **3 credits**  
A general survey of the nature, significance, and scope of marketing. Emphasis is placed upon the channels of distribution; the marketing of consumer, shopping, specialty and other goods; service marketing; middlemen, wholesaling, shopping and warehousing; standardization, grading and pricing; government regulations of competition.
- 2.134 Retail Merchandising**                 **3 class hrs/wk**   **3 credits**  
A general survey of the principles of efficient store organization and management. Topics include location and layout, types of store organization, personnel management, operating activities, financial and budgetary control, coordinating policies, and store protection.
- 2.222 Financial Management**                 **3 class hrs/wk**   **3 credits**  
All aspects of understanding how to finance a business are discussed. Special emphasis on short-term and intermediate-term debt financing. The topic of "Funding from Operations" is also thoroughly developed.  
**Prerequisite:** Sophomore standing or consent of the instructor.
- 2.308 Principles of Advertising**             **3 class hrs/wk**   **3 credits**  
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.  
**Prerequisite:** Sophomore standing or consent of the instructor.

- 2.501 Typing I** **4 class hrs/wk 2 credits**  
 A beginning course in typing for those with no previous typing instruction. It covers the basic techniques of the touch system, speed and accuracy, manuscript writing, composition at the machine, tabulation, letter writing, centering.
- 2.502 Typing II** **4 class hrs/wk 2 credits**  
 Continued practice in the mastery of the keyboard with emphasis on speed, accuracy, and secretarial standards. Review and advanced work in manuscripts, business forms, rules that govern word division, correspondence, courtesies, and similar typing technicalities.  
**Prerequisite:** Typing 2.501 or equivalent.
- 2.503 Typing III** **4 class hrs/wk 2 credits**  
 Continued units on letter writing, business forms, manuscripts, plus secretarial projects such as credit follow-up, sales promotion, financial analysis, conference arrangements, employment interviews, and promotion planning.  
**Prerequisite:** Typing 2.502 or equivalent.
- 2.504 Typing, Skill Building** **3 class hrs/wk 2 credits**  
 Special emphasis on speed and accuracy. Use of a wide variety of special drills to work on numbers and remedial techniques.  
**Prerequisite:** Typing 2.501 or equivalent.
- 2.505 Typing IV** **4 class hrs/wk 2 credits**  
 Theory and practice; drills of all kinds; punctuation and mechanical arrangements of business correspondence, legal forms, tabulating, manuscripts, modern business forms, straight copy timings; training on both manual and electric typewriter.  
**Prerequisite:** Typing 2.503 or equivalent.
- 2.506 Typing V** **4 class hrs/wk 2 credits**  
 Advanced course in production typewriting on all types of business materials. Continuation of skill development and typing techniques.  
**Prerequisite:** Typing 2.505 or equivalent.
- 2.509 Introduction to Data Processing** **3 class - 2 lab hrs/wk 4 credits**  
 A basic orientation of the field of electronic data processing with the definitions, history and functions of data processing and an introduction to unit record principles and machine operation.
- 2.510 Fundamentals of Unit Record Equipment** **3 class - 2 lab hrs/wk 4 credits**  
 The nature and purpose of electro-mechanical machine operation. Principles of punch card operations including key punch, interpreter, verifier, sorter, collator, reproducer and accounting machines.

- 2.511 Data Processing Systems**                      **3 class hrs/wk 3 credits**  
 A one-term course of instruction for students of computer programming curriculum who have completed 2.509 - Introduction to Data Processing. The course is designed to give instruction and knowledge of business computer applications in the areas of problem definition, system design, flowcharting, documentation and the writing of operational procedures. A proportionate amount of time is spent studying case histories of actual computer applications selected for their example and aptness.
- 2.512 Computer Operation**                      **1 class - 2 lab hrs/wk 2 credits**  
 An introduction to an experience in operation of digital computers and their associated devices including tape drives, reader-punches, printers, and random access files. A description of the operating principles of each of the devices, an outline of their structure, proper operation procedures for each and their proper care. Proper preparation for efficient job flow.
- 2.513 Computer Programming I**                      **3 class - 2 lab hrs/wk 4 credits**  
 The first of a series of two terms of instruction for programming of the International Business Machines family of System/360 computers. A proportionate amount of time is spent in covering the numbering systems, programming languages, and assembly language programming.
- 2.514 Computer Programming II**                      **3 class - 2 lab hrs/wk 4 credits**  
 A basic theory course in solving business data processing problems on modern digital computers including a survey of computer systems and an introduction to symbolic programming.  
**Prerequisite:** 2.511 and 2.513 or equivalent.
- 2.554 Data Processing Management**                      **3 class - 2 lab hrs/wk 4 credits**  
 Advanced study of machine accounting techniques, card design, procedure development, work loads, scheduling control, evaluation and improvement in the supervision of a data processing installation.
- 2.555 Data Processing Field Project\***                      **6 credits**  
 A course of instruction and practice of skills and techniques acquired in previous courses within the Electronic Data Processing Curriculum. Individual selected projects of practical value 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 procedure.  
 \*Unscheduled lab and outside study and preparation time totaling a minimum of 192 hours of work per term.

- 2.515 Business Mathematics** **3 class hrs/wk 3 credits**  
 A course designed to give the student an arithmetical background in general office work. Principles and short-cuts in basic functions such as addition, multiplication, decimals, fractions, percentage, simple and compound interest and discount, and the application of these functions to modern business.
- 2.516 Introduction to Business Statistics** **3 class hrs/wk 3 credits**  
 A statistical analysis of business and economic data used in controlling operation and in making sound business decisions. Special attention is given to assembling statistical data, statistical description, sampling, time series, cyclical fluctuations, and the application of statistics in business.
- 2.518 Business Law** **3 class hrs/wk 3 credits**  
 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 in the study of business agreements—their formation, operation, performance and discharge.  
**Prerequisite:** Sophomore standing or consent of instructor.
- 2.521 Office Machines** **5 class hrs/wk 3 credits**  
 Instruction and operating experience on the ten-key adding machine, full keyboard adding machine, printing calculator, and the rotary calculator.
- 2.524 Office Procedures I** **3 class hrs/wk 2 credits**  
 This initial course is designed to introduce the student to general office duties and the simple tools he will use in an office. Detailed instruction will be given in office techniques, including introduction to transcribing machines.
- 2.525 Office Procedures II** **3 class hrs/wk 2 credits**  
 A continuation of Office Procedures I, preparing the student to handle the office mail, telephone and telegraph communications, sources of information, and prepare office records and reports, including graphic presentations of business trends. Records and reports are emphasized. Continuation of transcribing machines.  
**Prerequisite:** Office Procedures I, or equivalent.
- 2.526 Office Procedures III** **3 class hrs/wk 2 credits**  
 A continuation of Office Procedures II with emphasis on those duties that require meeting the public as receptionists, cashiering, preparing credit instruments, and sales office operations. The student will be introduced to economic factors that affect business. Public relations and personality receive emphasis. **Prerequisite:** Office Procedures II, or equivalent.



- 2.530 Bookkeeping I** **5 class hrs/wk 3 credits**  
 Fundamental principles of double entry bookkeeping; general journals and ledgers, business forms, simple financial statements, and the completion of the bookkeeping cycle. Specific emphasis on cash receipts and payments, payroll accounting, purchases, sales, promissory notes, and inventories.  
 centering.
- 2.531 Bookkeeping II** **5 class hrs/wk 3 credits**  
 A continuation of Bookkeeping I with an expansion of the bookkeeping cycle to include special journals, ledgers and business forms.
- 2.532 Bookkeeping III** **5 class hrs/wk 3 credits**  
 An advanced course in bookkeeping 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.
- 2.536 Analysis of Financial Statements** **3 class hrs/wk 3 credits**  
 A study of financial analysis involving financial statements, statements of audit, and reports commonly found in business operations. **Prerequisite:** Bookkeeping III.
- 2.541 Stenography I (Gregg)** **5 class hrs/wk 3 credits**  
 Introduction to Gregg shorthand theory, including the alphabet, brief forms, phrasing and abbreviating principles.
- 2.542 Stenography II (Gregg)** **5 class hrs/wk 3 credits**  
 Completion of shorthand theory and review of all principles. Development of ability to construct new outlines rapidly from dictation and to lay solid foundation for further development of dictation and transcription skill. **Prerequisite:** Stenography I or equivalent.
- 2.543 Stenography III (Gregg)** **5 class hrs/wk 3 credits**  
 Emphasis on further development of speed and accuracy in dictation and transcription. Intensive practice in refining shorthand skills and in producing mailable letters. Personal qualifications covered. **Prerequisite:** Stenography II or equivalent.
- 2.541 Stenography I (Machine Shorthand)** **5 class hrs/wk, 3 credits**  
 Introduction to and training on the keyboard and theory of Touch Machine Shorthand with practical applications in sentence and paragraph dictation.
- 2.542 Stenography II (Machine Shorthand)** **5 class hrs/wk, 3 credits**  
 Completion of Touch Machine Shorthand theory. Development of ability to take dictation rapidly and the development of transcription skills. **Prerequisite:** Stenography I or equivalent.



- 2.543 Stenography III (Machine Shorthand) 5 class hrs/wk, 3 credits**  
 Emphasis on further development of speed and accuracy in dictation and transcription. Intensive practice in refining shorthand skills and in producing mailable letters. Personal qualifications covered. **Prerequisite:** Stenography II or equivalent.
- 2.545 Applied Stenography I 6 class hrs/wk 3 credits**  
 A thorough and extensive review of Gregg Shorthand, advanced principles, phrases and short cuts, dictation covering vocabularies representative of various types of businesses, legal forms, newspapers, and magazine articles. Basic skills of office work are stressed. **Prerequisite:** Stenography 2.543 and Typing 2.503 or equivalent.
- 2.546 Applied Stenography II 6 class hrs/wk 3 credits**  
 A continuation of 2.545 with emphasis on speed, accuracy and secretarial standards.
- 2.547 Applied Stenography III 6 class hrs/wk 3 credits**  
 A continuation of 2.546 with emphasis on speed, accuracy and secretarial standards.
- 2.548 Business English 3 class hrs/wk 3 credits**  
 The analysis and composition of the principal types of present-day business letters and reports.
- 2.613, 2.614, 2.615 On-the-Job Training (Secretarial) 16 hrs/wk 4 credits**  
 Supervised employment in secretarial field, stenography, office management, records control, etc. The employment portion shall be a minimum of 16 hours per week, with seminar.
- 2.710, 2.711, 2.712 On-the-Job Training (Business Management) 16 hrs/wk 4 credits**  
 Supervised employment in positions related to the field of merchandising. Intended to provide practical experience in operations and methods for students preparing for careers in business management. The employment portion shall be a minimum of 16 hours per week, with seminar.
- 2.652 Filing and Records Control, 1 class - 2 lab hrs/wk 2 credits**  
 Covers all basic systems found in modern business offices.
- CREATIVE ARTS DIVISION**
- Art 195 Basic Design 1 class - 2 lab hrs/wk 2 credits**  
 A general introduction to the design field through study of the basic art principles with emphasis on developing sound judgment, basic skills and individual creative growth.
- Art 196 Basic Design 1 class - 2 lab hrs/wk 2 credits**  
 Continuation of study of the design field with emphasis on relationships between 2 and 3 dimensional space; further development of basic skills, individual growth and ability to analyze design problems. **Prerequisite:** Art 195

**Art 197 Basic Design** 1 class - 2 lab hrs/wk 2 credits  
Continuation of the study of the design field with emphasis toward the development of the individual designer. Experimentation encouraged. **Prerequisite:** Art 196.

**Art 201, 202, 203 Survey of the Visual Arts** 3 class hrs/wk 3 credits  
Cultivation of understanding of the visual arts through the study of the elements of art, architecture, sculpture, drawing and print making, painting, industrial design, crafts.

**Art 255 Ceramics** 2 class hrs/wk plus lab 2 credits  
Introduction to ceramics with emphasis on pottery. Instruction offered in hand construction, throwing, glazing, and firing. Laboratory hours to be arranged. Maximum credit, 6 hours.

**Art 290 Painting** 2-3 credits  
Instruction in the use of oil color and other media on canvas and panels. Fall and winter term is primarily concerned with the development of the pictorial composition and self expression. During spring term, copolymer latex emulsions, lacquer, encaustic and other experimental media are used. Painting will be done from still lifes, human figure and individual imagination. One three-hour credit. Maximum credit 9 hours.

**Art 291 Drawing** 1-3 credits  
Problems in still life, figure drawing expressive and landscape drawing. Studies in the use of different materials and techniques. One three-hour studio period for each hour of credit. Maximum credit 9 hours.

#### **FIRE SCIENCE**

**5.250 Fire Fighting Skills I** 9 lab hrs/wk 3 credits  
Individual skills using small tools and minor equipment, practice in forcible entry, use of masks, and other activities generally performed by the individual.

**5.251 Fire Fighting Skills II** 1 class - 6 lab hrs/wk 3 credits  
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.

**5.252 Fire Fighting Skills III** 5 class hrs/wk 2 credits  
Practice in skills involving multi-company operations, including simultaneous activities of ladder, engine, and salvage companies; manning large stream appliances, coordinating communications, etc.

**5.253 Fire Apparatus and Equipment** 2 class - 3 lab hrs/wk 3 credits  
Familiarization with different types of fire apparatus; principles of application, care, and preventive maintenance; safe operating practices, emergency and non-emergency; National Board standards.

- 5.254 Introduction to Fire Protection 3 class hrs/wk 3 credits**  
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.
- 5.256 Physical Science of Fire 2 class - 3 lab hrs/wk 3 credits**  
Characteristics and behavior of fire; fundamentals of physical laws and chemical reactions occurring in fire and fire suppression; analysis of factors contributing to fire—its cause, rate of burning, heat generation and travel, by-products of combustion—and to its confinement, control, and extinguishment.
- 5.257 Fire Department Hydraulics 3 class - 3 lab hrs/wk 4 credits**  
Review of basic mathematics; hydraulic laws and formulas as applied to the fire service; application of formulas and mental calculations to hydraulics problems; fire ground water-supply problems; Underwriter's requirements for pumps and accessories.
- 5.258 Company Organization and Station Assignment 3 class hrs/wk 3 credits**  
Fire company organization and operation; company responsibilities in station, including record keeping, state communications; and watch, housekeeping and house privileges, tours and public relations, company organization for response to alarms, company morale.
- 5.260 Hazardous Materials I 5 class hrs/wk 3 credits**  
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 for fire control of these materials.
- 5.261 Hazardous Materials II 5 class hrs/wk 3 credits**  
Methods for combating fires involving hazardous chemicals and other materials; radiation hazards of the fire service; space age fuel; highway transportation of explosives, etc.
- 5.262 Fundamentals of Fire Prevention, 3 class hrs/wk 3 credits**  
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 2 class - 3 lab hrs/wk 3 credits**  
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**      **2 class - 3 lab hrs/wk 3 credits**  
 Classification of buildings; structural features affecting fire spread; effect of fire on structural strength; fire stops and ratings of materials; fire retardants; Sanborne maps.
- 5.267 Fire Department Communications and Alerting**      **2 class hrs/wk 2 credits**  
 Dispatching, receiving, and radio communication procedures; FCC regulations; municipal box alarm; telephone and tone-activated alarm; recording messages; tap-out procedures, running cards, etc.
- 5.268 Rescue Practices**      **6 class hrs/wk 2 credits**  
 Electrical; use of rescue tools; common rescue carries; search and rescue procedures; handling nets; care of victim; excavation emergencies; evacuations.
- 5.269 Water Distribution Systems**      **3 class hrs/wk 3 credits**  
 Main systems; hydrants: size, gridding, valving, distribution; residential and commercial districts; fire flow requirements; pumping stations; high pressure systems; storage tanks and cisterns; mobile supplies.
- 5.270 Fire Reports & Records**      **2 class hrs/wk 2 credits**  
 Analysis of fire department records and reports systems, their origins, types and functions. Application of these systems to the areas of pre-fire surveys, routine inspections, post-fire reporting, cost-accounting, research and planning.      **Prerequisite:** Communication Skills I and II.
- 5.272 Fixed Systems and Extinguishers**      **5 class hrs/wk 2 credits**  
 Portable extinguisher equipment; sprinkler systems: protection systems for special hazards; fire alarm and detection systems; ventilating systems.
- 5.273 Fire Investigation**      **3 class - 3 lab hrs/wk 4 credits**  
 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.
- 5.274 Fire Fighting Tactics and Strategy**      **3 class hrs/wk 3 credits**  
 Response and size-up; fire ground tactics; analysis and postmortem; pre-fire survey and planning.
- HEALTH OCCUPATIONS**
- 5.406 Nurses Aide Lecture**      **5 class hrs/wk 5 credits**  
 Daily assignments are given using a required manual which serves as the text. Weekly quizzes are given to determine the students' understanding of the theory portion of the course.

- 5.407 Nurses Aide Laboratory**      **25 lab hrs/wk 7 credits**  
Clinical experience is provided first in a Nursing Arts Laboratory, with demonstrations of procedures by the instructor, and an opportunity for the student to practice procedures before she is assigned to do them on the hospital stations. Experience at the bedside of patients is provided under the supervision of the instructor, in the hospital and in nursing homes.

#### **INDUSTRIAL**

- 3.278 Transmissions I**      **2 class - 3 lab hrs/wk 3 credits**  
A study of the principles of operation and maintenance of the manually operated transmissions. Detailed inspections and adjustments are conducted on clutches, pressure plates, three-speed, four-speed, and five-speed transmissions.
- 3.280 Transmissions II**      **2 class - 3 lab hrs/wk 3 credits**  
A study of the operating principles and repair procedures of automatic transmissions, torque converters and fluid couplings. Special emphasis is directed toward developing the ability to swiftly and accurately analyze the performance of automatic transmissions.
- 3.290 Chassis I**      **2 class - 3 lab hrs/wk 3 credits**  
A study of the complete system that composes the automotive power train. Emphasis is placed upon the theory, application, and servicing of differential units, universal joints, drive lines, transfer cases, and power take-offs.
- 3.292 Chassis II**      **2 class - 3 lab hrs/wk 3 credits**  
Fundamental principles of automotive suspensions systems are studied, with emphasis upon front end alignment, wheel balancing, steering systems, and frames.
- 3.295 Hydraulics and Pneumatics**      **2 class - 3 lab hrs/wk 3 credits**  
A course to familiarize the industrial student with fundamental principles of hydraulic and pneumatic systems. A study is made of the component parts of specific systems commonly used in automobiles and machinery of farm and industry.
- 3.304 Internal Combustion Engines I**      **2 class - 3 lab hrs/wk 3 credits**  
A lecture-lab course of instruction in the various types of internal combustion engines and their component parts, accessories, service and overhaul techniques.
- 3.306 Internal Combustion Engines II**      **2 class - 3 lab hrs/wk 3 credits**  
A lecture-lab course that builds on prior course work in 3.304. The fundamentals and principles of engine reconditioning and repair are studied and performed as the student returns the engine to manufacturer's specification.

- 3.308 Fundamentals of Automotive Electricity**      **3 class hrs/wk 3 credits**  
 A lecture-demonstration course intended to acquaint the student with the basic fundamental theories and principles of automotive electricity.
- 3.310 Automotive Electricity I**      **2 class - 3 lab hrs/wk 3 credits**  
 Basic instruction and practice in the theory and servicing of automotive electrical equipment and systems.
- 3.311 Automotive Electricity II**      **2 class - 3 lab hrs/wk 3 credits**  
 Advanced instruction in automotive electrical systems under conditions similar to those experienced by the line mechanic. Testing, adjusting and servicing of all electrical systems is carried out while the equipment functions as an integral part of the automobile.
- 3.324 Tune-up and Diagnosis**      **2 class - 3 lab hrs/wk 3 credits**  
 A problem-solving course of the lecture-demonstration-lab-performance type in which the student works on a live engine. He will call on his learning and skills acquired in previous courses to solve various engine malfunctions and then to bring that engine to optimum operating efficiency.
- 3.329 Automotive Repair Practices I**      **7 lab hrs/wk 3 credits**  
 A laboratory course in which the student can develop additional abilities and understanding through diagnosis and repair of automotive equipment. It will include overhaul, maintenance procedures, and practices to simulate the work of a line mechanic. Live jobs will be selected to provide the student with a wide scope of experiences.
- 3.331 Automotive Repair Practices II**      **7 lab hrs/wk 3 credits**  
 A continuation of Automotive Repair Practices 3.329.
- 3.332 Automotive Service Management**      **2 class hrs/wk 2 credits**  
 This course outlines the duties and responsibilities of the service manager. The students study methods of organizing service personnel, shop facilities, and an introduction to shop layout and buildings. Appreciation of good relationship with customers, labor and management groups, and individuals is emphasized.
- 3.350 Service Station Operation**      **2 class - 3 lab hrs/wk 3 credits**  
 A course primarily concerning the attitudes and philosophy of automotive employees who must frequently meet and deal with the public. Particular attention is given to the attributes of successful service station operation which will include product and service knowledge, courtesy, cleanliness, merchandising, planning and organization.

- 3.360 Automotive Machine Shop**      **2 class - 3 lab hrs/wk 3 credits**  
 A specialty course devoted to the successful organization and operation of the automotive machine shop. Included are boring, milling, grinding, re-sizing, honing, and other simple operations common to the automotive machinist's work.
- 3.364 Fuels and Carburetion**      **2 class - 3 lab hrs/wk 3 credits**  
 An introductory course dealing with the principles and terminology of automotive fuel and carburetion systems. Students will become involved with techniques and overhaul procedures as they apply to carburetors, fuel pumps, fuel tanks, fuel gauges and the fuel lines and fittings.
- 3.370 Automotive Brakes**      **2 class - 3 lab hrs/wk 3 credits**  
 Fundamental principles of the functioning and repair procedures of automotive braking systems. Included are mechanical, air, electric and combination braking systems with emphasis upon servicing for optimum performance according to established safety standards.
- 3.375 Heat Exchangers and Air Control**      **2 class - 3 lab hrs/wk 3 credits**  
 A study of the problems of temperature control both inside the engine compartment and inside the automobile. Included are diagnosis, adjustment, and repair of radiators, heaters, air conditioning units, and temperature control accessories.
- 3.380 Machine Tools I**      **2 class - 4 lab hrs/wk 3 credits**  
 Covers the fundamentals and workable knowledge of the processes and machines required of the machinist. Safety, shop rules and procedures, bench and layout tools, micrometers and other measuring tools, application of mathematics to shop problems. Plane turning, boring, facing, and chucking operations on the engine lathe.
- 3.381 Machine Tools II**      **2 class - 4 lab hrs/wk 3 credits**  
 A continuation of instruction in the operation and maintenance of the machine lathe. Introduction to the types and uses of milling machines and shapers. **Prerequisite:** Machine Tools I.
- 3.382 Machine Tools III**      **2 class - 4 lab hrs/wk 3 credits**  
 A continuation of Machine Tools II with advanced projects and metallurgy. **Prerequisite:** Machine Tools II.
- 3.425 Employment Techniques**      **1 class hr/wk 1 credit**  
 A course designed to aid the student in locating and securing employment. This course should be of equal interest to those students who will be seeking permanent employment or part-time work experience.



- 3.440 Industrial Carpentry 2 class - 3 lab hrs/wk 3 credits**  
 A maintenance type course devoted to alteration, repair and design of wooden structures used in industry. Emphasis is on fire safety, safe working habits, public safety, and materials conservation.
- 3.444 Metallurgy 3 class - 3 lab hrs/wk 4 credits**  
 An introduction to those metals which may be readily welded in respect to how these metals behave when subjected to specific fabrication processes. An attempt is made to understand metal failures and methods of eliminating these failures.
- 3.448 Industrial Electronics 2 class - 3 lab hrs/wk 3 credits**  
 A continuation of industrial electricity that introduces the student to the principles and applications of electronics in industry. Emphasis is on electronic relays, timing devices, photo-electric circuitry instrumentation, and solid state control mechanisms. **Prerequisite:** Industrial Electricity 3.462.
- 3.452 Plumbing and Pipe Fitting 2 class - 3 lab hrs/wk 3 credits**  
 This course introduces the emergency pipe repair and maintenance procedures and measures necessary in industry. Pressure loss, liquid friction, supports, fittings, adapters and basic pipe safety and maintenance are studied and evaluated.
- 3.455 Masonry and Concrete Fundamentals 2 class - 3 lab hrs/wk 3 credits**  
 A study of concrete and masonry products, the governing codes of standardization, the applications, and the methods and practices of common usage in industry. Reinforcing, fireproofing, repairing and maintaining concrete and masonry structures are included.
- 3.458 Sheet Metal 2 class - 3 lab hrs/wk 3 credits**  
 An introductory course involving layout and fabrication practices used in industry. Emphasis is given to pre-planning, pattern transfer, metal cutting, forming and securing. Safety, material conservation and good work habits are stressed.
- 3.462 Industrial Electricity 2 class - 3 lab hrs/wk 3 credits**  
 An introductory course concerned with the principles and applications of electricity in industry. Studies are made of the basic principles and maintenance of AC and DC motors and generators, their controls, switching gear, and circuit protection devices.
- 4.100 Blueprint Reading and Sketching 4 class hrs/wk 2 credits**  
 A basic course in blueprint reading and freehand sketching to develop knowledge of graphic symbols, standards, perception and an understanding of a variety of drawings.



- 4.101 Drafting and Blueprint I** 4 class hrs/wk 2 credits  
A fundamental course in drafting designed to give the student a basic understanding of drawing techniques. Emphasis is placed on the application of drafting instruments, standard orthographic projection, layout procedures, and ASA approved lettering techniques. Drawing techniques such as geometric construction, selection of views, sectional and auxiliary views, revolutions, threads and standard dimensioning practices will be covered.
- 4.105 Drafting and Blueprint II** 4 class hrs/wk 2 credits  
This is an intermediate course designed to prepare students to enter mechanical, structural, civil and architectural drafting. It includes isometric projection, perspective drawings. Emphasis is placed on the concept technique of inking, and the development of working drawings as used in industry. Limitations of general shop equipment are discussed. **Prerequisite:** Drafting I or equivalent.
- 4.108 Industrial Safety** 2 class hrs/wk 2 credits  
A survey of the principles of safety in industry including safety codes, personnel considerations, safety practices relating to machine design, materials handling and safe equipment operation and maintenance. An attempt is made to decrease the number of accidents along with reducing the seriousness when an accident does occur.
- 4.110 Elements of Blueprint and Drafting**  
1 class - 9 lab hrs/wk 4 credits  
A basic course in drafting to acquaint students with principles of freehand sketching in creating graphic symbols as on blueprints.
- 4.111 Fundamentals of Drafting**  
2 class - 9 lab hrs/wk 5 credits  
An introductory course in the use of tools, equipment, and supplies commonly used by the drafting industry. Essentially this will provide the student with an overview of the full scope of drafting.
- 4.113 Elements of Surveying** 6 lab hrs/wk 2 credits  
An introductory course in surveying designed to help the student understand layout procedures in construction. Included will be use, care, and adjustment of surveying instruments such as the optical level and engineer's transit.
- 4.114 Structural and Architectural Drafting**  
2 class - 6 lab hrs/wk 4 credits  
An introductory course in architectural details. A wide scope of construction information will be studied ranging from simple residential building to commercial construction.

- 4.116 Architectural Planning** 2 class - 6 lab hrs/wk 4 credits  
An advanced course in architectural drafting involving subcontractors of excavation, concrete, masonry, carpentry, plumbing, environmental control and electricity.
- 4.117 Sheet Metal and Pipe Drafting** 2 class - 6 lab hrs/wk 4 credits  
A course in procedures and development of structures used in heating, air conditioning, hydraulic and pneumatic assemblies.
- 4.118 Drafting Maps, Charts and Graphs** 2 class - 3 lab hrs/wk 3 credits  
An introductory course to acquaint students with methods and equipment involved in constructing maps, charts and graphs as might be involved in subdivision design.
- 4.119 Machine Tool Drafting** 2 class - 6 lab hrs/wk 4 credits  
A course involving the design and function of machine tool components as they perform an integral part of a machine. Included will be cams, gears, bearings, fasteners, and precision dimensioning.
- 4.120 Fundamentals of Specifications** 2 class - 3 lab hrs/wk 3 credits  
A course to introduce students to the demands involved in preparing and interpreting specifications. Case histories and on-the-job inspection will be utilized. Students will compile a personal file of ideas to be used in writing specifications.
- 4.121 Electrical and Electronic Drafting** 2 class - 6 lab hrs/wk 4 credits  
A course involving electrical and electronic circuitry as the individual components operate as a part of a machine. Included will be a study of approved symbols, abbreviations, and overall terminology as found in industry.
- 4.122 Strength of Materials** 5 hrs/wk 3 credits  
A course designed to develop an understanding of structural materials as they are related to service conditions such as tensile, compressive, and shearing forces. The magnitude and distribution of stresses are studied in products common to building contractors and manufacturers. **Prerequisite:** Industrial Math II or equivalent.
- 4.123 Technical Illustration** 1 class - 6 lab hrs/wk 3 credits  
A course to introduce students to the techniques and skills involved in commercial illustrations as used in merchandising, manufacturers' instructions, and industrial training. Perspective, balance, surface rendering, and shading will be included.

- 4.124 Jig and Fixture Drafting 2 class - 6 lab hrs/wk 4 credits**  
A course designed to utilize theoretical information to produce tangible devices on an economical and quality basis. Laboratory assignments will be to design and remanufacture jigs and fixtures which will be studied on a basis of performance.
- 4.127 Industrial Practices I 2 class - 3 lab hrs/wk 3 credits**  
First quarter of a three-quarter sequence covering general fabrication practices and industrial equipment. Frequent field trips will be made to observe modern methods of manufacturing, casting, forging, construction and assembly. Emphasis will be placed on materials, methods of fabrication and the application of these processes to specific machines. **Prerequisite:** A background in drafting and blueprint reading or concurrent enrollment.
- 4.129 Industrial Practices II 2 class - 3 lab hrs/wk 3 credits**  
A study will be made of the practices used in manufacturing a variety of wood products including dimensional lumber, pulp and paper, particle board, plywood, wood chemicals and other wood by-products. Visits to various manufacturers and construction projects will be correlated with class assignments. Pre-assemblies, finishing, and fastening and the machines used will be part of the study.
- 4.131 Industrial Practices III 2 class - 3 lab hrs/wk 3 credits**  
This is a continuation of Industrial Practices II. Areas of study will include concrete structures, the metals industry, industrial electricity, plastic products and machinery.
- 4.148 Descriptive Geometry 1 class - 3 lab hrs/wk 2 credits**  
A course in drawing to relate the parts of a structure or device from a two-dimensional drawing to that of the three-dimensional real object. Special emphasis is given toward developing methods to determine true size, true shape, and true relations of one element to another.
- 4.151 Welding I 1 class - 3 lab hrs/wk 2 credits**  
Set-up and operation of oxyacetylene welding and cutting equipment. Demonstrations and practice in welding, brazing and soldering ferrous and non-ferrous metals and their alloys. Various types of welds are made and tested. (For non-majors.)
- 4.152 Welding II 1 class - 3 lab hrs/wk 2 credits**  
Set-up and operation of electric arc welding equipment. Technical information on use of rods, composition of metal and application is included. Inert arc welding is also included. (For non-majors.)
- 4.153 Welding Seminar 3 class hrs/wk 3 credits**  
Lectures and discussion sessions covering selection of equipment, welder certification, etc. **Prerequisite:** second year standing.

- 4.240 Basic Arc Welding 2 class - 12 lab hrs/wk 6 credits**  
An introduction to arc welding practices on mild steel of various thicknesses and joint configurations in all positions on mild steel.
- 4.241 Intermediate Arc Welding, 2 class - 12 lab hrs/wk, 6 credits**  
This course is a continuation of Basic Arc Welding 4.240. Areas of consideration will be arc welding mild steel and commonly used ferrous and non-ferrous alloys employing the metal arc, TIG, and MIG process.
- 4.242 Basic Oxyacetylene Welding 2 class - 6 lab hrs/wk 4 credits**  
An introduction to oxyacetylene welding practices on mild steel of various thicknesses and joint configurations in all positions on mild steel.
- 4.243 Intermediate Oxyacetylene Welding 2 class - 6 lab hrs/wk 4 credits**  
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 dissimilar metals.
- 4.246 Advanced Arc Welding 2 class - 12 lab hrs/wk 6 credits**  
This course is a continuation of Intermediate Arc Welding 4.241. The areas of consideration will be preparation for welder certification in all positions with the metal arc process.
- 4.250 Advanced Oxyacetylene Welding 2 class - 6 lab hrs/wk 4 credits**  
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.
- 4.350 On-the-Job Training (Industrial)**  
Supervised employment in positions providing practical experience in the various aspects of industry suited as nearly as possible to the student's wants and capabilities. Credits and hours to be determined.
- 9.500 Elements of Supervision 3 class hrs/wk 3 credits**  
A basic introductory course in general terms the total responsibilities of a supervisor in industry, such as organization, duties and responsibilities, human relations, grievances, training, rating, promotion, quality-quantity control, and management-employee relations.
- 9.501 Written Communication for Supervisors 3 class hrs/wk 3 credits**  
Review of writing mechanics covering grammar, punctuation, sentence structure and paragraph structure. Busi-

ness letter writing involving the principles, planning, and dictating of letters. Memorandum and bulletin writing with emphasis on format, content, structure, tone and style. Manual writing, covering format, content and structure.

- 9.502 Basic Psychology for Supervisors 3 class hrs/wk 3 credits**  
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 Communications for Supervisors 3 class hrs/wk 3 credits**  
How we communicate, effective speaking and listening. Kinds of supervisory communications. Saying what we mean, which covers oral versus written communication. Understanding what is communicated as related to intent and effect. Conference leading practice for supervisors.
- 9.504 Developing the Employees Through Training 3 class hrs/wk 3 credits**  
The supervisor's responsibility for developing employees through training. Orientation and induction. Vestibule and on-the-job techniques. Job instruction principles. Apprenticeship training, technical training. Supervisory training. Supervisory training and management development. Use of outside agencies. Advisory committees.
- 9.505 Report Writing for Supervisors 3 class hrs/wk 3 credits**  
Types of reports. Statistical, financial, narrative, technical. Steps in preparation of reports. Parts of the report. Techniques of writing. Format, style and organization. Illustrating the report. Practice in writing and evaluating reports in the occupational field of the individual enrollees.
- 9.506 Human Relations 3 class hrs/wk 3 credits**  
To show the practical application of basic psychology in building better employer-employee relationships by studying human relations techniques. **Prerequisite:** Basic Psychology for Supervisors.
- 9.507 Reading Improvement for Supervisors 3 class hrs/wk 3 credits**  
General approach to better reading through the proper use of text materials, reading films, tachistoscope, and practice. Benefits of better reading, primary considerations in reading, evaluating and analyzing what is read, vocabulary improvement, advanced reading tips.
- 9.508 Labor-Management Relations 3 class hrs/wk 3 credits**  
The history and development of the Labor Movement. Development of the National Labor Relations Acts, the Wagner Act, the Taft-Hartley Act. The supervisor's responsibility for good labor relations. The union contract and grievance procedure.

- 9.509 Industrial Economics** **3 class hrs/wk 3 credits**  
 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** **3 class hrs/wk 3 credits**  
 The supervisors responsibility for job methods of improvement. The basic principles of work simplifications. Administration and the problems involved. Motion study fundamentals for supervisors.
- 9.514 Cost Control for Supervisors** **3 class hrs/wk 3 credits**  
 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 Supervisor's Responsibility for Management of Personnel** **3 class hrs/wk 3 credits**  
 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 credits**  
 The supervisor's responsibility for planning, organizing, directing, controlling and coordinating. Acquaints the supervisors 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, functions of departments or units, duties and responsibilities, policies and procedures, rules and regulations.
- 9.520 Job Analysis for Wage Administration** **3 class hrs/wk 3 credits**  
 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 classifications. The wage laid down by the Department of Labor. The Federal Employment Service. Wage administration and the line organization.
- 9.522 Safety Training and Fire Prevention** **3 class hrs/wk 3 credits**  
 Problems of accident and fire in industry. Management and supervisory responsibility for fire and accident prevention. Accident reports and the supervisor. Good

housekeeping and fire prevention. Machine guarding and personnel protective equipment. State Industrial Accident Code and fire regulation. The First Aid Department and the line supervisor's responsibility. Job instruction. Company rules and enforcement. Use of Safety Committees. Your insurance carrier and the Insurance Rating Bureau. Advertising and promoting a good safety and fire prevention program.

**9.524 Management Controls and the Supervisor**

**3 class hrs/wk 3 credits**

Basic principles of controls. Delegation of responsibility through the use of controls. The purpose and objectives of controls, manufacturing costs, quality control, quantity control, production control, control over materials, control over personnel organization.

**LANGUAGE ARTS DIVISION**

**Wr 111, 112, 113 English Composition 3 class hrs/wk 3 credits**

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, principles of logic as they applied to rhetoric, and the research paper. Frequent written themes and tutorial conferences. Must be taken in sequence.

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

**3 class hrs/wk 3 credits**

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) Beowulf through Shakespeare; (102) Milton through Byron, Keats, and Shelley; (103) Tennyson to the present. Need not be taken in sequence.

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

**3 class hrs/wk 3 credits**

Study of literature and the nature of literary experience through the reading of great works of prose and poetry, drawn from English, American and other literature. Works representing the principal literary types are read in their entirety when possible, with emphasis on such elements as structure, style, characterization, imagery and symbolism.

**Eng 107, 108, 109 World Literature**

**3 class hrs/wk 3 credits**

A sequence to acquaint the student with outstanding works of ancient, medieval, Renaissance, and modern literature that have a permanent and wide appeal outside his own country. (107) Greece, Rome, and the early



Middle Ages; (108) The Middle Ages and the Renaissance to the 18th century; (109) The 18th century to the present. Need not be taken in sequence.

**Eng 201, 202, 203 Shakespeare 3 class hrs/wk 3 credits**  
Study of important plays—comedies, histories and tragedies.

**Eng 253, 254, 255 Survey of American Literature 3 class hrs/wk 3 credits**  
American literature from its beginning to present day.

**RL 50, 51, 52 First-Year French 4 class - 1 lab hrs/wk 4 credits**  
An introduction to French, stressing listening, speaking, reading, and writing. Exercises in elementary grammar and composition. A minimum of one hour language laboratory practice is required in addition to scheduled lectures.

**RL 60, 61, 62 First-Year Spanish 4 class - 1 lab hrs/wk 4 credits**  
An introduction to Spanish, stressing speaking and reading. Exercises in elementary composition. A minimum of one hour language laboratory practice is required in addition to scheduled lectures.

**RL 107, 108, 109 Second-Year Spanish 4 class - 1 lab hrs/wk 4 credits**  
A continuation course of RL 60, 61, 62. Some review of basic constructions and vocabulary with an intensified systematic development of listening, speaking, reading and writing proficiency. A continued oral practice in the laboratory. A minimum of one hour language laboratory practice is required in addition to scheduled lectures. **Prerequisite:** RL 60, 61, 62 or the equivalent.

**Sp 111 Fundamentals of Speech 3 class hrs/wk 3 credits**  
Original speeches, analysis, and synthesis of material with emphasis on organization; outlining, articulation, and group and individual practice to improve the student's poise in the communication act.

**Sp 112 Fundamentals of Speech 3 class hrs/wk 3 credits**  
A continuation of Speech 111 with greater depth in organization and clear critical thinking, providing an opportunity for the student to study, prepare, and present the many types of speeches.

**Sp 113 Fundamentals of Speech 3 class hrs/wk 3 credits**  
A continuation of Speech 112 providing practice in persuasive speaking, further work in panel discussion and parliamentary procedure. The course is designed for all students regardless of speech objectives. Must be taken in sequence.



- Sp 229 Interpretation** **2 class hrs/wk 2 credits**  
 A beginning course dealing with the understanding and oral interpretation of prose and poetry. Emphasis is placed on analysis for meaning rather than technique of expression.
- Sp 250 Speech and Theater Workshop** **1-3 credits**  
 Workshop credit is given for participation in productions in the quarter when taken. This is a laboratory course for students who participate in productions. The student would be required to work in and for productions in whatever capacity assigned. Maximum 6 credits.
- Phi 201 Problems of Philosophy** **3 class hrs/wk 3 credits**  
 An introduction to the study of some of the persistent problems of philosophy.
- 1.101, 1.104 Communication Skills I, II** **3 class hrs/wk 3 credits**  
 Designed to improve the student's ability to employ the four basic communication skills: reading, speaking, writing and listening. Emphasis is placed on the written and oral forms of communication as they apply to the professional and technical world. Stresses vocabulary building, group discussion in business and industry, and representative forms of business and technical communication.
- 1.112 Technical Report Writing** **3 class hrs/wk 3 credits**  
 Principles of composition, gathering data, and basic forms of writing reports are covered. **Prerequisite:** Communication Skills I and II.
- 1.610 Public Speaking** **3 class hrs/wk 3 credits**  
 The study of the principles of oral communication and their application. The course stresses the analysis and organization of material, the evaluation of the audience and speaker's purpose. Practice through regular assignments related to student's interest and experience.
- 0.655 Basic English** **3 class hrs/wk 3 credits**  
 A review of English fundamentals designed for the student who is deficient in the principles of standard English grammar, spelling, sentence structure, punctuation, and usage. Frequent practice in basic writing techniques and vocabulary development. Tutorial conferences.
- 0.656 Developmental Reading** **3 class hrs/wk 2 credits**  
 For students who have become conscious of reading difficulties which interfere with effective study and who are actively interested in correcting them.
- 0.657 Reading Acceleration** **3 class hrs/wk 2 credits**  
 For the average reader who wishes to improve his study skills and increase his reading efficiency (speed, comprehension, and vocabulary.)

## LAW ENFORCEMENT

### LE 111, 112, 113 Law Enforcement and Society

**3 class hrs/wk 3 credits**

Orientation in law enforcement; history and philosophy of enforcement of criminal laws; administration of justice; etiology of criminal behavior; correctional treatment; professional career opportunities.

### 5.200 Introduction to Law Enforcement **3 class hrs/wk 3 credits**

The philosophy and history of law enforcement; overview of crime and police problems; organization and jurisdiction of local, state and federal law enforcement agencies; survey of professional career opportunities, qualifications required, and police ethics.

### 5.202 Administration of Justice **3 class hrs/wk 3 credits**

Review of court systems; procedures from incident to final disposition; principles of constitutional, federal, state and civil laws as they apply to and affect law enforcement.

### 5.204 Defensive Tactics I **2 lab hrs/wk 1 credit**

A course designed to teach the rudiments of self-defense and attack. Boxing, wrestling, and hand-to-hand combat will be offered.

### 5.206 Defensive Tactics II **2 lab hrs/wk 1 credit**

A continuation of Defensive Tactics 5.204.

### 5.208 Criminal Law I **3 class hrs/wk 3 credits**

The structure definitions and the most frequently used sections of the Penal Code and other criminal statutes. Prerequisite to 5.238.

### 5.210 Traffic Control **3 class hrs/wk 3 credits**

Traffic law enforcement, regulation and control; fundamentals of traffic accident investigation; Oregon Motor Vehicle Code.

### 5.212 First Aid I **2 lab hrs/wk 1 credit**

A class in standard First Aid procedures and techniques designed to meet graduation requirements of all students as well as adults who wish to secure first aid training. Upon successful completion of course, a standard first aid card will be given.

### 5.213 First Aid II **2 lab hrs/wk 1 credit**

A class in advanced first aid procedures and techniques to meet the needs of special interest groups who have opportunity to give first aid care frequently in the course of their daily routine. Upon successful completion of the course, an advanced first aid card will be given.

### 5.214 Emergency Care and Rescue **2 lab hrs/wk 1 credit**

A study and practice of rescue techniques and application of approved first aid practices of various agencies involved in search and rescue during emergency situations.

- 5.240 Police Report Writing** **3 class hrs/wk 3 credits**  
This course supplies knowledge of the principles of composition and basic forms of writing reports. The subjects covered are: why reports are written, types of reports, make-up of reports, effectiveness of writing styles, gathering of facts for a report, planning a report, method of writing a report, layout and typing of a report, and visual aids in a report.

#### **PHYSICAL EDUCATION**

- PE 180 Physical Education (Women)** **3 class hrs/wk 1 credit**  
A variety of activities taught for physiological and recreational values. A total of five terms required for all lower division women students. 1 hour each term.
- PE 190 Physical Education (Men)** **3 class hrs/wk 1 credit**  
A variety of activities taught for physiological and recreational values. A total of five terms required for all lower division men students. 1 hour each term.
- HE 250 Personal Health** **2-3 class hrs/wk 2-3 credits**  
Application of facts and attitudes to the maintenance of optimum health for the individual and society; effects of alcohol, tobacco, drugs, with emphasis on family life, mental health, communicable and non-communicable diseases and nutrition. Satisfies the college requirement in health education for both men and women. 2-3 hours any term.
- HE 252 First Aid** **3 class hrs/wk 3 credits**  
Theory and practice in immediate and temporary care given in case of accident or sudden illness. Complies with American Red Cross requirements. Meets standard and advanced certification of American Red Cross.

#### **SCIENCE AND MATH**

- Bi 101, 102, 103 General Biology** **3 class - 3 lab hrs/wk, 4 credits**  
Principles of life applied to plants, animals, and protists. May not be taken for credit if a student has completed six or more hours in a college-level course in a biological science.  
For NON-MAJORS. Students may enter any term; however, it is best to take each term in sequence.  
Bi 101: Cellular biology and genetics  
Bi 102: Tissues, organs, organ systems, homeostasis and behavior  
Bi 103: Diversity of life, evolution, ecology.
- Ch 101, 102, 103 General Chemistry** **2 class - 3 lab hrs/wk 3 credits**  
Survey course of inorganic and organic chemistry. Designed as a service course for students not intending to major in science or engineering, this course will not transfer as a prerequisite for advanced chemistry courses and cannot be used as a sequence for science majors. High school chemistry is not required.

**Ch 201, 202, 203 General Chemistry** **3 class - 3 lab hrs/wk 4 credits**

A general inorganic chemistry course designed for students planning additional work in chemistry or other fields of science. This course is a prerequisite for advanced courses. **Prerequisite:** High school chemistry and algebra. Students transferring to Oregon State University or the University of Oregon will be required to take a specialized one-term lab course in chemistry to complete the equivalent sequence at those institutions.

**G 201, 202, 203 Geology** **3 class - 2 lab hrs/wk 4 credits**

Earth materials, processes and forms, formation of economic mineral deposits, the main events in the history of the earth. Field work will be used where applicable.

**GS 104, 105, 106 Physical Science** **3 class - 2 lab hrs/wk 4 credits**

Survey course in physical science intended to provide a broad background in physical science for the liberal arts student and non-science major. Students are advised to complete one year of high school algebra, or equivalent, as prerequisite to the course. 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; matter, energy, chemical change

GS 106: Principles of astronomy and geology

**Mth 95 Intermediate Algebra** **5 class hrs/wk 4 credits**

The real number system, exponents, roots and radicals, polynomials, rational expressions, first degree equations and inequalities, second degree equations, functions and graphs, progressions, and variation. **Prerequisite:** One year of high school algebra and recommendation of the counselor, or credit in Math 1.110, Elements of Algebra. Some colleges and universities will not accept Math 95 for credit if a student has had one and one-half years or more of algebra in high school.

**Mth 101 College Algebra** **5 class hrs/wk 4 credits**

Additional work in already familiar topics of algebra together with the introduction of new topics as a basis for more advanced courses. Set theory, number systems, relations and functions, sequences, systems of equations, matrices and determinants, permutations and combinations, mathematical induction, the exponential and logarithmic functions. **Prerequisite:** Three years of mathematics in high school and recommendation of the counselor, or credit in Math 95.

**Mth 102 Trigonometry** 5 class hrs/wk 4 credits  
Trigonometric functions, identities, graphs of the trigonometric functions, inverse trigonometric relations and functions, solution of triangles, logarithms, trigonometric equations, vectors, and complex numbers. The emphasis of the course will be on the analytic aspects of trigonometry. **Prerequisite:** Three years of mathematics in high school and recommendation of the counselor, or credit in Math 95. In most cases it is recommended that the student take Math 102 **before** he takes Math 101.

**Mth 191, 192, 193 Math for Elementary Teachers** 3 class hrs/wk 3 credits  
Basic concepts of mathematics for prospective elementary teachers. This sequence will not satisfy the science group requirements for graduation from an Oregon State System of Higher Education institution.  
191: Deductive systems, logic, elementary number theory, counting numbers, fractions, and integers.  
192: Rational numbers, real numbers, decimal numerals, systems of numeration such as the binary system, elementary set theory.  
193: Elementary plane geometry, measurement, similarity, congruence.  
The three terms are to be taken in sequence. **Prerequisite:** for Math 191: Two years of mathematics in high school or Math 1.110, Elements of Algebra.

**Mth 200, 201, 202, 203 Analytic Geometry and Calculus** 5 class hrs/wk 4 credits  
Standard sequence for students of mathematics, science, and engineering.  
200: Elementary analytic geometry in the Cartesian plane, functions and graphs, limits and continuity, derivatives, the chain rule and differentials, applications of the derivative, related rates and extrema. **Prerequisite:** Math 101 and Math 102 or equivalent. Math 102 may be taken concurrently.  
201: Antidifferentiation and elementary differential equations, the definite integral, the mean-value theorem and fundamental theorem of calculus, applications of the definite integral: volume, area, work, etc., differentiation and integration of transcendental and trigonometric functions. **Prerequisite:** Math 200.  
202: Techniques of integration, approximate integration, polar coordinates, the conic sections, vectors in the plane, parametric equations, hyperbolic functions, indeterminate forms, improper integrals, vectors and analytic geometry in three dimensional space. **Prerequisite:** Math 201.  
203: Functions of several variables, partial derivatives,

multiple integration, applications of multiple integration, infinite series, Taylor's theorem, differentiation and integration of power series. **Prerequisite:** Math 202.

- 0.668 Basic Mathematics I**                      **3 class hrs/wk 3 credits**  
The course is designed as a thorough review of the arithmetical processes and provides a basis for the study of algebra. Systems of numeration; fundamental operations with whole numbers, common fractions, and decimal fractions; measurement; ratio and proportion; per cent; graphs; equations and formulas; word problems.
- 0.669 Basic Mathematics II**                      **3 class hrs/wk 3 credits**  
This course is a continuation of Basic Mathematics I, and includes additional work with equations and formulas as well as topics in elementary geometry and elementary trigonometry.
- 4.145 Industrial Mathematics I**                      **3 class hrs/wk 3 credits**  
This course is similar to Basic Mathematics I in content, but many topics are covered in greater depth and greater emphasis is placed on application and problem-solving with typical problems from industry being used. **Prerequisite.** Enrollment in a vocational-technical or apprenticeship program.
- 4.146 Industrial Mathematics II**                      **3 class hrs/wk 3 credits**  
This course is a continuation of Industrial Mathematics I and is similar to Basic Mathematics II in content.
- 1.110 Elements of Algebra**                      **4 class hrs/wk 3 credits**  
Fundamental concepts of algebra including signed numbers, monomials, polynomials, operations with polynomials, factoring, linear equations, graphing, systems of linear equations, quadratic equations, and radicals. Stated problems are studied throughout the course. This course is designed to qualify the student with insufficient background in algebra for Math 95.
- 4.128 Computer Math and Logic**                      **5 class hrs/wk 4 credits**  
The course consists of mathematical logic involving the basic operations on propositions and truth values, truth tables, tautologies, the algebra of logic, Boolean algebra, sets and operations on sets, the algebra of sets, and numeration systems (including the binary and octal systems). **Prerequisite:** Math 1.110 or one year of high school algebra from a "modern" viewpoint or the consent of the department.
- 6.337 Slide Rule**                                      **3 lab hrs/wk 1 credit**  
A basic course on the operation and use of the slide rule. Included are various methods of placing the decimal point, multiplication and division, squares and cubes of numbers, square root and cube root of numbers, and an introduction to the log and trig scales on the slide rule.

**4.300, 4.302, 4.304 Practical Physics**      **3 class - 2 lab hrs/wk**  
**4 credits**

An introductory course in practical physics. Laboratory time is provided for demonstrations and experiments to clarify the principles and procedures covered in class. Students are advised to complete Basic Mathematics I, or equivalent, as a prerequisite to the course. Elementary algebra is desirable. Students may enter any term.

4.300: Heat, light, sound

4.302: Matter, measurement, mechanics, and machines

4.304: Magnetism and electricity

**SOCIAL SCIENCE DIVISION**

**Anth 101, 102, 103 General Anthropology**      **3 class hrs/wk 3 credits**

Fall: man as a living organism, biological evolution, fossil man; winter: prehistoric cultures; spring: organization and functioning of culture. (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 207, 208, 209 Introduction to Cultural Anthropology**      **3 class hrs/wk 3 credits**

The meaning of culture; its significance for human beings; its diverse forms and degrees of elaboration among different groups of men; its processes of growth and expansion. (Meets general education requirement in social science. Transfer students should **not** complete both Anth 101, 102, 103 and Anth 207, 208, 209.)

**Ec 201, 202, 203 Principles of Economics**      **3 class hrs/wk 3 credits**

Principles underlying production, exchange, and distribution; practical problems relating to monetary and banking policy, trade regulations, taxation, labor relations, unemployment, business cycles. Three terms must be taken in sequence. **Prerequisite:** sophomore standing.

**Geog 105, 106, 107 Introductory Geography**      **3 class hrs/wk 3 credits**

A general introduction to the field of geography. Geog 105: physical geography; Geog 106: regional survey of the world; Geog 107: cultural geography.

**Hst 101, 102, 103 History of Western Civilization**      **3 class hrs/wk 3 credits**

Origins and development of western civilization from ancient times to the present. The study of the political, economic, social and religious institutions which have shaped the "modern mind." Also, a study of the significant men and women who have influenced man's development.



- Hst 201, 202, 203 History of the United States** 3 class hrs/wk 3 credits  
From colonial times to present.
- PS 201, 202, 203 American Governments** 3 class hrs/wk 3 credits  
PS 201: principles of American constitutional system, political process, and organization of national government; PS 202: powers and functions of national government; PS 203: practical operation and contemporary reforms in government at state and local levels.
- PS 205 International Relations** 3 class hrs/wk 3 credits  
Analysis of the nature of relations among states, with specific reference to contemporary international issues; a study of the motivating factors, including nationalism, economic rivalries, quest for security, etc.; study of the problems of national sovereignty and its relation to international cooperation.
- Psy 201, 202, 203 General Psychology** 3 class hrs/wk 3 credits  
A survey of methods, theories and facts of contemporary psychology considered as a biological and social science. Covers: the nervous system, learning, heredity and maturation, intelligence, measurement and statistics, motivation, emotion, sensation, perception, thought, abnormal behavior and therapy, personality and social psychology. **MUST BE TAKEN IN SEQUENCE.**
- Soc 204, 205, 206 General Sociology** 3 class hrs/wk 3 credits  
A survey of methods, concepts, theory and fact in contemporary sociology. Topics included are: culture, personality, socialization, social control and deviation, social organization, social processes and interactions, human ecology, social movements and change, race and ethnic relations in the U. S. **SHOULD BE TAKEN IN SEQUENCE.**
- 1.124 American Institutions** 3 class hrs/wk 3 credits  
A study of the effect of the American social, economic and political institutions upon the individual as a citizen. Topics considered are: culture, its functions and changes; social groups in relation to problems of urban living; the American economic system and the American political systems.
- 1.500 Employer-Employee Relations** 3 class hrs/wk 3 credits  
The objective of this course is to provide understanding of the rights and responsibilities of employees. Government laws and regulations covering collective bargaining, other state and federal labor laws, and how labor disputes are negotiated are given consideration. Information on how the problems faced by individuals applying for work and the individual's association with fellow workers and company representatives are covered.



**1.524 Applied Economics** **3 class hrs/wk 3 credits**  
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 illustrations of how they affect current business situations.

**1.606, 1.607, 1.608 Introduction to Psychology and Human Relations** **3 class hrs/wk 3 credits**  
A survey of contemporary psychology with emphasis on the practical application in all fields of life. Covers the definition of psychology; cultural and biological backgrounds of behavior; such determinants of behavior as learning, perception, motivation, thinking and intelligence, frustration and defense mechanisms; the study of the individual person including: personality assessment, child development, maladjustment, interpersonal behavior and social relations. **SHOULD BE TAKEN IN SEQUENCE.**

# Index to Programs and Courses

Adult Education Division .....	55-59
Agriculture Classes (Adult Education) .....	57
Agriculture Course Descriptions .....	89-91
Agriculture Services Technology Curriculum .....	39-40
Agriculture Transfer Curriculum .....	64
Anthropology Course Descriptions .....	121
Anthropology Transfer Curriculum .....	64-65
Apprenticeship Training (Adult Education) .....	58-59
Architecture Transfer Curriculum .....	65
Art Course Descriptions .....	99-100
Art Transfer Curriculum .....	66
Auto Mechanics Course Descriptions .....	103-105
Automotive Mechanics Curriculum .....	48
Basic Education (Adult Education) .....	58
Biology Course Descriptions .....	117
Biology Transfer Curriculum .....	66-67
Bookkeeping-Clerical Curriculum .....	43
Bookkeeping Course Descriptions .....	98
Business Administration Transfer Curriculum .....	67
Business Education Transfer Curriculum .....	84
Business Management Curriculum .....	41-42
Business Course Descriptions (Transfer) .....	91-93
Business Course Descriptions (Vocational) .....	93-99
Chemistry Course Descriptions .....	117-118
Communications Skills Course Descriptions .....	115
Community Service and Public Affairs Transfer Curriculum .....	68
Computer Programming Course Descriptions .....	96
Data Processing Course Descriptions .....	95-96
Data Processing Curriculum .....	45
Dentistry Transfer Curriculum .....	69
Drafting Course Descriptions .....	106-109
Drafting Technology Curriculum .....	50
Economics Course Descriptions .....	121
Education Transfer Curriculum .....	70
Engineering Transfer Curriculum .....	71
English Course Descriptions .....	113
Fire Science Curriculum .....	46
Fire Science Course Descriptions .....	100-102
First Aid Course Descriptions .....	116

Foreign Language Course Descriptions .....	114
Forestry Transfer Curriculum .....	72
French Course Descriptions .....	114
General Arts and Letters Transfer Curriculum .....	72-73
General Science Transfer Curriculum .....	73-74
General Social Science Transfer Curriculum .....	74-75
Geography Course Descriptions .....	121
Geography Transfer Curriculum .....	75
Geology Course Descriptions .....	118
Geology Transfer Curriculum .....	76
Health Occupations .....	47
High School Completion (Adult Education) .....	59
History Course Descriptions .....	121-122
History Transfer Curriculum .....	76-77
Homemaking (Adult Education) .....	58
Industrial Division Course Descriptions .....	103-113
Industrial Division Curriculum .....	48-53
Industrial Mechanics Curriculum .....	49
Industrial Practices Course Descriptions .....	109
Language Arts Course Descriptions .....	113-115
Law Enforcement Course Descriptions .....	116-117
Law Enforcement Curriculum .....	54
Law Enforcement Transfer Curriculum .....	78
Law Transfer Curriculum .....	77
Machine Tool Course Descriptions .....	105
Mathematics Course Descriptions .....	118-120
Mathematics Transfer Curriculum .....	78
Medical Technology Transfer Curriculum .....	79
Medicine Transfer Curriculum .....	79
Nurses Aide .....	47
Nurses Aide Course Descriptions .....	102-103
Nursing Transfer Curriculum .....	80
Office Occupations (Adult Education) .....	58
Personal Health Course Descriptions .....	117
Pharmacy Transfer Curriculum .....	80-81
Physical Education Transfer Curriculum .....	81
Physical Education Course Descriptions .....	117
Physical Science Course Descriptions .....	118
Physics Course Descriptions .....	121
Physics Transfer Curriculum .....	81-82
Poise, Posture, Personality Course Description .....	93
Political Science Course Descriptions .....	122

Political Science Transfer Curriculum .....	82-83
Psychology Course Descriptions .....	122
Psychology Transfer Curriculum .....	83
Reading Acceleration (Developmental Reading) .....	115
Science and Mathematics Course Descriptions .....	117-121
Secretarial Course Descriptions .....	92-99
Secretarial Science Transfer Curriculum .....	84
Secretarial Studies - Office Administration Curriculum ....	44
Social Science Course Descriptions .....	121-123
Sociology Course Descriptions .....	122
Sociology Transfer Curriculum .....	84-85
Spanish Course Description .....	114
Speech Course Descriptions .....	114-115
Speech Transfer Curriculum .....	85
Supervisory Curriculum .....	51-52
Supervisory Training Course Descriptions .....	110-113
Theater Arts Transfer Curriculum .....	85
Transfer Curricular Patterns .....	63
Typing Course Descriptions .....	93-95
Welding Course Descriptions .....	109-110
Welding Curriculum .....	53

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