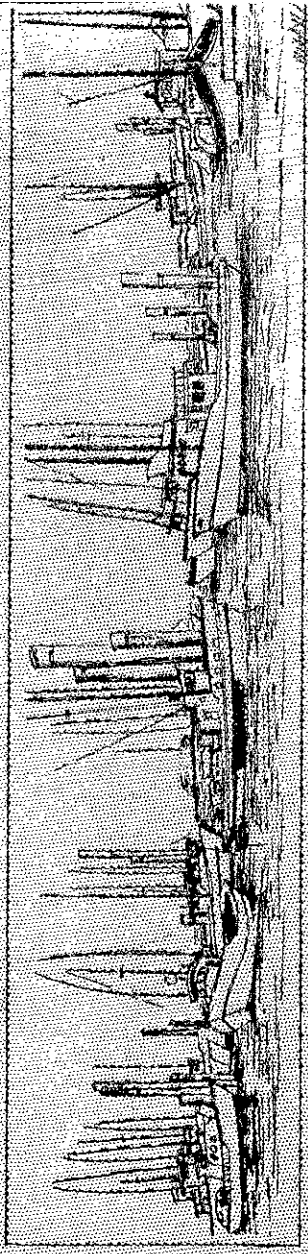
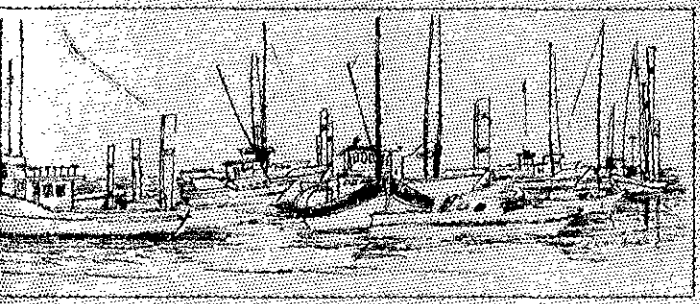
Judy Kinzel

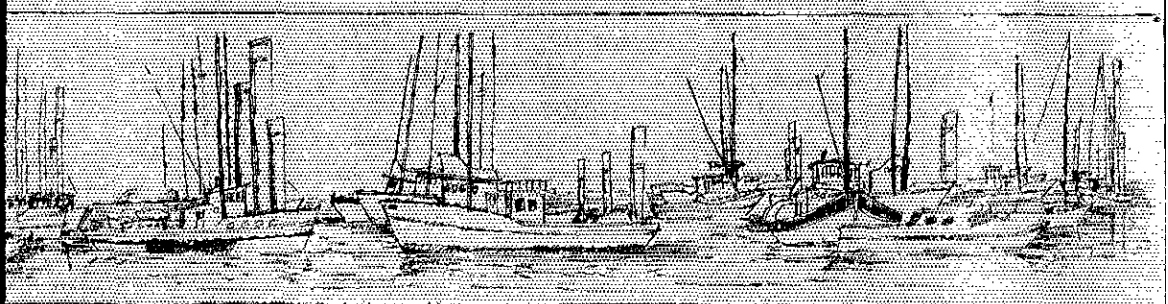




SOUTHWESTERN OREGON COMMUNITY COLLEGE

GENERAL CATALOG

1965 - 1966



COVER DRAWINGS BY HOWARD A. HALL

* ADMINISTRATIVE OFFICERS

JACK E. BROOKINS

President of the College

STANLEY B. BROWN

Dean of Instruction

R. VANCE PEAVY

Director of Student Services

HARVEY N. CRIM

Business Manager
Deputy Clerk

SYDNEY D. THOMPSON

Coordinator of
Community Services

* Revised September 1, 1965

1965 - 66

GENERAL CATALOG

Southwestern Oregon College

EMPIRE LAKES CAMPUS

POST OFFICE BOX 518
EMPIRE STATION
COOS BAY, OREGON 97421

A PUBLIC TWO-YEAR
COEDUCATIONAL
COMMUNITY COLLEGE

TABLE OF CONTENTS

ACADEMIC CALENDAR

SUMMER SESSION, 1965

June 14 ..... Placement tests
June 21, Monday ..... Registration for Summer Session
June 22, Tuesday ..... Summer Session Classes begin
June 23, Wednesday ..... Late registration fee charges begin
July 2, Friday ..... Last day for registration or addition of courses
July 2, Friday ..... *Last day for withdrawal from courses
August 13, Friday ..... 8 week Summer Session ends

FALL TERM, 1965-66

September 1 ..... Applications for new admissions due
September 13-17, September 20-22 ..... Placement tests
September 20-24 ..... New Student Week and Registration
September 27, Monday ..... Classes begin
September 28, Tuesday ..... Late registration fee charges begin
October 8, Friday ..... Last day for registration or addition of courses
October 22, Friday ..... *Last day for withdrawal from courses
November 11, Thursday ..... Veteran's Day—school holiday
November 25 and 26, Thursday and Friday ..... Thanksgiving holiday
December 13-17, Monday-Friday ..... Term Examinations
December 18-January 2 ..... Christmas holiday

WINTER TERM, 1965-66

January 3, Monday ..... Registration: A.M.—Initials A thru K
P.M.—Initials L thru Z
January 4, Tuesday ..... Classes begin
January 5, Wednesday ..... Late registration fee charges begin
January 14, Friday ..... Last day for registration or addition of courses
January 28, Friday ..... *Last day for withdrawal from courses
March 14-18, Monday-Friday ..... Term examinations
March 19-27 ..... Spring vacation

SPRING TERM, 1965-66

March 28, Monday ..... Registration: A.M.—Initials L thru Z
P.M.—Initials A thru K
March 29, Tuesday ..... Classes begin
March 30, Wednesday ..... Late fee charges begin
April 8, Friday ..... Last day for registration or addition of courses
April 22, Friday ..... *Last day for withdrawal from courses
May 30, Monday ..... Memorial Day—school holiday
June 6-10, Monday-Friday ..... Term examinations
June 12, Sunday ..... Graduation exercises

SUMMER SESSION, 1966

June 20, Monday ..... Registration for Summer Session

*Note: See page No. 20 for regulations governing withdrawals.

ADMINISTRATION

Board of Directors
Southwestern Oregon Area Education District

G. E. ALBERTSON

MERLEN L. FREEMAN

ORVILLE R. ADAMS

KARL GEHLERT

BEN R. CHANDLER, JR.

HARRY H. BYRER

SIDNEY FOX

Administrative Officers

WENDELL L. VAN LOAN
President of the College

M. F. W. POLLACK
Dean of Liberal Arts and Sciences

JACK E. BROOKINS
Dean of Technical-Vocational and Adult Education

R. VANCE PEAVY
Director of the Counseling Center and Student Services

HARVEY N. CRIM
Comptroller

SYDNEY D. THOMPSON
Coordinator of Information

NADINE A. EATON (MRS.)
Registrar

FACULTY

*Alto, Victor; Instructor; Carpenter Apprentice. Approved Vocational Instructor.

Andrews, Wayne; Assistant Professor, Industrial Mechanics. Approved Vocational Instructor.

*Arrambide, Anthony, B.A.; Instructor, Spanish. A.A. (1947) Boise Junior College; B.A. (1951) College of Idaho.

*Bailey, James, B.B.A.; Instructor, Accounting. B.B.A. (1941) University of Oregon. Certified Public Accountant. Approved Vocational Instructor.

Baxter, Bryce, M.S.; Assistant Professor, Mathematics. B.S. (1956) Eastern Oregon College; M.S. (1962) Oregon State University.

Borrevik, Berge, Jr., M.S.; Assistant Professor, Physical Education. B.S. (1958); M.S. (1962) University of Oregon.

Brookins, Jack E., M.Ed.; Professor and Dean of Technical-Vocational and Adult Education. B.Ed. (1950); M.Ed. (1954) Colorado State University.

*Conners, John, M.S.; Instructor, Art. B.S. (1961) Eastern Oregon College; M.S. (1963) University of Oregon.

Croft, Robert, M.S.; Assistant Professor, History and Political Science. B.S. (1950); M.S. (1951) University of Oregon.

Cumpston, Sam E., M.S.; Assistant Professor, Physics. B.S. (1942) U.S. Military Academy; M.S. (1948) University of Chicago.

*Dew, James; Instructor; Electrical Apprentice. Approved Vocational Instructor.

*Doty, Irwin; Instructor; Business and Electronics. Approved Vocational Instructor.

El-Wattar, Zaki, M.A.; Assistant Professor, Business. B.C. (1951) Universtity of Cairo; M.A. (1954) San Francisco State College.

*Eickworth, Clara M., M.S.; Instructor, Home Economics. B.S. (1930); M.S. (1937) Oregon State University. Approved Vocational Instructor.

*Farr, Donald H., M.B.A.; Instructor, Business. B.S. (1936) University of Oregon; M.B.A. (1938) Northwestern University.

Fawver, Ben J., Ph.D.; Professor, Biological Science. B.Ed. (1941) Illinois State Normal University; M.S. (1947); Ph.D. (1950) University of Illinois.

*Part Time Instructors

*Fietz, Roy, B.A.; Instructor, Accounting. B.A. (1949) University of Washington. Certified Public Accountant.

*Ferguson, Helen W.; Instructor, Business. Approved Vocational Instructor.

Gearhart, John B., P.E.; Assistant Professor, Civil-Structural Engineering Technology. B.S. (1946) Oregon State University; Registered Civil Engineer and Land Surveyor. Approved Vocational Instructor.

Gibson, Robert N., M.A.; Assistant Professor, Psychology and Counseling. B.A. (1948) University of Texas; M.A. (1962) San Francisco State College.

*Gross, Charlie; Instructor, Plumber Apprentice. Approved Vocational Instructor.

*Hale, Anita; Instructor, Business. Approved Vocational Instructor.

Hall, Howard, M.F.A.; Assistant Professor, Fine Arts. B.S. (1949); M.F.A. (1951) University of Oregon.

*Hargens, Robert; Instructor, Fire Training. Approved Vocational Instructor.

Hootman, Warren, B.S.; Assistant Professor, Forestry Technology. B.S. (1948) Iowa State College.

*Howard, Gary, B.A.; Instructor, Supervisory Training. B.A. (1962) Ft. Hayes State College. Approved Vocational Instructor.

*Hovis, Ivan, A.B.; Instructor, Supervisory Training. A.B. (1958) Whitman College. Approved Vocational Instructor.

Hoyt, Hugh, M.A.; Assistant Professor, History. A.B. (1951); M.A. (1953) Sacramento State College.

Humphrey, Thomas, M.S.; Adviser on Student Activities and Assistant Professor, English and Literature. B.S. (1959); M.S. (1961) University of Oregon.

*Hutchinson, Robert; Instructor; Sheet Metal Apprentice. Approved Vocational Instructor.

*Jones, Duncan; Instructor; Power Lineman Apprentice. Approved Vocational Instructor.

*Karl, Maggie, B.A.; Instructor, Art. B.A. (1943) Kansas State College.

Kruse, Una Lee, M.A.; Assistant Professor, English. B.A. (1938) Augsburg College; M.A. (1939) Northwestern University.

*Part Time Instructors

LaFond, Isabelle, R.N.; Instructor, Practical Nurse Training. St. Barnabas Hospital School of Nursing (1931); University of Oregon School of Nursing, Nursing Education B.S. (1962).

LeFebre, Charlene, M.A.; Assistant Professor, Anthropology and Sociology. B.S. (1945); M.A. (1948) Radcliffe College.

LeFebre, Charles, M.A.; Assistant Professor; College Librarian. B.A. (1940) University of Alaska; M.A. (1963) University of Oregon.

*Leegard, Ellsworth J.; Instructor, Welding. Approved Vocational Instructor.

Leuck, Frank, M.M.; Assistant Professor, Music. B.A. (1951) Lewis & Clark; M.M. (1961) Eastman School of Music.

+Lilienthal, Ronald, M.S.; Assistant Professor; B.S. (1958) University of Oregon; M.S. (1963) Oregon State University.

Meacham, Bernell, M.S.; Assistant Professor, English and Journalism. B.S. (1941) Utah State University; M.S. (1943) Northwestern University.

Moffitt, Donald R., M.Ed.; Assistant Professor and Chairman, Business. B.S. in Commerce (1960) Ferris State College; M.Ed. (1964) Oregon State University. Approved Vocational Instructor.

*Morton, Jacqueline, B.S.; Instructor. B.S. (1956) Oregon State University. Approved Vocational Instructor.

Peavy, R. Vance, D.Ed.; Professor, Psychology and Counseling. B.A. (1952); M.A. (1953) Colorado State University; D.Ed. (1963) University of Oregon.

Pollack, Myron F.W., Ph.D.; Professor of English and Dean of Liberal Arts and Sciences. A.B. (1941) Dartmouth; M.A. (1950); Ph.D. (1965) Stanford University.

Sorensen, Hagbarth, M.A.; Associate Professor, Speech and English. A.A. (1937) Pasadena Junior College; B.A. (1939) University of Iowa; M.A. (1948) Columbia University, T.C..

Sorenson, Vernon C., B.A.; Assistant Professor, Modern Languages. B.A. (1947) University of Utah; Graduate study at University of Zurich.

Spaugh, Roger, Assistant Professor, Electronics Technology. Approved Vocational Instructor.

*Spaugh, Sara; Instructor, Art. Approved Adult Instructor.

*Part Time Instructor

+ On Leave of Absence, 1965-66

*Stender, Veneita, B.S.; Instructor, Home Economics. B.S. (1955) University of Idaho. Approved Vocational Instructor.

*Stoll, E.E.; Instructor, Automotive Mechanics. Approved Vocational Instructor.

*Strassburg, Margaret, B.S.; Instructor, Home Economics. B.S. (1954) Iowa State College. Approved Vocational Instructor.

Swangard, Trevor, M.S.; Instructor, Physical Education. B.S. (1962); M.S. (1964) University of Oregon.

*Thom, Cameron, L.L.B.; Instructor, Business Law; B.S. (1950); L.L.B. (1956) University of Oregon.

Thompson, Sydney D., B.S.; Assistant Professor, Business. B.S. (1949) Babson Institute of Business Administration. Approved Vocational Instructor.

Trussell, Margaret E., M.A.; Assistant Professor, Geography and Economics. A.B. (1949) University of California; M.A. (1957) Long Beach State College; M.A. (1960) University of California.

*Vanderhoff, George; Instructor; Welding. Approved Vocational Instructor.

Van Loan, Lillian S., Ed.D.; Professor, Psychology and Counseling. B.A. (1950) Oregon College of Education. E.M. (1951); Ed.D. (1959) Oregon State University.

Van Loan, Wendell L., Ed.D.; President of Southwestern Oregon College. B.S. (1928); M.S. (1933) University of Oregon; Ed.D. (1942) Stanford University.

Vik, Bruce, M.A.; Instructor, Mathematics. B.S. (1961) Pacific Lutheran; M.A. (1964) University of Oregon.

Warren, George D., M.Ed.; Assistant Professor, Industrial Mechanics. O.T.I. (1953); B.S. (1961); M.Ed. (1964) Oregon State University. Approved Vocational Instructor.

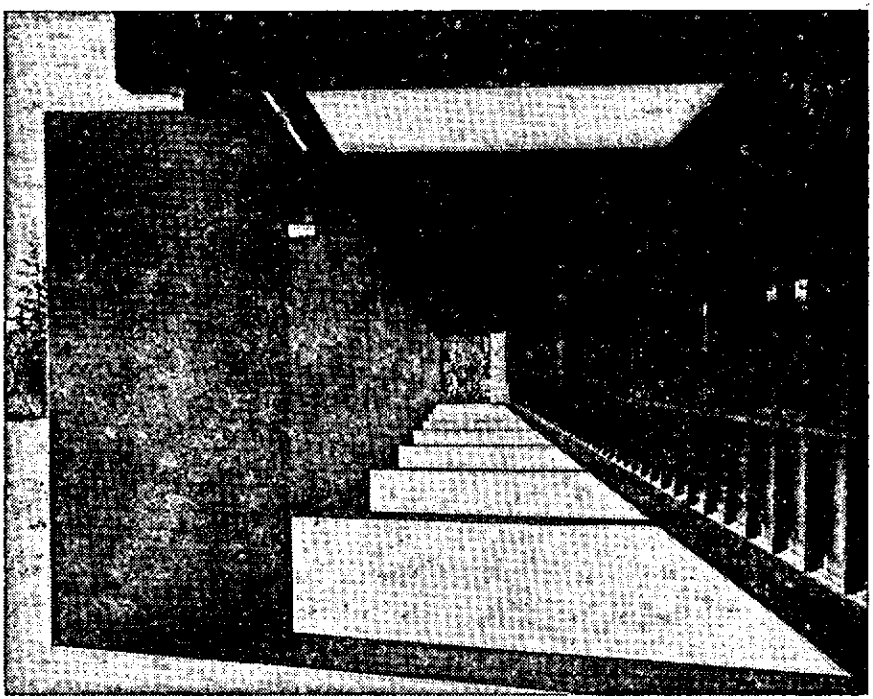
*Wehrle, Clare, B.F.A.; Instructor, Art. B.F.A. (1941) Yale University. Approved Adult Instructor.

*Wornath, Harold, B.S.; Instructor, Business. B.S. (1962) Montana State College. Approved Vocational Instructor.

*Wright, Norman; Instructor; Electrical Apprentice. Approved Vocational Instructor.

*Zarbano, S., B.S.; Instructor, Law Enforcement. A.A. (1956) Compton Junior College; B.S. (1959) Los Angeles State College.

*Part Time Instructor



TECHNICAL BUILDING, EMPIRE LAKES CAMPUS

GENERAL INFORMATION

LOCATION

Southwestern Oregon College is located on Coos Bay in Coos County, Oregon. The surrounding urban area is comprised of the municipalities of North Bend, Coos Bay and Eastside and several unincorporated communities. The campus is on Newmark Avenue in Coos Bay.

HISTORY

Four years ago, Oregon Governor Mark O. Hatfield designated Southwestern Oregon College: "a milestone in Oregon education".

At that same time, speaking on the same platform, Dr. Wendell L. Van Loan, Southwestern Oregon College's president, expressed his willingness to accept the challenge of directing the college through its formative years. These formative years are still going on, but much has been accomplished toward making Southwestern Oregon College a community college in the broadest sense—socially, culturally, and educationally.

Enrollment— By September 25, 1961, in time for the 1961-62 school year to begin, approximately 497 students enrolled for the first courses offered at the new college. Four years later, in 1965, over 1200 students are pursuing various educational goals.

Facilities— Southwestern Oregon College students met for classes in the old Sunset Avenue School near the airport in North Bend. The gymnasium, left over from the Navy's stay during World War II, was renovated and became part of what is now known as the "North Bend Campus." Many classes were held at Marshfield High School. Because of lack of adequate space, evening programs predominated during the first year.

In 1962 the east wing of the Michigan Avenue School in Empire was leased by the college. Several of Southwestern Oregon College's technical and business programs utilized the six rooms in the Empire school until fall, 1964.

Administrative facilities, which at first were divided between the North Bend campus and Marshfield High School, also expanded during 1962. The old hotel building became the college administration building, and facilities formerly located at Marshfield High and at the airport moved "up the hill."

During the 1963-64 school year, the college again expanded facilities by leasing the former Naval Reserve building near the airport. Two new buildings were started at the Empire Campus during this period. A Study Center, an Art Department, and a Music Department now utilize the former Naval Reserve building.

Existing facilities have enabled the College to emphasize daytime curricula. As a result, more full-time students are engaged in the various courses of study offered at Southwestern Oregon College. Evening programs do, however, continue to constitute an important part of the total college offerings.

By September of 1965, three additional buildings will be completed and available to the College on its Empire Campus: a classroom building, a laboratory building, and an administration building which will also house a temporary library and Counseling Center.

The years ahead will see further additions to the campus—a library, a gymnasium, a student center building, a physical plant, and, ultimately a Fine Arts Center.

The Empire Lakes' campus is planned to accommodate between 2500 and 3000 individual students by 1972.

The Teaching Staff— In all cases, faculty members are approved either by the Oregon State System of Higher Education or the State Department of Education. The number of full-time teachers has increased each year, from less than twenty in 1961 to over thirty today. Part-time instructors continue to serve in many areas. An estimated full-time faculty of fifty is anticipated by 1970.

The Administration— Representing the patrons of the district in the conduct of college affairs is the group known as the Board of Directors, Southwestern Oregon Area Education District. The Board makes the policy which the President puts into the operation and decides what is needed and how it can be obtained. The Board is assisted by a Budget Committee.

Today, President Van Loan, the college's chief administrator, is assisted by two Deans who conduct the affairs of the two divisions of Southwestern Oregon College — the Liberal Arts Division and the Technical-Vocational Division.

In all endeavors, Southwestern Oregon College has moved ahead gathering tradition and experience. The formative years continue. The challenge remains great. The support of the residents of the education district has made progress possible. Southwestern Oregon College is a community college; it is your college.

PURPOSES

Southwestern Oregon College, serving the Southwestern Oregon Area Education district, is a community college. It serves college-bound youth, youth aspiring to a career in a technical field, adults seeking cultural or general education experiences, and workers desiring to keep abreast of new developments in their field or to gain new skills.

The Directors of Southwestern Oregon College are guided in their policy-making decisions by a set of purposes. These purposes explain what your college offers to the community.

Lower Division College transfer and pre-professional education as an integral part of the Oregon State System of Higher Education.

Occupational-Vocational education for those students whose formal education will end when they finish junior college.

General Education opportunities for those with professional or vocational objectives, as well as for those who aspire to a liberal education.

Continuing Education to assist in meeting the many educational and occupational training needs of adults living in the area served by Southwestern Oregon College.

Guidance and Counseling so that every student may discover his aptitudes, make a wise occupational selection and prepare for the successful pursuit of his life's work.

Special Services to the community, such as lectures, cultural programs, testing and counseling for non-high school graduates, and other activities.

ACCREDITATION

The curricula and standards of Southwestern Oregon College are approved by the Oregon State Department of Education. All "transfer" courses offered by the Division of Liberal Arts and Sciences applicable to a Baccalaureate (four year) degree are approved by the Oregon State Board of Higher Education, and credit for them can be transferred to the institutions comprising the State System of Higher Education.

LIBRARY

The college library has an expanding, well-selected collection of materials to inform, excite and challenge the mind. It is designed to house a balanced collection of the latest books in the liberal arts, technical and vocational fields, as well as a complete set of basic reference material. It contains, in addition, an extensive selection of current popular and professional periodicals. It subscribes to a representative selection of metropolitan newspapers. Reserve shelves are regularly established by the librarian at instructor request to facilitate student reading and research.

BOOKSTORE

Required textbooks and classroom supplies can be purchased at the College bookstore.

SUMMER SESSION

The only requirement for admission to summer session is the ability to do the work. Those persons who wish to work toward degrees and those who expect to attend sessions during the Fall, Winter and Spring at Southwestern Oregon College, must meet standard admission requirements.

TUITION OFFSET ALLOWANCE

Commencing with the 1965-66 school year, those resident students of Southwestern Oregon Area Education District who reside more than 15 miles from the college will be granted a tuition offset in the following amounts:

15-30 miles	25% Reduction
30-50 miles	50% Reduction
50 miles and over	100% Reduction

The above reduction will apply to the $80.00 tuition charge for all full time students (12 or more credit hours, or 15 or more clock hours) whose legal permanent residence is within Southwestern Oregon Area Education District and located the above distances from the campus. All student body fees will still be due in addition to the tuition charge.

STUDENT SERVICES

ACADEMIC ADVISING

Upon admission to the College, each new student is assigned to a faculty adviser. The student is encouraged to cultivate the advisory relationship through discussions about registration, educational objectives, academic regulations and degree requirements.

Upon entering the College for the first time, each student is provided with an **Adviser's Record** for the purpose of recording each subsequent term's work, grades received and other information necessary to the advisory relationship. It is the student's responsibility to keep possession of the Adviser's Record and have it available for reference when discussing educational plans with an adviser, especially at registration time. Should the initial **Adviser's Record** be lost, a $1.00 fee will be charged for each additional Record issued.

The purposes of advising are consistent with those of teaching. The relationship between student and adviser is intended to foster the student's intellectual and vocational growth and develop his ability to make sensible choices. The student is expected to accept the primary responsibility for making his own informed decisions on all aspects of his college life where he has discretion.

The extent to which students should use advisory services is a matter of individual need. All students are required to review their study programs with advisers at each term registration time, but beyond this, the use of the advisory service depends upon the individual student's concern about educational development.

All faculty advisers post office hours and regularly allot a portion of their time to consultation with students.

COUNSELING

The Counseling Center offers vocational, educational and personal counseling to students who need special assistance. The staff of the Center, which includes vocational counselors as well as psychologists, works closely with other service agencies and the faculty advisers of the College. The services of the Center are available to any registered student who desires counseling about such matters as making an appropriate vocational choice, improving study skills, or determining a proper area of study. The staff of the Center is skilled in psychological test interpretation and can arrange, when appropriate, additional tests of special interest or aptitude. Students may be referred by any of the faculty members of the College, or may make appointments with the Center on their own initiative.

Adults who reside within the College district and who wish counseling with regard to further educational or vocational development may make appointments with the Counseling Center staff. The Center works closely with the Oregon State Department of Employment and the Division of Vocational Rehabilitation in assisting adults with educational planning.

G.E.D. EXAMINATIONS

Adults who have not received a high school diploma and wish to apply for a certificate of equivalency may make an appointment with the Counseling Center to take the General Educational Development (G.E.D.) examinations. Staff members will explain requirements for taking the tests and will assist applicants to prepare necessary application forms which are sent to the Department of Education in order to obtain the equivalency certificate.

Persons who feel inadequately prepared to take the G.E.D. tests can obtain assistance in evaluating their chances of success. When necessary, the staff members can suggest study materials designed to improve an individual's chances for success in taking the G.E.D. tests.

PLACEMENT EXAMINATIONS

Each candidate for admission to the College as a regular student must submit placement examination scores to the Office of Admissions before registration.

Prospective students who have taken College Entrance Examination Board (CEEB) tests during their senior year in high school should submit scores from the following Board tests:

(1) Scholastic Aptitude Test (SAT)
(2) English Achievement
(3) Mathematics Achievement

Prospective students who have taken only part or none of the required Board tests are expected to take the College placement examinations given by the Counseling Center. These examinations are given at regular intervals and arrangement to take the tests can be made by contacting the Counseling Center.

Placement test scores are used by advisers to assist students in making out study programs and in placing students in appropriate sections in English and mathematics. Placement tests are not a factor in determining the admissibility of a student.

READING AND STUDY SKILLS IMPROVEMENT

The Study Center, operated in conjunction with the Counseling Center, is a program of individualized instruction and counseling designed to improve reading, writing and study skills. Students whose previous records and performance on diagnostic tests indicate inadequate skills for successful achievement in college course work are provided with an opportunity for improvement through Study Center instruction.

The Center provides both instruction and materials for the development of advanced reading and study skills. Students seeking a high level of competence in these skills are encouraged to enroll in this developmental program through self-referral.

STUDENT EMPLOYMENT

The Counseling Center, in conjunction with the Department of Employment, maintains a listing of jobs for students as well as a file of student applications for employment. Students seeking employment should file applications in the Counseling Center office.

The College employs a certain number of students in campus positions.

STUDENT HOUSING

The College does not provide campus housing for students. However, the Counseling Center maintains a list of living accommodations available to students and will provide students with current information about housing. The College assumes no responsibility in negotiating housing agreements between students and rentors. The responsibility for securing adequate living arrangements rests with the student and his parents.

FINANCIAL AID

Four types of financial aid — scholarships, grants-in-aid, loans and part-time employment — are available to students with financial need.

The administration of scholarship and loan programs is handled by the Southwestern Oregon College Foundation, Inc., a separate corporation made up of interested citizens from throughout Coos and Douglas counties. The program is coordinated by the Faculty Scholarship and Loan Committee which operates under the jurisdiction of the Foundation, Inc.

District Scholarships— The College Board of Directors has authorized full tuition sholarships for two full-time students from each of the high school districts within the College district. These scholarships are based on financial need and promise. In addition, one district scholarship each is authorized for the student body president and the editor of the Southwester, student newspaper. Application blanks are available from the College office or from high school principals and counselors within the College district. Completed applications, including a transcript of high school work to date of application should be filed with the Registrar's office by May 1st.

General Scholarships and Grants-in-Aid — Various organizations and individuals contribute funds to provide promising students in financial need with College tuition scholarships. A limited number of grants-in-aid are awarded to deserving students for payment of tuition and books. Applications for College scholarships and grants-in-aid are available at the College office or from high school principals and counselors. Contributors to these funds include:

P.E.O., Chapter AS	Clara Eickworth
P.E.O., Chapter CZ	Rev. Joseph A. Dubay
Yergen & Meyer	Sand Dunes Local 1000
Tom Lillebo Construction	S.W.O.C. Faculty Club
Lillian Van Loan	Bangor P.T.A.

Central Labor Council Scholarships— On the basis of financial need, ability to do the required work, and good citizenship, the Central Labor Council offers two scholarships to graduates of high schools within the College district. These scholarships may be awarded to students enrolling in either technical-vocational curricula or liberal arts curricula. Applications should be requested from principals of high schools within the College district.

Zonta Scholarships— Zonta awards scholarships to students entering nurses' training or teacher education. Zonta scholarship recipients may enroll in an Oregon state college or university. Other qualifications being equal, these scholarships will be awarded to students who receive their pre-professional education at Southwestern Oregon College. Further information about Zonta scholarships may be obtained at the College office.

Student Loans— The College Scholarship and Loan Committee administers funds providing for loans to eligible students for a period of up to one year. All loans from these funds require the completion of one term of satisfactory work before a student is eligible to borrow. Loan applications are available at the College office.

Contributors to the fund from which these loans are made include:

W. L. & Lillian Van Loan	Inga Dubay
Mrs. George Hornby	Menasha Corporation
North Bend Business & Professional Women	P.E.O., Chapter CC
Soroptimist Club	Judge & Mrs. Dal M. King

William Gamble
Southwestern Oregon Insurance Agents Assn.
Coquille Women's Club
Reedsport Elementary P.T.A.
Coos Co. Home Economics Advisory Council
S.W.O.C. Faculty Women's Club
Coos County P.T.A.
Mrs. Myron Andrews
Alice L. Dement
Wallace B. Dement
Bangor P.T.A.

National Defense Loan Fund— The College is an approved participant in the national defense loan fund made available under the National Defense Education Act of 1958. For furthr information, inquire at College office.
P.E.O. Educational Fund— Women students in good standing may apply for P.E.O. educational loans at 3 per cent interest rate. Information about eligibility may be obtained at the College office.

High School Loan Fund— Educational loans are available through several high schools within the College district. Further information may be obtained at the College office or through high school principals' offices.
Student Employment— Students seeking part-time employment should contact the Counseling Center.

DEAN OF STUDENTS OFFICE

Regularly enrolled students are entitled to membership in Southwestern Oregon College Associated Student Government. The Executive Council, governing body of this organization, consists of president, vice-president, secretary, treasurer, and one student representative from each of the two College divisions. These offices are gained by election. Activities are financed by a part of the regular student fees.

The College recognizes the importance of out-of-class activities and encourages the development and function of organizations of students for social, recreational, and cultural purposes.

Student Organizations— All activities of the Associated Student Government and other student organizations are coordinated and scheduled through the office of the Dean of Students.

Student Publications— Student publications include a newspaper, The Southwester, and the Laker Handbook. a publication of the Associated Students. All regularly enrolled students are eligible to apply for positions on the publications staff.

Eligibility for Participation in Activities— To be eligible (1) to hold office in Associated Students or other organization, (2) to hold a staff position on a student publication, or (3) to represent the College in athletic, forensic and other such intercollegiate activities, a student shall:

(1) Be enrolled in at least 10 credit hours or 15 clock hours during the term of the activity and have been similarly enrolled during the term prior to the term in which participation occurs. For first term students, the requirement of a previous term's work is waived.

(2) Maintain a grade-point average of 2.00 in his last quarter of College work and over his entire College record.

(3) Not have been declared ineligible for disciplinary reasons.

Student Conduct and Discipline— The College assumes that students in attendance will conduct themselves according to acceptable standards, and will abide by regulations and procedures as are or may be established by the College for all students. Failure to observe College regulations

may render students subject to penalty which may include dismissal from the College.

The Dean of Students is the primary agent for the administration of discipline for unacceptable conduct or infraction of College regulations except for (1) matters of academic failure and (2) maintenance of proper conduct in classrooms and laboratories. The dean and faculty of each division are responsible for matters relating to academic failure and infractions of academic regulations. The instructor is authorized to take such steps as are necessary to maintain the cooperation of students in fulfilling course requirements.

INTRAMURALS AND ATHLETICS

An intensive intramural program is provided for all students in college. This program includes regular schedules or tournaments in most activities. Students have the opportunity to participate in sports activities which are planned so that the student may become better acquainted with games which may be used in adult life and provide enjoyment and worthy use of leisure time.

Southwestern Oregon College is a member of the National Junior College Athletic Association and the Oregon Community College Athletic Association. Competition in various major and minor sports is arranged with other colleges of the Oregon Association and with Junior Varsity and Freshmen Teams from four-year institutions.

ACADEMIC REGULATIONS

ADMISSION

Southwestern Oregon College admits a student when he submits evidence of being able to pursue a program of study "with a reasonable probability of success." Upon admission, a student will be classified as a "regular" or "special" student of the College.

Regular Student— To apply for admission to regular standing, a prospective student must, before registration:

(1) file official Application for Admission

(2) present high school transcripts showing evidence of graduation from a standard high school (or G.E.D. equivalency certificate)

(3) if previously attending college, submit transcripts showing: (a) honorable dismissal, (b) cumulative grade-point average of 2.00

(4) submit placement test scores (either College Entrance Examination Board Scholastic Aptitude Test, achievement test in English Composition and achievement test in mathematics OR Southwestern Oregon College placement examinations scores)

Special Student— Entering students, including non-high school graduates or transfer students, who enter the College part- or full-time, in an organized program of study and who, in some respect, do not meet the requirements for regular standing, will enter as "special" students. This category of special student must, before being admitted:

(1) file official Application for Admission
(2) submit transcripts of high school work (if any)
(3) submit transcripts of college work (if any)
(4) take placement examinations (unless excused)

A special student admitted under these conditions may gain regular standing upon completion of at least 15 hours of college credit and with a cumulative grade-point average of 2.00.

Also classified as a special student is the person attending the College on a non-program basis. This category of special student may enter without application or transcripts but may be asked to take placement examinations depending upon courses taken.

Generally, special students who accumulate 45 term hours are asked to qualify for regular student standing and a special student may not become a candidate for a degree without qualifying as a regular student. Special students who wish to change their classifications to regular standing should make application to the Registrar.

Practical Nursing Student— The Practical Nursing Program covers a one-year curriculum of class work and clinical practice. While the students are classified as regular students, their application and registration are handled in a different manner than those entering the regular 36-week program of the College.

Applicants for the Practical Nurse training program must submit their written application four months in advance of the start of the program.

Fifty dollars of the tuition must be paid upon acceptance with the balance due at the time of registration. The fifty dollars is not refundable; however, it applies to the tuition when the student registers.

No stipend will be paid as was paid during the first two years of the program.

CLASS TIME SCHEDULES

Class time schedules are issued and are available at the business office approximately one month before the end of each term. Schedules list courses available and fees for each.

REGISTRATION PROCEDURE

All students should register in person and should complete registration on the days assigned and before the opening day of each term. Registration dates for the regular academic terms are listed in the college calendar and should be observed. A fee for late registration is charged. Detailed registration instructions are provided the student at the time of registration.

Students are completely registered and entitled to attend classes for credit only when they have completed prescribed procedures including the payment of term fees.

Placement tests are required of all Southwestern Oregon College regular (curricular) students. Such tests will be given by the Counseling Center prior to each term.

AUDITORS

Students who do not wish college credit may register as auditors in any of the courses offered. Auditors are not required to meet any specific academic requirements but should expect to participate fully in the activities of the class. If audit is desired, it should be so indicated at the time of registration. Auditors pay regular fees.

CHANGE OF REGISTRATION

After initial registration, any student desiring to make course changes—such as changing from credit to audit, audit to credit, dropping courses, or adding courses—must do so by means of a formal request on a form secured from the college office. Students are encouraged to check the academic calendar for regulations governing course changes. See schedule of fees.

WITHDRAWALS

Students may withdraw from courses within certain periods without prejudice, but only by filing official withdrawal forms with the Registrar. A student who registers for a course is considered to be in attendance; if he discontinues without filing official withdrawal forms, he may receive a grade of F in the course. Students are expected to process their withdrawals in person. If a student withdraws from or simply stops attending classes after the dates shown in the academic calendar, he will receive a grade of F unless there are very unusual circumstances involved and then only if specifically approved by the Dean of his Division and the Director of Admissions.

TUITION AND FEES

Fees are payable in full at the time of registration. The right is reserved to make changes in any and all fees at any time, except that fees announced for any given term may not be increased after the date an-

nounced for the registration in such term. This does not effect the right of the president of the college to levy special charges at any time should conditions make them necessary.

Payment of the stipulated fees entitles all students registered for academic credit, full-time and part-time, to all services maintained by the college for the benefit of students. These services include use of the library, use of laboratory and course equipment and materials in connection with courses for which the student is registered, subscription to the student newspaper, and admission to special events sponsored by the college. No reduction in fees is made to students who do not intend to avail themselves of these services.

Regular Fees **per term**

Full-time curriculum students. This applies to a program of eight or more term hours (15 or more clock hours of Technical-Vocational work) $90.00

Practical Nursing Fee: Payable in three installments (16 week periods) 270.00

Matriculation Fee for Practical Nurse applicants payable at time of official acceptance. Not refundable but applies on tuition fee 50.00

Out-of-district resident. In addition to full-time fee 45.00

Part-time students:

Students registered for less than eight term hours in Liberal Arts subjects or less than 15 clock hours in Technical-Vocational or general education will pay individual course fees as listed in the college schedule of classes each term.

Liberal Arts and Sciences courses. Per term hour 12.00

Technical-Vocational and General Education:
Per CLASS hour (approximate) 6.00
Per LABORATORY hour (approximate) 4.00
Out-of-district resident; additional course fee 50%

Special Fees

Laboratory Fees for certain courses are assessed by the office in varying amounts and are payable at time of registration.

Fees for special courses and programs not falling into the regular college pattern will have their fees determined by the administration of the college.

Staff Fee: Liberal Arts Division—per credit hour $3.00
Technical-Vocational and General Education ..... 25% of Reg. Fee
All full-time employees, with the approval of the president, may be admitted to one course each term. Part-time employees, if employed half-time or more, may register at the staff fee rate.

Late Registration Fee: ($5.00 maximum) (Charges begin on the day after classes start)

Students in curricular program courses ..... Per school day 1.00

Students in General Educational, Vocational Education and other non-curricular courses ..... Per missed class session 1.00

Check Irregularity Fee ..... per day $1.00
If institutional charges are met by a check which is returned because of any irregularity—NSF, illegible signature, etc. — a fine of $1.00 per day will be charged, maximum $5.00.

Change of Program Fee ..... per change $1.00

Reinstatement Fee $2.00
If for any reason a student has his registration canceled during a term but is later allowed to re-enter, he must pay the reinstatement fee.

Transcript Fee ..... $.50 and $1.00
Each student is entitled to his first transcript free. Subsequent copies will be furnished at the rate of $1.00, first copy and $.50 additional copies furnished simultaneously.

Graduation Fee—paid 30 days prior to graduation $5.00

Audit Fee—same as regular fee.

Special Examination Fee .....$2.00 per credit hour
Students making application to take an examination for the purpose of obtaining credit will be assessed this fee.

Fee Refunds

Students who withdraw from the college or drop courses may be entitled to refunds if they comply with regulations governing withdrawals:

1. Any claim for a refund must be made in writing to the Controller before the end of the term in which the claim originates.
2. The amount of any refund is calculated from the date the written withdrawal application is received and not from the date the student ceased attending classes. An exception to this rule may be allowed if it can be shown that filing of the withdrawal application was delayed for reasons beyond the student's control.
3. The refund schedule: During the first week of the term 90%
second week of the term 70%
third week of the term 50%
fourth week of the term 30%
4. No refunds will be authorized after the second session of special "seminars" or "workshops" scheduled for six weeks or less.

GRADING SYSTEM

The grading system consists of four passing grades: A, B, C, D; failure, F; incomplete, Inc. Students ordinarily receive one of the four passing grades or failure. Exceptional accomplishment is denoted by the grade of A, superior by B, average by C, passing, below average by D, unsatisfactory by F. When the quality of the work is satisfactory but the course has not been completed for reasons acceptable to the instructor, a record of incomplete, (Inc.) is made and additional time is granted. Students are officially withdrawn (W) from a course on filing the proper completed forms with the college office. Non-credit courses are graded "S" (satisfactory) or "U" (unsatisfactory).

CHANGE OF GRADE

When it is necessary for any reason to change a grade, the instructor should obtain two "Supplementary Grade Report" cards from the business office. After cards have been completed, they are returned to the Registrar at which time one is mailed to the student and the other processed and filed in the records office.

GRADE REPORTS

Grade reports of students who are living at home or who have their legal address at home will be mailed to the parents. They will be mailed direct to emancipated minors and all others.

Mailing of grades may be held up for various reasons, such as: incomplete credentials, irregular checks, unpaid library fines, etc.

COMPUTATION OF GRADE POINT AVERAGES

Grade points are computed on the basis of 4 points for each term hour of A grade, 3 for each term hour of B, 2 for each term hour of C, 1 for each term hour of D, and 0 for each term hour of F. Marks of Inc. and W are disregarded in the computation of points. The grade-point average (GPA) is the quotient of total points divided by total term hours in which grades A, B, C, D, and F are received.

OFFICIAL TRANSCRIPTS

An official transcript is a copy of the student's permanent record which is signed by the Registrar and has the school's seal placed over this signature. Transcripts are issued only upon the order of the student, his parents or guardian, or college officials. Consult the college fee schedule for charges.

Transcripts from high schools and other colleges filed with Southwestern Oregon College become the property of this institution and cannot be forwarded to any other school.

CREDIT HOUR LOAD

A full-time student in the Liberal Arts and Sciences should enroll for an average of 16 term hours of credit. A minimum of 93 term hours meets the college requirement for an Associate in Arts Degree.

Students may not register for more than 19 term hours without the specific approval of the Dean of Liberal Arts and Sciences. Special permisssion from the dean is also required before a student may register for more than a single course per term in any given sequence.

A full-time student in the Technical-Vocational Division of the college should enroll for an average of 15 units (20 to 30 clock hours) per term. A minimum of 90 units is required for an Associate in Science Degree.

COURSE NUMBERING

Liberal Arts courses in the college catalog are numbered in accordance with courses throughout the State System of Higher Education.

1- 49	Courses which carry no credit toward a degree, or terminal courses that may not be used as transfer credits.
50- 99	Courses in the first year of foreign language, elementary algebra, and remedial courses.
100-110 200-210	Survey or foundation courses that satisfy group requirements in the language and literature, science, and social science groups.
111-199 211-299	Other courses offered at first-year and second-year level. Normally, 100-199 numbers are considered freshman courses and 200-299 are considered sophomore.

ACADEMIC STANDARDS

A student's work is considered satisfactory, and he is considered in good standing, when he maintains an average grade of "C" (GPA of 2.00) on both his quarter term and cumulative grade record.

HONOR ROLL

The names of those students who carry 12 term hours or more in liberal arts and 15 or more clock hours of technical-vocational curricular work without a failing grade and whose GPA for the term is 3.50 or above will be placed on the term honor roll. The dean's honor roll consists of those students whose GPA is 3.00 or above but below a 3.50 without any failing grades.

ACADEMIC PROBATION

Any student who has completed three or more quarters in the College and whose cumulative grade point average is below 2.00 shall be placed on academic probation. Any student who has completed not more than two quarters at the College shall be placed on probation when his cumulative grade point average is below 1.80. Students shall be notified as soon as possible when placed on probation. Such action is noted on the student's official academic record.

REMOVAL FROM ACADEMIC PROBATION

A student on academic probation will be removed from probation at the end of any quarter in which his cumulative grade point average reaches 2.00 or better.

SUSPENSION FOR LOW SCHOLARSHIP

Any student on academic probation will be suspended if he fails to attain a 2.00 cumulative average at the end of two subsequent quarters after being placed on probation.

REINSTATEMENT

Any suspended student may petition the Academic Standards Committee for readmission to the College. A student so readmitted will have probationary status. Such a student will be dropped: (1) if he fails to attain a 2.00 for the following quarter's work, or (2) if he fails to attain a 2.00 cumulative average at the end of two quarters subsequent to reinstatement. He will be removed from probation at the end of the quarter in which his cumulative grade point average reaches 2.00 or better. Students who have shown marked improvement in their grades prior to suspension are encouraged to petition for readmission.

TRANSFER STUDENTS

In determining a transfer student's academic status, the previous record is evaluated as though it had been earned at Southwestern Oregon College.

PHYSICAL ACTIVITY REGULATIONS

All students at Southwestern Oregon College who are pursuing a transfer program must take Physical Education unless exempt for the following reasons:

1. Health— If a physician recommends exemption and a written statement is filed with the Registrar. This must be done at the beginning of each term.
2. Age— If students are over 50 years of age, they may be exempted at the discretion of the Chairman of the Physical Education Department. If they are between 35 and 50 years of age, at least three terms of Physical Education are required; the other two terms may be waived by the Chairman of the Physical Education Department.
3. Other— On very rare occasions an exemption may be granted for other reasons. The Chairman of the Physical Education Department should be petitioned.

DEGREES AND REQUIREMENTS

DEGREES

Southwestern Oregon College awards two degrees — Associate in Arts and Associate in Science. The following degrees may be awarded (by application and subject to approval by the Dean of Instruction):

THE ASSOCIATE IN ARTS to those students who complete the requirements of the lower-division liberal arts program.

THE ASSOCIATE IN SCIENCE to those students who complete the requirements of a departmental curriculum when such requirements represent the completion of an organized two-year program.

Certificate of Completion may be awarded to those students who complete the requirements of some less than degree curriculum.

For persons completing degree requirements at the end of summer, fall, or winter term rather than at June commencement time, Associate in Science and Associate in Arts degrees will be conferred three weeks from the date that requirements have been met. In order to receive a degree at these times, previous application must be filed with the Registrar. The degree will be awarded by means of a letter, and diplomas will be mailed during the June following the awarding of the degree.

Requirements completed in summer, fall, or winter term for Certificates of Completion for some less than degree curriculum will be awarded in the same manner.

The cost for the diploma will be the regular fee of $5.00.

APPLICATION FOR DEGREES

Candidates must apply for degrees and certificates through the Registrar's office. Applications should be made during winter term if the degree or certificate is to be conferred at the June commencement.

ASSOCIATE IN ARTS DEGREE

The Associate in Arts Degree is a nationally recognized award that is conferred upon those who complete the general requirements of the lower-division liberal arts program.

General requirements for the Associate of Arts Degree:

1. Not less than 93 term hours of lower division courses approved by the Oregon State System of Higher Education for transfer credit.
2. Grade point average minimum of 2.00 (C average).
3. English Composition: 9 term hours.
4. Health Education: HE 250, 3 term hours for both men and women.
5. Physical Education: 5 term hours are required. Not more than one hour of credit may be earned in these courses in any one term.
6. Required year sequence in each of the following groups: Language and literature, science, and social science. A second year sequence must be chosen in one of the three groups. For a list of sequences that satisfy these requirements, see "Group Requirements" below.
7. At least one of the sequences must be numbered in the 200 series.
8. At least one sequence in language and literature must be in literature.

9. The second sequence in either science or social science must be taken in a different department.
10. A student must attend Southwestern Oregon College at least two terms (including the final term) before the Associate in Arts Degree is awarded, and must have completed 24 term hours at the college.

ASSOCIATE IN SCIENCE DEGREE

The Associate in Science Degree is offered by many technical schools and colleges in all parts of the United States. It is a recognized degree and is approved by the State Department of Education.

General requirements for the Associate in Science Degree:

1. Minimum of 90 units of specified courses. (see particular curriculum)
2. Grade-point average minimum of 2.00 ("C" average).
3. Complete the required courses as listed in the specific curricula. This must include 18 term units of approved general education subject.
4. Must attend the College at least two terms (including the last term) before degree is awarded, and must have completed 24 units at the College.

GROUP REQUIREMENTS

A complete list of sequences approved for the satisfaction of requirements 6 through 9 above are listed below. These may be taken as electives also.

Language and Literature

English

Eng 101, 102, 103	Survey of English Literature, or	3 hrs. each
Eng 107, 108, 109	World Literature	3 hrs. each
Eng 201, 202, 203	Shakespeare	3 hrs. each

Languages (Applicable as a second literature sequence)

RL 101, 102, 103	Second-Year French	4 hrs. each
GL 101, 102, 103	Second-Year German	4 hrs. each

Science

General Science

GS 104, 105, 106	Physical Science Survey	4 hrs. each

Biology

Bi 101, 102, 103	General Biology	4 hrs. each

Chemistry

Ch 101, 102, 103	Elementary Chemistry	4 hrs. each
Ch 201, 202, 203	General Chemistry	3 hrs. each
Ch 204, 205, 206	General Chemistry Laboratory	2 hrs. each

Mathematics

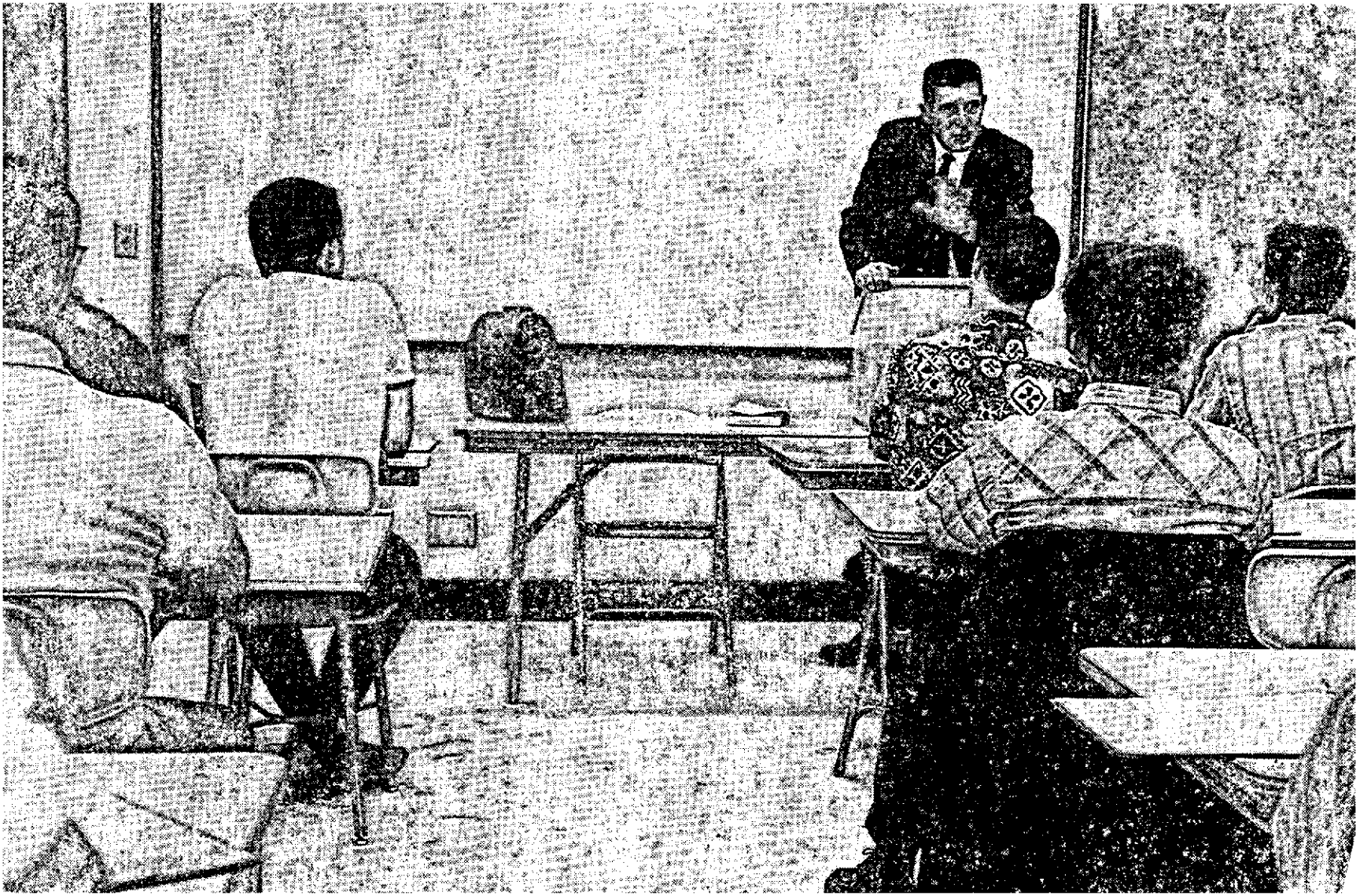
Mth 100	Intermediate Algebra	4 hrs.
Mth 101	College Algebra	4 hrs.
Mth 102	Trigonometry	4 hrs.
Mth 200, 201, 202, 203	Calculus with Analytic Geometry (any three of this group)	4 hrs. each

Physics

Ph 101, 102, 103	Essentials of Physics	3 hrs. each
Ph 201, 202, 203	General Physics	4 hrs. each

Social Science

Anthropology		
Anth 101,102, 103	General Anthropology	3 hrs. each
Anth 207,208, 209	Introduction to Cultural Anthropology	3 hrs. each
Economics		
Ec 201, 202, 203	Principles of Economics	3 hrs. each
Geography		
Geog 105, 106, 107	Introductory Geography	3 hrs. each
History		
Hst 101, 102, 103	History of Western Civilization	3 hrs. each
Hst 201, 202, 203	History of the United States	3 hrs. each
Political Science		
PS 201, 202, 203	American Government	3 hrs. each
Psychology		
Psy 201, 202, 203	General Psychology	3 hrs. each
Psy 204	Psychology of Adjustment	3 hrs.
Psy 205	Applied Psychology	3 hrs.
Sociology		
Soc 204, 205, 206	General Sociology	3 hrs. each



LIBERAL ARTS AND SCIENCES

The Liberal Arts and Sciences Division and its courses represent the ancient and continuing effort of men to extend the range of their experience beyond the narrow limits of the time and place in which they find themselves at birth. To enjoy such a freedom, men must know all they can about themselves and their environment, both physical and social. The liberal arts and sciences are a group of studies designed to assist and direct the exploration of man's nature and his position in the world around him.

By the help of some of these studies, Western man is able to compare his own experiences with those of men in other times, places, and circumstances, and thus share in the inherited wisdom and satisfaction of mankind. Through others, we deepen and extend our knowledge of our physical environment. Knowledge—scientific, historical, and literary—is the indispensable condition of the good life of free men, of "the good society."

ENTRANCE REQUIREMENTS

There are no efficial entrance requirements, beyond the general entrance requirements of the college, for students intending to choose a major field of study within the Liberal Arts and Sciences Division.

Students intending to major in any of the natural sciences are, however, advised to present at least two units of high school mathematics and two units of high school science. Experience has proved that students who lack this preparation are handicapped in college work in science.

TRANSFER EDUCATION

Transfer (lower-division) courses parallel freshman and sophomore courses offered by major Oregon universities and four-year colleges. Students normally transfer to upper division (junior) standing at the end of the sophomore year to the school of their choice. Students may arrange a general education program in the liberal arts, or they may plan a special course of study to meet particular needs.

Southwestern Oregon College's lower-division collegiate program offers credits transferable within the Oregon State System of Higher Education. The student planning to seek a degree in these institutions should familiarize himself with the catalog of the institution of his choice and with the specific requirements of his proposed major program. The faculty advisers of Southwestern Oregon College will gladly assist him in this planning. Certain professional course requirements may be met only on the campus of the institution offering the advanced program. Students in art, music, business and education curricula should be aware of these requirements.

The several institutions of the Oregon State System of Higher Education require that the student offer credit hours in each of the major academic divisions: the Humanities (language, literature and the arts); the Social Sciences; and the Sciences, in addition to the requirements of the major. A student at the Southwestern Oregon College can satisfy the state-wide health and physical education and English composition requirements and also elect to do work in each of these major divisions to meet the general institutional requirements. He may also satisfy the language requirements that certain degree programs demand. Students enrolling in elementary and secondary education and in general liberal arts curriculums will find most of the courses they need for lower division credit. **They should, however, familiarize themselves with the catalog of the four-year institution they plan to attend and keep in mind that the institutions might not accept more than 93 credit hours of lower division work upon transfer from a community college.**

LOWER-DIVISION GENERAL EDUCATION

This curriculum is intended to be broad and general in scope. Students completing two years' work and fulfilling all requirements normally select a major in a specialized field only at the end of the sophomore year when they transfer to a school which is authorized to grant a baccalaureate degree.

For students who plan to complete work for a bachelor's degree, the two lower-division years provide a general education and a foundation for specialization during the junior and senior years in some field in the liberal arts and sciences or in a professional or technical curriculum.

For students uncertain about their educational or professional goals, the lower division offers the opportunity to explore several fields of study to help determine special interests and aptitudes. The college offers such students the opportunity of taking the Standard Aptitude Test administered by the Counseling Center.

For students who plan to complete no more than two years of college, the lower-division offers a terminal program suited to the needs of the individual, balancing cultural and vocational courses as preparation for intelligent and useful citizenship.

COURSE DESCRIPTIONS

BUSINESS ADMINISTRATION

BA 211, 212, 213 Principles of Accounting — **3 hours each term**

Introduction to field of accounting, technique of account construction; preparation of financial statements; application of accounting principles to practical business problems; proprietorship studies from standpoint of single owner, partnership, and corporation.

BA 101 Introduction to Business — **4 hours**

Business organization, operation, and management intended to orient the student in the field of business and to help him determine his field of major concentration.

FINE ARTS

AA 195, 196, 197 Basic Design — **2 hours each term**

A three-term introductory sequence; a series of studio participation exercises involving the basic principles of design.

AA 201, 202, 203 Survey of the Visual Arts — **3 hours each term**

Cultivation of understanding and intelligent enjoyment of the visual arts through a study of historical and contemporary works; consideration of motives, media, and forms.

AA 290 Painting — **1-2 hours any term**

Instruction in the use of oil color, water color, or other media. Registration permitted any term but it is desirable that the work be started in the fall. Maximum credit: 6 hours.

AA 291 Drawing — **1-2 hours any term**

Training in observation and selection of significant elements. Registration permitted any term, but it is desirable that the work be started in the fall. Maximum credit: 6 hours.

Mus 111, 112, 113 Music Theory I — **4 hours each term**

Theory I and II are basic courses. They provide a thorough groundwork in the elements of music science — melodic, harmonic and rhythmic — taught through analysis of the styles of Bach, Haydn, Mozart, Beethoven, and other eighteenth and nineteenth century composers.

Mus 211, 212, 213 Music Theory II — **4 hours each term**

For description, see Mus 111, 112, 113.

Mus 190 Applied Music — **1 hour each term (maximum 3 hours)**

Individual instruction.

Mus 195 Band — **1 hour each term**

(No more than 6 hours total credit may be earned in Mus 195, 196, 197.)

Mus 196 Orchestra — **1 hour each term**

(No more than 6 hours total credit may be earned in Mus 195, 196, 197.)

Mus 197 Chorus — **1 hour each term**

(No more than 6 hours total credit may be earned in Mus 195, 196, 197.)

Mus 201, 202, 203 Introduction to Music and Its Literature — **3 hours each term**

Development of understanding and intelligent enjoyment of music through a study of its elements, forms, and historical styles.

Mus 224, 225, 226 Keyboard Harmony — **1 hour each term**

Keyboard application of the theoretical principles studied in Mus 211, 212, 213; exercises in figured-bass realization, modulation, transposition, and score reading; development of extempore playing. To be taken concurrently with Mus 211, 212, 213. Prerequisite: Mus. 113 or equivalent; satisfactory rating in test of keyboard proficiency.

Mus 290 Performance (Private Instruction) — **1 - 3 hours any term (3 hours maximum)**

Prerequisite: proficiency required for satisfactory completion of Mus 190.

HEALTH AND PHYSICAL EDUCATION

HE 250 Personal Health — **3 hours any term**

Study of the personal health problems of college men and women, with emphasis on implications for family life, mental health, communicable diseases, degenerative diseases, and nutrition. Satisfies the college requirement in health education for both men and women.

HE 252 First Aid — **3 hours any term**

Study of first aid and safety procedures—for the individual, schools, athletics, and civilian defense; meets standard and advanced certification of the American Red Cross.

PE 180 Physical Education (Women) — **1 hour each term**

A variety of activities taught for physiological and recreational values. Special sections for restricted and corrective work. A total of five terms required for all lower-division women students. 3 hours a week.

PE 190 Physical Education (Men) — **1 hour each term**

A variety of activities taught for physiological and recreational values. Special sections for restricted and corrective work. A total of five terms required for all lower-division men students. 3 hours a week.

HUMANITIES, LANGUAGE AND LITERATURE

Eng 101, 102, 103 Survey of English Literature — **3 hours each term***

Study of the principal works of English literature based on reading selected to represented great writers, literary forms, and significant currents of thought. Provides both an introduction to literature and a background that will be useful in the study of other literatures and other fields of cultural history. Fall: Anglo-Saxon beginnings to the Renaissance; Winter: Milton to Wordsworth; Spring: Byron to present.

Eng 107, 108, 109 World Literature — **3 hours each term***

Study of the literary and cultural foundations of the Western world through the analysis of a selection of masterpieces of literature, ancient and modern, read in chronological order. The readings include continental, English, and American works.

***NOTE: A student may apply credits of only one of the above Literature sequences toward the English sequence requirement.**

Eng 201, 202, 203 Shakespeare — **3 hours each term**

Study of important plays—comedies, histories, and tragedies. Recommended for majors.

Eng 253, 254, 255 Survey of American Literature — **3 hours each term**

American literature from its beginning to the present day.

Phl 201 Problems of Philosophy — **3 hours**

An introduction to the study of some of the persistent porblems of philosophy.

Phl 202 Elementary Ethics — **3 hours**

An introduction to the philosophical study of morality, e.g., right and wrong, free will and determinism, morals and society, etc.

Phl 203 Elementary Logic — **3 hours**

An introduction to the study of reasoning. How to recognize, analyze, criticize, and construct the main types of argument and proof.

Wr 50 Corrective English — **No Credit**

One term course in the mechanics of English, required of freshmen who receive low ratings in an entrance placement examination. For such students, Wr 50 is a prerequisite for any other course in written English. 3 hours a week. Transfer credit not granted.

Wr 111, 112, 113 English Composition — **3 hours each term**

The fundamentals of English composition; frequent written themes. Special attention to correctness in fundamentals and to the organization of papers.

Wr 218 Creative Writing — **3 hours**

Opportunity and encouragement for those who wish to express themselves through literary mediums. Models of essays, short stories, and poetry are studied and original work is done in each of these branches of writing. Prerequisite: demonstrated skill in writing; Wr 111, 112.

GL 50, 51, 52 First-Year German — **4 hours each term**

Designed to provide a thorough grammatical foundation and an elementary reading knowledge of German, as well as an understanding of the spoken language.

GL 101, 102, 103 Second-Year German — **4 hours each term**

Review of grammar and composition; reading selections from representative authors; conversation.

J 215 Journalism Laboratory — **1 hour each term**

Work on the student publications. Given in coordination with J 216, 217, 218.

J 216 Reporting I — **2 hours**

Basics of gathering and reporting news, with emphasis on accuracy and clarity of writing. J 215 required in conjunction with this course.

J 217 Reporting II — **2 hours**

Accuracy and objectivity standards as well as reader appeal in writing. Methods of gathering and organizing material for multiple-source, multiple-fact stories. J 215 required in conjunction with this course. Prerequisite: J 216.

J 218 Copy Editing and Makeup — **2 hours**

Copy reading, heading writing, proofreading and makeup. (Recommended for advanced positions on the **Southwester.**) J 215 required in conjunction. Prerequisite: J 216 or consent of instructor.

RL 50, 51, 52 First-Year French — **4 hours each term**

An introduction to French, stressing reading and speaking. Exercises in elementary composition and grammar.

RL 101, 102, 103 Second-Year French — **4 hours each term**

Study of selections from representative authors; review of grammar; considerable attention to oral use of the language.

Sp 111, 112, 113 Fundamentals of Speech — **3 hours each**

Projects in extempore speaking. Primary emphasis on content and organization, with attention also to the student's adjustment to the speaking situation, effective delivery, audience motivation, and language of speech.

Sp 229 Interpretation — **2 hours**

The application of the principles of oral reading to literature.

Sp 232 Group Discussion — **3 hours**

Preparing for, leading and participating in types of discussions used in various groups led by extension workers, technical and professional people, and teachers, in conferences, panels, lecture-forums, and symposiums; strong emphasis on problem-solving and interpersonal relations. Prerequisite: Sp111 or instructor's consent.

Sp 237 Argumentation — **3 hours**

Analysis; brief-drawing; collection and use of evidence; deductive and inductive reasoning; types of argument; fallacies; construction of speeches. Prerequisite: Sp 111 or instructor's consent.

Sp 238 Persuasion — **3 hours**

Study of models; composition exercises; writing a term speech; mastery of audience psychology and effective style. Prerequisite: Sp 111 or instructor's consent.

Sp 250 Workshop Theater — **1 to 3 hours (maximum 3 hours)**

Principles of acting and dramatic production. Consent of instructor required.

SCIENCE AND MATHEMATICS

Bi 101, 102, 103 General Biology — **4 hours each**

Biological principles applied to both plants and animals. 3 lectures; 1 three-hour laboratory period.

Bot 201, 202, 203 General Botany — **3 hours each**

How plants get their food, grow, differentiate, and reproduce. Bot 201: seed plants; Bot 202: lower plants; Bot 203: identification of native plants, use of keys, floral morphology. 3 lectures; 3 hours laboratory.

***Ch 101, 102, 103 General Chemistry** — **3 hours each term**

For students who have had no previous training in chemistry and for those whose college aptitude scores indicate need for a more elementary approach. Two lectures, one recitation period and one two-hour laboratory. This sequence and Ch 241 are prerequisite to Ch 226 and Ch 234.

***Ch 201, 202, 203 General Chemistry** — **4 hours each term**

Service course covering basic principles of general chemistry. Three lectures and one three-hour laboratory. Prerequisite: one year of high school chemistry and acceptable college aptitude scores. The laboratory work during spring term will be largely devoted to qualitative analysis.

*Transfer credit will not be granted for more than one of the two sequences. (Ch 101, 102, 103; Ch 201, 202, 203)

Ch 226, 227 Elements of Organic Chemistry — **5 hours each**

Chemistry of the carbon compounds; the aliphatics, aromatics, and derivatives. For predental, preveterinarian, and medical technology 3 lectures, 2 three-hour laboratory periods.

Ch 234 Quantitative Analysis — **5 hours**

Principles of gravimetric analysis and volumetric analysis. Designed for predental, premedical, and medical technology students. 3 lectures, 2 three-hour laboratory periods. Prerequisite: Ch 206.

GS 104, 105, 106 Physical Science — **4 hours each**

Fundamental principles of physics, chemistry, astronomy, and geology; development and application of the scientific method. 3 lectures; 1 two-hour laboratory period.

Mth 10 Elements of Algebra — **No Transfer Credit**

A remedial course intended primarily for students entering with less than one year of elementary algebra. Four class meetings a week. Transfer credits not granted.

Mth 20 Elementary Geometry — **No Transfer Credit**

A postulational study of the geometry of the Euclidean plane. Four class meetings a week.

Mth 100 Intermediate Algebra — **4 hours**

Functions and graphs, linear equations in two unknowns, quadratic equations, negative and fractional exponents, radicals, progressions, binomial theorem, logarithmic computation. Prerequisite: one year of high school algebra or Mth 10. No credit allowed if taken after Mth 101 or any more advanced mathematics course.

Mth 101 College Algebra — **4 hours**

Review of high school algebra emphasizing number system, logarithms, progressions, binomial series, theory of equations, determinants. Prerequisite: one and one-half years of high school algebra or Mth 100.

Mth 102 Trigonometry — **4 hours**

Trigonometric functions for general angles, solution of triangles, addition formulas, trigonometric equations, graphs, complex numbers, and De Moivre's theorem. Prerequisite: Mth 101.

Mth 111, 112 Mathematics for Elementary Teachers — **3 hours each**

Basic concepts of mathematics. For prospective elementary teachers.

Mth 200, 201, 202, 203 Calculus with Analytic Geometry — **4 hours each**

Mth 200: Differentiation and integration; applications to rates, area, volumes. Mth 201: Applications in mechanics; plane analytic geometry, elementary transcendental functions. Mth 202: Techniques of integration, vectors, solid analytic geometry. Mth 203: Partial differentiation, multiple integration, infinite series. Standard sequence for students in science and engineering.

Phy 201, 202, 203 General Physics **5 hours each**

Standard first-year college physics. 3 lectures; 1 recitation; 1 three-hour laboratory period. Prerequisite: Mth 101, 102, or equivalent.

Z 201, 202, 203 General Zoology **4 hours each**

For zoology majors and premedical, predental, prenursing, prepharmacy students and others. 3 lectures; 1 three-hour laboratory periods.

SOCIAL SCIENCE

Anth 101, 102, 103 General Anthropology **3 hours each term**

Fall: man as a living organism; biological evolution; the human cycle. Winter: evolution of man; human races, nature and problems. Spring: the development of culture; organization of culture; man, participant in and observer of culture.

Anth 207, 208, 209 Introduction to Cultural Anthropology **3 hrs each term**

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.

Ec 201, 202, 203 Principles of Economics **3 hours each term**

Principles that underlie production, exchange, distribution, etc. Must be taken in sequence. Prerequisite: sophomore standing.

Geog 105, 106, 107 Introductory Geography **3 hours each term**

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

Hst 101, 102, 103 History of Western Civilization **3 hours each term**

Origins and development of Western Civilization from ancient times to the present.

Hst 201, 202, 203 History of the United States **3 hours each term**

From colonial times to the present.

PS 201, 202, 203 American Government **3 hours each term**

201: principles of American constitutional system, political process, and organization of national government; 202: powers and functions of national government; 203: practical operation and contemporary reforms in government at state and local level.

PS 205 International Relations **3 hours**

Analysis of the nature of relations among states with particular reference to the contemporary international issues; a study of motivating factors, including nationalism, imperialism, economic rivalries, quest for security, etc.; study of the problem of national sovereignity and its relation to international cooperation.

Psy 111 Personality and Development **3 hours**

Self-understanding and development; emphasis upon habits, attitudes, emotional problems, and efficient learning techniques.

Psy 201, 202, 203 General Psychology **3 hours each**

Introductory study of behavior and conscious processes. Survey of experimental studies of motivation, learning, thinking, perceiving, and individual difference.

Psy 204 Psychology of Adjustment **3 hours**

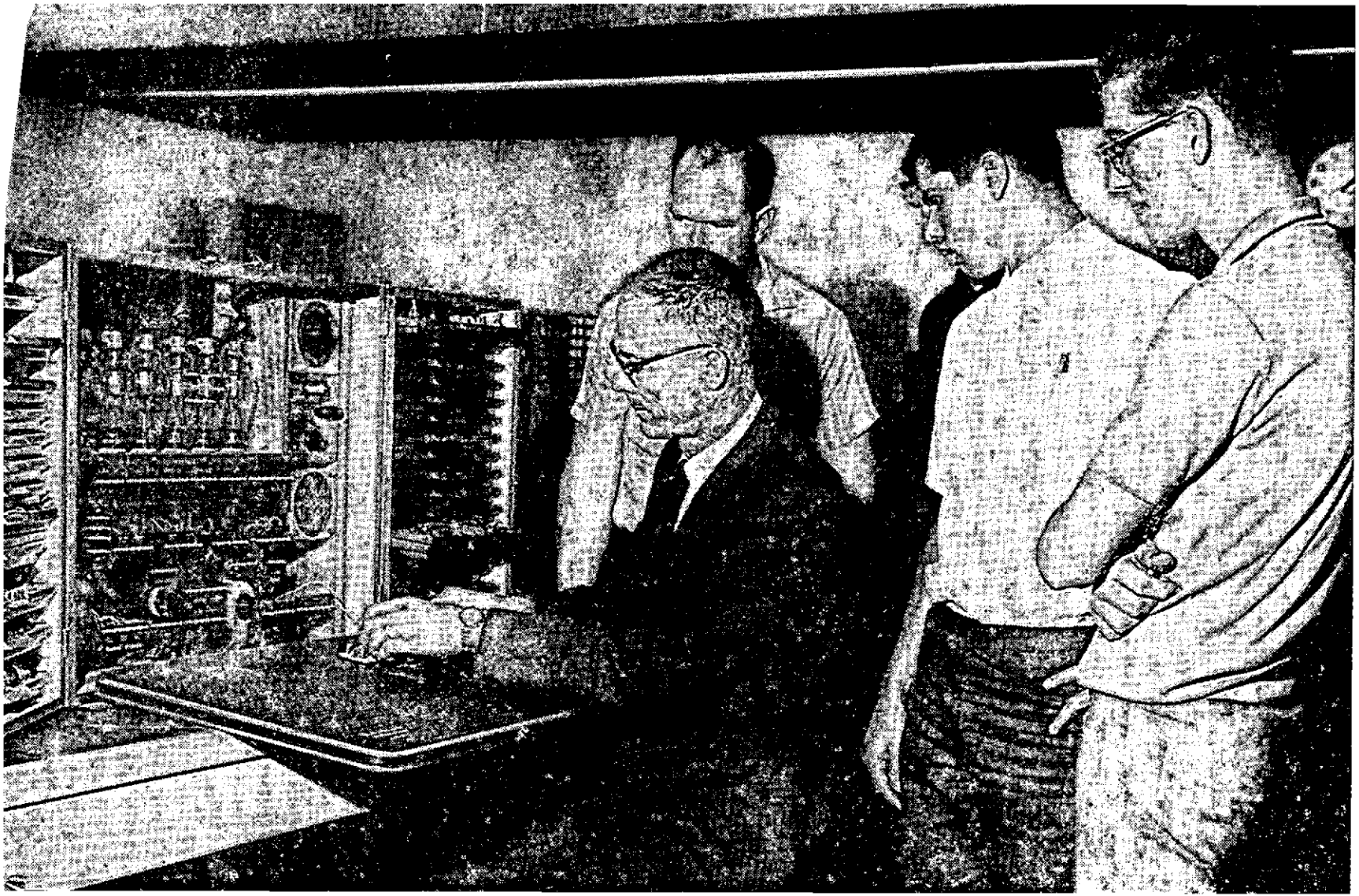
The nature and origins of differences in personality; means of making desired changes.

Psy 205 Applied Psychology **3 hours**

Applications of psychology in personnel selection and training; the planning and design of environmental situations for optimal human functioning. Prerequisite: Psy 201, 202.

Soc 204, 205, 206 General Sociology **3 hours each term**

The basic findings of sociology concerning the individual, culture, group life, social institutions, and factors of social change. Prerequisite: sophomore standing or consent of instructor.



TECHNICAL-VOCATIONAL, ADULT, AND GENERAL EDUCATION PROGRAMS

The courses and curricula offered by this division of the College have a wide variety of objectives. They are designed to serve a diversified group of individuals through the following types of programs:

1. **Occupational Preparatory Program.** These curriculums and courses are designed to prepare students for successful entrance into employment. They include preparation for semi-professional, technical, skilled, semi-skilled and service occupations in general industry categories such as agriculture, business and commerce, sales and distribution, manufacturing and construction. Curricula are designed to provide an optimum balance between specialized and general education requirements for each occupational area included.

2. **Occupational Extension Program.** These curriculums and courses are designed to upgrade the skills and knowledge of employed workers, or persons who are temporarily unemployed, in a variety of subject-matter, occupational or industrial areas. These courses are developed to provide a continuing education program for the employed worker so that he may keep up-to-date and adjust to the changing skill and knowledge requirements which are demanded in a complex and dynamic industrial society.

   Most occupations and industries may be included in the occupational extension program; some of the areas include: agriculture, business and commerce, sales and distribution, homemaking, industrial and service occupations, technical and semi-professional occupations, and supervisory and management training.

3. **General Education Program.** The general education program of the College provides courses for preparatory, extension and special students. Courses are designed to aid the student in attaining an optimum degree of self-development and assist him in making the maximum contribution as an informed and intelligent citizen in a democratic society. Areas included in the general educational program are: communications and language arts, social and behavorial sciences, science and mathematics, and the humanities and fine arts.

4. **Adult Education Program.** The adult education program of the College provides a wide variety of general and special courses (because of their special and changing nature many are not listed in the catalog.) Almost any type of course or program may be organized by the College provided there is a need and the staff and other resources are available. The primary purpose of the adult education program is to assist adults to effectively deal with the ideas, concepts and areas of knowledge which will enable them to better cope with their social and physical environment.

5. **Community Service Program.** The community service program provides a wide variety of services and activities including: lectures and forums, concerts, film series, special seminars and convocations, speakers bureau and others. Many groups and individuals within the college district cooperate with the College in the development and operation of the community service program.

ENTRANCE REQUIREMENTS

The general College entrance requirements apply to all programs in the division (see page 19). Certain curricula and courses have special entrance requirements. Students are advised to carefully read specific curricula and course requirements.

DEGREES, DIPLOMAS AND CERTIFICATES

The Associate in Science Degree is offered for certain two-year technical-vocational curricula in the College. Other programs of study provide for diplomas or certificates (see individual curriculums and programs for detailed requirements).

The associate degree is provided for programs requiring the equivalent of two years (six terms) of full time study — minimum of 90 term units. The diploma is provided for programs requiring the equivalent of one year (three terms) of full time study — minimum of 45 term units. The certificate, when authorized, generally requires the equivalent of one term of full time study — minimum of 15 term units.

COLLEGE TRANSFER CREDIT

Applicants must clearly understand that term units of credit in technical-vocational, adult and general education courses provided in the division may not be transferable to other institutions of higher education.

ADVISORY COMMITTEES

The curriculums and courses of the technical-vocational division of the College are planned and operated with the advice and counsel of representative advisory committees. These committees, composed of local employers, employees and interested government representatives, meet periodically to plan, evaluate and develop courses and curricula for the College. Their services are invaluable and go far in assuring that programs are realistic, practical and up-to-date. They also assure a continuing community interest and commitment to our community college, its students and its programs.

DEPARTMENTS AND CURRICULA

The following general programs and curricula are provided in the program of studies of the College (see pages 48 to 70 for individual course descriptions).

AGRICULTURE

Although there are no specific programs or curricula planned in the field of agriculture many of the individual course offerings of the College apply to this important field. Selected preparatory and extension courses, as well as most of the general education courses, apply directly to agriculture and the field currently known as agribusiness.

Courses in business, metals and mechanics, the engineering technologies and wood industries technology are related to agriculture. Additionally, special courses in many agricultural fields may be planned and operated by the College upon request, e.g., livestock, feeds and feeding, soils, farm management and accounting and so forth.

BUSINESS DEPARTMENT

The business department offers a wide variety of occupational preparatory and occupational extension courses. They include office and clerical occupations, bookkeeping and accounting, business data processing, sales and merchandising, and business management. A special feature of certain business department programs includes provision for work experience credit during the second year of Business Technology and Secretarial Technology.

Business Technology

The associate degree program in business technology is designed to prepare persons for employment in a variety of business and sales establishments. During the second year of the program, the student may choose to take part of his program in paid and supervised work experience or complete the requirements in regular college classes. Students may prepare for specialization in various types of department or specialty stores, other retail and wholesale sales establishments, real estate, insurance, accounting, data processing and other business or sales areas. The program is extremely flexible allowing a wide variety of specialization through the work experience phase of the program.

Basic course work required in the program includes mathematics, English, social science, salesmanship, business law, office procedures, marketing, retailing and accounting.

Additional information including detailed course requirements may be obtained from the College.

Secretarial Technology

This associate degree program is designed to prepare persons for various clerical and stenographic positions. The first year program requires work in mathematics, English, typing, shorthand, office procedures, office machines and social science.

During the second year, the student may elect to take full time course work on campus or pursue a half-time supervised work experience program for credit. Specialization in the work experience program may be in many fields including legal, medical, insurance, real estate and similar fields. Second year courses include advanced typing, transcription, business communications and business law.

Additional information regarding the Secretarial Technology program including detailed course requirements may be obtained from the College.

Diploma Programs

The business department also offers two one-year diploma programs.

The Bookkeeping-Clerical diploma program requires three terms of course work totaling a minimum of 45 term units. Course requirements include English, mathematics, accounting, typing, office procedures and office machines. Persons completing the program are qualified for entry-level jobs in bookkeeping or clerical work including clerk-typist and receptionist.

The Stenography diploma program also requires three terms and a minimum of 45 units of course work. Persons completing are qualified for entry-level stenography positions. Course requirements include typing, shorthand, business mathematics, English, filing, office procedures and office machines.

Additional information regarding these programs may be obtained from the College.

CIVIL-STRUCTURAL ENGINEERING TECHNOLOGY

This department offers an associate degree program in Civil-Structural Engineering Technology and a one-year diploma program in General Drafting.

Civil-Structural Engineering Technology

This two-year associate degree program is designed to prepare graduates to work as technicians in the following fields: civil engineering, surveying, construction, drafting, estimating, inspection, cost estimating and related areas. Opportunities for employment in this field exist with private industry as well as municipal, county, state and federal government agencies.

Applicants should have at least one year of high school algebra and high school courses in physical science and drafting are desirable. Course requirements in the two-year program of studies include: technical mathematics, applied physics, English, social science, drafting, surveying and other specialized technical courses.

Detailed course requirements and additional information regarding the program may be obtained from the College.

General Drafting

The one-year General Drafting diploma program requires three terms and a minimum of 45 units for completion. It is designed to prepare persons for entry-level jobs as draftsmen in mechanical, architectural and civil-structural fields. Graduates will find employment opportunities with private industry and the various levels of public employment. Course requirements include mathematics, physics, English, social science, with drafting courses each term. Detailed information and course requirements may be obtained from the College.

CONSTRUCTION TRADES

With the exception of the Civil-Structural Technology curriculum there are no specific programs planned which lead to employment in building and construction occupations. However, there are many individual courses offered by the College which will prepare persons for entry-level jobs or apprenticeships in this industry. Courses in mathematics, drafting, electricity, mechanics, metals, applied physics, and surveying can provide important skills and knowledge for persons who wish to enter an apprenticeship in any of the following occupations: carpenter, cabinet maker,

plumber, metalworker, roofer, painter, electrician, bricklayer, tile setter, and many others.

The College also offers related instruction classes for registered apprentices in the building and construction trades. Special classes may also be organized and operated for journeymen and other employed workers in the construction industry.

ELECTRICAL-ELECTRONICS DEPARTMENT

The electrical-electronics department offers programs and courses for full and part-time students—for persons preparing for employment in electrical and electronic occupations and others who are already employed in these occupations. There is no area where knowledge and technology is advancing more rapidly than in the wide variety of occupations and industries covered in electricity and electronics.

Electrical-Electronic Technology

This two-year associate degree program is designed to prepare persons for a number of skilled and technical occupations in the electrical and electronic fields. The student may prepare for apprenticeships in the inside wiring (electrician) field, electrical maintenance, radio-television-appliance servicing, radio-telephone-telegraphic communications, or electrical and electronics work in many industries including aero-space, nucleonics and many others.

The program is designed around basic principles, theory and laboratory work in electricity and electronics. Related courses in the curriculum include technical mathematics, applied physics, English, social science, drafting and engineering problems. Completion of high school algebra is essential and science courses, particularly physics, is recommended. Detailed curricular and course information is available from the College upon request.

Special Programs and Courses

The department also offers other special programs and courses for individuals and industries in the area served by the College. Related classes for registered electrical apprentices in the maintenance and construction fields are a regular part of the program of studies. Special courses for other employed workers are also planned and operated as needed. A knowledge and understanding of electricity and electronics is now required in many occupations and industries—the College does its best to fulfill these needs as they arise. Persons interested in such courses should contact the College for information.

HOME ECONOMICS DEPARTMENT

The home economics department offers courses in clothing selection and construction (Bishop Method), home planning and decoration, foods and nutrition, child care, family living and home management. Most of the courses in this department are specially planned to meet particular needs. Regular courses are listed under the 9.900 - 9.949 number series in the "Course Description" section of the catalog (see page 70).

Persons interested in organizing special courses or programs in home and family living areas, or in occupational areas related to homemaking, should contact the College.

LAW ENFORCEMENT (Police Science)

The curriculum in Law Enforcement prepares young men and women for careers in law enforcement agencies such as police departments and

sheriffs' offices. This two-year associate degree program is planned and operated with the cooperation of the Peace Officers Committee of Region III (Lane, Douglas, Coos and Curry Counties) and the State Advisory Board on Police Standards and Training. It also provides opportunities for persons already employed in law enforcement to obtain further training for added skills and knowledge or retraining which will help them qualify for promotions.

In addition to selected general education courses, the program of studies covers basic police science, knowledge, skills and techniques. Courses include: introduction to law enforcement, administration of justice, criminal law, investigation, evidence, firearms and defensive tactics. Detailed information and program requirements are available from the College.

METAL - MECHANICAL DEPARTMENT

The metal-mechanical department offers a two-year associate degree curriculum in Industrial Mechanics as well as other special programs and courses. Its courses are intended for persons preparing for initial employment in metals or mechanical occupations and for employed workers who wish to upgrade their job skills and knowledge. Instruction areas in the department include machine shop, sheetmetal, metallurgy and heat treating, welding, power plants, power transmission, general mechanics, pneumatics and hydraulics.

Industrial Mechanics

The general two-year associate degree program in industrial mechanics is designed to lead to entry-level jobs in a number of occupations and industries. It prepares persons for occupations such as automotive mechanic, truck or heavy duty equipment mechanic, small engine mechanic and maintenance mechanic in construction, manufacturing and service-type industries. It also provides excellent background and entry-level skills for occupations such as machinist, sheetmetal worker, millwright and industrial or mechanical technician.

The course requirements in this program include practical mathematics and physics, communications, social science and drafting. Major area courses include welding, metallurgy, metal and machine work, hydraulics and pneumatics, gasoline engines and other power plants, chassis and brake systems, power transmission systems, fuel systems and carburetion, and electrical systems. High school courses in drafting, mathematics and physical science are recommended.

Specific curricular requirements and additional information regarding the program are available upon request.

Part-Time Programs and Courses

Students may enroll in the industrial mechanics curriculum on a part-time basis if they wish. The College also offers an extensive gas, arc and heliarc welding program for employed workers who need knowledge and skill in the field. A number of evening courses in automotive carburetion, electricity and tune-up are also available for employed mechanics. Many other courses such as blue-print reading, machine maintenance and erection, industrial materials and processes, heating and air conditioning are also available. Additional information may be secured from the College.

The College also offers related instruction classes for apprentices in metalworking and mechanical occupations.

PRACTICAL NURSING

This 48-week program of training is open to persons between 18 and 50 years of age who are high school graduates or the equivalent. (A GED test and certificate is acceptable.) The program is accredited by the Oregon State Board of Nursing. Graduates are eligible to take an examination given by the Board of Nursing and those who pass this examination become licensed practical nurses (LPN) and are eligible for licensing by endorsement in other states of the nation. A licensed practical nurse is prepared to give nursing care to patients who do not need the constant attention of a professional nurse. The class instruction and hospital clinical experience are under the direct supervision of the college instructor and registered nurses of the hospital. The licensed practical nurse is also under the direct supervision of professional registered nurses or licensed physicians.

Students are taught to assist in the care of medical and surgical patients, care of mothers and new born babies, care of children, care of the chronically ill and convalescent patient. The first eight weeks of the course are spent in the classroom—6 hours a day, five days a week. During the following four weeks, part of the time is spent becoming acquainted with the hospital routine. After twelve weeks, the students begin their assigned clinical practice in the various departments of the hospitals. During this time, students will spend one day a week in class with the nurse instructor.

During the clinical practice period in the hospital, the student nurses will be assigned duties by the college instructor and their schedule will be similar to that of regular nursing employees. This means that Saturdays and Sundays are not automatically days off. The nursing program calendar does not follow the academic calendar in the front of this catalog. See schedule below.

Practical Nurse Training Schedule

September 7, Tuesday ..... 1st Period Registration & Fee Payment; Classes begin
November 1, Monday ..... Hospital Orientation begins
November 29, Monday ..... Clinical Practice begins
December 27, Monday ..... Registration for 2nd period
April 18, Monday ..... Registration for 3rd period
August 5, Friday ..... End of Training
August 7, 1966, Sunday ..... Graduation & Capping Ceremony
September 6, 1966, Tuesday ..... Registration, 1966-67; Classes begin

Graduation Requirements:

Candidates for graduation from the Practical Nursing curriculum shall have developed the personal and professional characteristics which, in the opinion of the college officials, will enable them to function effectively in the role of a practical nurse.

Professional & Vocational Relationships (5.501)	78 Clock Hours
Nursing Care in Conditions of Illness (5.502)	129 Clock Hours
Normal Health, Growth & Development (5.503)	128 Clock Hours
Nursing Skills (5.504)	181 Clock Hours
Total Technical Information	516 Clock Hours
Clinical Practice (5.525) (see course listings for description of content)	1232 Clock Hours

Applications for admission to Practical Nurse Training must be filed by April 15.

SUPERVISORY TRAINING

This program is planned as a series of courses and supervisory methods, theory and practices. The courses are available to individuals who are currently involved in supervisory duties or to persons who aspire to supervisory positions.

An interested individual may elect to follow one of three planned programs, depending upon his ultimate needs, culminating in a certificate, a diploma or an Associate Degree. Instructors for these courses are selected from industry on the basis of experience and special competence in the course to be taught. Persons interested in these programs may obtain additional information from the College.

WOOD INDUSTRIES TECHNOLOGY

This new two-year associate degree curriculum prepares technical or semi-professional employees for the lumber, wood products and forestry industries. Graduates may work for private industry in woods or mill operations or for various government agencies at state and national levels. Types of work include forest and logging engineering, forest development and conservation, road building, surveying and mapping, fire protection and control, cruising, scaling and many areas of technical work in lumber, plywood and pulp mills.

Cources required in the curriculum include general forestry, technical physics and chemistry, technical mathematics, forest botony, English, social science, forest operations and engineering, mensuration, surveying and mapping. Detailed information and curriculum requirements are available from the College.

PART-TIME AND SPECIAL PROGRAMS

The College offers a number of special programs and services which were outlined earlier in this section of the catalog. Any type of technical, occupational, adult or general education program or course may be offered to meet specific community needs if it falls within the resources of the College. The community college is a local community service institution designed by and for the people it serves.

OCCUPATIONAL EXTENSION CLASSES

The occupational extension classes provided by the College cover a large number of occupational and industrial areas. They also include special subject-matter courses which are oriented toward certain occupational groups. Persons interested in the development of such courses should contact the College for further information.

Apprenticeship Classes

Oregon State law requires all registered apprentices to attend related instruction classes for 144 hours each year of their apprenticeship. The College operates these classes for the Southwestern Oregon area in cooperation with local apprenticeship committees. At the present time, classes are operated for carpenters, plumbers, inside wiring electricians, maintenance electricians and power linemen. Enrollment in these courses is restricted to registered apprentices.

Business Classes

Part-time extension classes in business are offered during day and evening hours. They are intended to up-grade the job skills and knowledge of persons employed in various business occupations. Courses in accounting, shorthand, typing, business data processing, business machines, small business records and management, and business law are available. Many other courses in the business field may be organized if there is a need for them.

Distributive and Sales Classes

Closely related to the business field is the area of sales and distribution so important to our economy. Classes for employed persons in marketing, advertising, salesmanship, merchandising and related topics are available. The College is engaged in preliminary study to determine the advisability of offering courses in real estate and insurance fields. Some of these courses may be operated during the 1965-66 academic year.

Home and Family Life Education

Many homemakers, men and women, find it advantageous to take courses to assist them to better perform their roles as homemakers. Courses in this area include several in clothing selection and construction, foods and nutrition, home planning and decorating, home management, and family living including child care. Additional information regarding these classes may be obtained from the College.

Industrial and Technical Education

The variety of courses offered by the College in this area is limited only by the number of industrial and technical occupations in our many faceted industrial economy. Specific courses for many occupational groups and general courses covering skills and knowledge common to many occupations are possible. Electricity, electronics, mechanics, metalworking, welding, blueprint reading, drafting and applied mathematics are only a few of the possible areas included.

Management and Supervisory Development

The College offers two separate programs in this field. The first, Supervisory Training, is explained elsewhere in the catalog (see page 44). It is intended for practicing supervisors in business and industry or for persons who aspire to those positions. The management development program is intended primarily for small business owners and managers. Some of the courses are operated in cooperation with the U.S. Small Business Administration ,particularly the Small Business Management Seminar usually operated during the fall term. Other courses include small buisness management and small business records.

Public and Protective Services

The service occupations are the most rapidly growing segment of our occupational structure. Two programs in this field are provided by the College at the present time — Law Enforcement (see page 41 and 42) and a program in Firetraining offered in cooperation with fire departments in the area. Other public service courses, such as custodial training, are planned and operated by the College as the need for them arises.

GENERAL ADULT EDUCATION

The general adult education program of the College actually covers all areas of the curriculum. College transfer courses and other non-transfer adult courses are available in English and literature, the social and behavioral sciences, science and mathematics and the arts. During the past year, the College has expanded its offerings in art and music with considerable community interest and support. Adults may participate in the College orchestra, band and chorus as well as drawing, painting and ceramics courses.

Persons interested in course offerings in this program should contact the College for additional information.

CONTINUING EDUCATION PROGRAM

The College provides facilities to operate upper division and graduate level courses offered by the Division of Continuing Education, Oregon State System of Higher Education. Many of these courses are intended for teachers in the Southwestern Oregon area; however, other qualified persons may attend them. Persons interested in the continuing education program should contact the College for additional information.

COMMUNITY SERVICE PROGRAM

The community service program of the College includes a wide variety of activities. The College cooperates with many community groups and agencies in the operation of the program. Included among the activities are lectures and forums, concerts, the annual film series, college speakers bureau, the Fine Arts Festival, special workshops and institutes, the Great Decisions program. The College has cooperated with such groups as the Little Theater on the Bay and the Coos Artists League in the development of some activities and programs.

The College also operates some special classes for high school students in the area served by the college district. Students from Marshfield, North Bend, Reedsport, Bandon, Powers, Coquille and Myrtle Point High Schools have attended special vocational classes during the past year. It is planned that this program will continue and expand.

The College also operates some evening classes in the Coquille, Myrtle Point and Reedsport areas for persons who reside there. It is possible to offer classes in other communities if there is need and sufficient enrollment to justify them.

MANPOWER DEVELOPMENT AND TRAINING

The College is operating several special programs provided for under the Federal Manpower Development and Training Act and completely funded by the federal government. During the past year, programs for unemployed persons in entry logging occupations, clerk-stenographer, forester aide, and waitresses have been operated. It is planned to continue and expand these programs in 1965-66. The program is operated in cooperation with the North Bend local office of the Oregon State Employment Service.

It is also possible that the College may participate in certain programs under the recently passed Economic Opportunity Act. The College is represented on the recently organized Community Action Committee, Inc., which is eligible to contract with the federal government for the various programs provided under the Act.

Additional information regarding these programs may be obtained from the College.

COURSE DESCRIPTIONS

0.100 Adult Driver Training (6 Class & 7 Lab Hrs. each term) Term Units 0

This is a course offered to adults who wish to learn to drive. The course includes Oregon vehicle law, operating, principles of the car, preventative maintenance, as well as financial factors which include financial responsibility and insurance. Both classroom instruction on driving procedures and driving practice in a dual-controlled automobile will be included.

0.500 Mathematics Workshop (5 Class Hrs/Wk) Term Units 0

A course designed for students whose knowledge of basic arithmetic or intermediate algebra is deficient. The purpose of this course is to prepare students for successful completion of his science sequence or any other program requiring knowledge of basic mathematics.

0.501 Communications Workshop (5 Class Hrs/Wk) Term Units 0

A course required of entering students whose entrance scores indicate a deficiency in reading and writing skills. Successful completion of this course is necessary before further work in English can be undertaken.

1.111 Communications (3 Class and 2 Lab Hrs/Wk) Term Units 3

A course stressing the importance of communications activities. Emphasis is given to improving the student's ability to write, speak, read, and listen effectively. The purposes and organization of many communications are emphasized. Attention is given to the recognition of thinking as a means to effective communications. Particular attention is given to exposition and the techniques used in exposition. Sentence and paragraph development receive special attention. The student receives an introduction to literature including poetry, the novel, the short story, and drama. Students are required to schedule two hours each week in the Study Center.

.1112 Communications (3 Class and 2 Lab Hrs/Wk) Term Units 3

This course is a continuation of Communications 1.111. The student receives further introduction to literature. Attention is given to critical analysis and evaluation of information contained in the mass media. Specific methods of utilizing logical thinking in presenting and evaluating informative and controversial material is emphasized. Students are required to schedule two hours each week in the Study Center.

1.113 Communications (3 Class and 2 Lab Hrs/Wk) Term Units 3

This course is a continuation of Communications 1.112. The student receives further introduction to literature. Practice is provided the student in applying the basic communication skills. Group discussions, individual speaking situations, written communications, and listening situations receive special emphasis. Students are required to schedule two hours each week in the Study Center.

1.221 Labor-Management Relations (3 Class Hrs/Wk) Term Units 3

This course traces the development of the unionism in the United States. Attention is given to the roles of labor and management in collective bargaining. A review of labor and management legislation is correlated with the development of unionism. Labor organization disagreement, arbitration, conciliation and problems of labor are also studied.

1.506 Applied Economics (3 Class Hrs/Wk) Term Units 3

Economics deals with the principles involved in the operation of the American economic system. The role of business and industry in the total economy is studied. Basic economic principles are applied to the relationship of employer and employee. Topics considered include historic trends, business organization, prices and competition, imperfect competition and monopoly, price levels, business cycles, taxation, labor unions, management associations, labor-management relations, labor legislation, and social and private security.

1.508 Economic Geography (3 Class, 1 Lab Hrs/Wk) Term Units 3

A study of the economic activities of the world with emphasis upon world activities in relation to United States activities. Geographic influences upon trade, manufacturing, agriculture, and mineral and power resources are covered. Attention is given to the interdependence of countries on economic activities.

1.510 Elements of American Government (3 Class Hrs/Wk) Term Units 3

A course devoted to the study of American government structure at the national, state, and local levels. An introduction to the principles and problems of government is included in this course.

1.600 American Institutions (3 Class Hrs/Wk) Term Units 3

A study of the effect of American social, economic, and political institutions, upon the individual as a citizen and as a worker in business and industry. The interrelationship of freedom and control is utilized as a common denominator in considering the fundamental principles and processes involved in the development of the basic institutions of our society. Topics considered are: culture, its functions and changes; social groups in relation to problems of urban living, personality formation, the family, and social classes; the American economic system, its concepts and organization; public opinion, the American political system, its constitutional foundations, judicial, executive, and legislative divisions; and international relations.

1.605 Health Education (2 Class Hrs/Wk) Term Units 2

This course is designed to provide individuals with select health and physical education activities through participation or study for the purpose of adding to their knowledge and appreciation of desirable mental and physical health practices as they relate to the individual and the community.

1.608 Psychology of Human Relations (3 Class Hrs/Wk) Term Units 3

A study of principles of psychology that will be of assistance in the understanding of inter-personal relations on the job. Motivation, feelings and emotions, and learning are considered with particular reference to the application to on-the-job problems. Other topics investigated are: intelligence and aptitude tests, employee selection, supervision, job satisfaction, and industrial conflict as they relate to the employee and his work situation. Attention is also given to personal and group dynamics so that the student may learn to apply the principles of mental hygiene to his adjustment problems as a worker and a member of the general community.

1.610 Public Speaking (1 Class, 2 Lab Hrs/Wk) Term Units 2

This course is intended to develop speaking skills with emphasis on the dual role of speech as both a speaking and listening skill, and on adjusting the approach to the specific audience. Practice is provded through individual speeches and group discussions with careful attention being given to effective organization and delivery. In addition to the general principles of speech, stress is placed on poise and confidence and on understanding their psychological basis.

1.620 The Physical World (3 Class, 1 Lab Hrs/Wk) Term Units 3

This course introduces the student to the physical world through an integrated study of everyday applications of physical science principles with emphasis on the basic principles of physics, astronomy, meteorology, geology, and chemistry, to provide an understanding of the scientific method and the role it has played in the intellectual history of mankind.

2.100 Introduction to Data Processing (2 Class, 3 Lab Hrs/Wk) Term Units 3

Basic orientation to the field including: history and development of data processing; manual, machine, unit record and integrated data processing; understanding of data processing functions, coding systems, flow charts, common language tape, and punch cards.

2.101 Data Processing Mathematics (3 Class Hrs/Wk) Term Units 3

Basic logic, number systems, algebra, with emphasis on problem solving, computation with logarithms, and Boolean algebra. Necessary foundation in numerical understanding for the application of accounting problems to machine processes. Prerequisite: Consent of instructor.

2.102 Systems and Procedures (3 Class Hrs/Wk) Term Units 3

Procedures as a basic administrative technique. The principles of organizing, planning, and administering a procedure program; and techniques of systems and procedures analysis. Prerequisite: 2.100 or consent of instructor.

2.250 Business Mathematics I (3 Class Hrs/Wk) Term Units 3

A concentrated class of programmed learning. Rebuilding fundamentals including special uses of estimating for decision making. Uses algebraic equations to solve business problems.

2.252 Business Mathematics II (3 Class Hrs/Wk) Term Units 3

Interest, discount, negotiable instruments, payroll mathematics, cash and trade discount, determining profit and loss, computing commission, and mathematics of depreciation.

2.258 Office Procedures (2 Class, 3 Lab Hrs/Wk) Term Units 3

This course is designed to familiarize the student with office jobs. Attention is given to work normally performed in an office such as postal and shipping, telephone, and telegrams and cables. Forms and supplies, office manuals, financial transactions, employer-employee relations, business customs, office systems and routine are also discussed. The student receives an introduction to data processing in this course.

2.261 - 2.262 - 2.263 Work Experience (10-20 Hrs/Wk) Term Units 2-5

General approved and supervised paid work experience in conjunction with major field of study. The student works from 10 to 20 hours a week on an on-the-job training arrangement (100 to 200 hours a term). Credit varies from 2-5 units. A maximum of 15 units is allowed towards an A.S. degree. Related instruction (2.264, 2.265 or 2.266) must be taken concurrently.

2.264 - 2.265 - 2.266 Related Instruction (3 Class Hrs/Wk) Term Units 3

Each student enrolled in Work Experience (2.261, 2.262 or 2.263) must also enroll in this course. Instruction is related to work experience activities and requirements.

2.301 Credit Procedures (3 Class Hrs/Wk) Term Units 3

A study of the principles and methods of credit administration in the mercantile and retail field, including sources of information, credit policy, credit control, legal remedies, and collection techniques.

2.304 Fundamentals of Marketing (3 Class Hrs/Wk) Term Units 3

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, shipping and warehousing; standardization, grading, and pricing; government regulation of competition.

2.305 Principles of Retailing (3 Class Hrs/Wk) Term Units 3

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 bdugetary control, coordinating policies, and store protection.

2.307 Advertising (3 Class Hrs/Wk) Term Units 3

An introduction to advertising and the role it plays in business. Planning advertising programs, advertising budgets, media, techniques of merchandising with advertising and types of advertising are covered. Layout and copywriting as applied to the newspaper and direct mail media are studied.

2.310 Small Business Operation (3 Class Hrs/Wk) Term Units 3

An introduction to the small business in the American economy and recent trends and operations in small business operation. The problems of establishing and operating a business are considered, with emphasis given to the field of retailing.

2.320 Business Law (3 Class Hrs/Wk) Term Units 3

An introduction to business law. Emphasis is on contractual relationships, the law of sales, bailments, and negotiable instruments. Case studies are used to illustrate the principles involved.

2.321 Business Law (3 Class Hrs/Wk) Term Units 3

A continuation of 2.320 with emphasis on agency and employment, Union labor contracts, personal property, real property, suretyship and guaranty. Prerequisite: 2.320 or consent of instructor.

2.322 Business Law (3 Class Hrs/Wk) Term Units 3

A continuation of 2.321 with emphasis on risk-bearing devices, partnerships and corporations, bankruptcy, and current social legislation. Prerequisite: One term of Business Law, 2.320 or 2.321, or consent of instructor.

2.330 Fundamentals of Salesmanship (3 Class Hrs/Wk) Term Units 3

An analysis and evaluation of the salesman of today and the role he plays in our economic life are made during this course. The principles and techniques of selling constitute the areas covered in this course. Detailed attention is given to both inside and outside selling activities.

2.331 Federal Income Tax (3 Class Hrs/Wk) Term Units 3

A study of income tax law and the record-keeping necessary for income tax purposes.

2.501 Typing (1 Class, 4 Lab Hrs/Wk) Term Units 2

This is a beginning course in typing for those with no previous typing instruction. It covers the parts and construction of the more common makes of typewriters, learning of the keyboard, and the basic techniques of the touch system. The student should develop rhythm in his movements and attain an acceptable typing speed. He is introduced to simple forms or letters, tabulations, and manuscripts.

2.503 Typing (1 Class, 4 Lab Hrs/Wk) Term Units 2

This is a continuation of Typing I with emphasis on increasing the typing speed to an acceptable level. The student becomes familiar with a wide variety of business papers. Prerequisite: Typing 2.501 or equivalent.

2.504 Business Communications (3 Class Hrs/Wk) Term Units 3

A study of business communications aimed at learning the purposes and functions of the many different types of communications utilized by the business world today. In addition to learning the purposes and functions, a primary objective of this course is learning to write effective business letters and the less complicated of the informal and formal reports.

2.505 Typing (1 Class, 4 Lab Hrs/Wk) Term Units 2

An intermediate course including corrective and acceleration drills to develop an acceptable accuracy and typing speed. The student receives instruction in developing and arranging tabulated material papers encountered in the general office. Prerequisite: Typing 2.503 or equivalent.

2.507 Typing (1 Class, 4 Lab Hrs/Wk) Term Units 2

An advanced course intended to increase the typing speed to an acceptable minimum. The student is provided with sustained practice in long range assignments of specialized applications in industrial and professional fields such as legal, engineering, medical, sales and public relations communications, etc. Prerequisite: Typing 2.505 or equivalent.

2.519 Office Machines (1 Class, 3 Lab Hrs/Wk) Term Units 2

The acquaintanceship level is learned on the following machines: 10-key and full-key adding listing; Friden ,Monroe and Marchant rotary calculators; printing calculators; Burroughs accounting machines; mimeo and spirit duplicators; IBM, and transcribing machines; IBM Selectric key-punch trainers. Prerequisite: Business Math for calculators, Typing proficiency for transcribing and IBM Key Punch operation.

2.521 Office Machines (1 Class, 3 Lab Hrs/Wk) Term Units 2

The proficiency of most, and mastery of some, of the same machines used in 2.519. Specialization will be encouraged in the area of special ability. Prerequisite: Office Machines 2.519.

2.541 Shorthand (2 Class, 3 Lab Hrs/Wk) Term Units 3

An introduction to theory, reading and writing outlines of abbreviated words, phrasing and contexual material. Course includes dictation and longhand transcription of familiar previewed material. Aims at dictation speed of 60 words a minute. Prerequisite: Satisfactory grade in high school English or pass qualifying English test. One term of typing or concurrent enrollment in typing.

2.543 Shorthand (2 Class, 3 Lab Hrs/Wk) Term Units 3

This course is a continuation of 2.541; completion of theory and introduction to dictation and longhand transcription of unfamiliar material. Aims at speed of 80 to 100 words a minute. Prerequisite: Minimum grade of C in Shorthand 2.541.

2.545 Shorthand (2 Class, 3 Lab Hrs/Wk) Term Units 3

An advanced course in shorthand with an introduction to typewritten transcription, with emphasis on correct letter form, grammar, spelling, and punctuation. Aims at dictation speed of 100 to 120 words a minute. Prerequisite: Minimum grade of C in Shorthand 2.543.

2.547 Transcription (2 Class, 3 Lab Hrs/Wk) Term Units 3

This is an advanced course in transcription, with emphasis on comprehensive reading of notes in thought sequence and sustained transcription practice. Aims at coordinating skills and speed of typing, shorthand, and English essentials. Prerequisite: Minimum grade of C in Shorthand 2.545.

2.549 Advanced Dictation (2 Class, 3 Lab Hrs/Wk) Term Units 3

This course introduces the student to the study of special terminology in areas such as: legal, medical, and other certain specified areas. The student learns phrasing, advanced brief forms, and special abbreviations in the dictation of material in these special areas. Prerequisite: Satisfactory completion of 2.547, Transcription.

2.551 Advanced Transcription (2 Class, 3 Lab Hrs/Wk) Term Units 3

This course instructs the student in the preparation of legal manuscripts (briefs, court testimony, etc.), medical reports (case histories, postoperative diagnosis, etc.), or other specialized report writing. The student transcribes from dictation material in these areas. Prerequisite: Satisfactory completion of 2.549, Advanced Dictation.

2.755 Filing (2 Class Hrs/Wk) Term Units 2

This course covers the basic rules and procedures of filing. Individual practice filing equipment allows actual practice in arranging records according to alphabetic, geographic, numeric, and subject methods of filing.

2.766 Accountnng (4 Class Hrs/Wk) Term Units 4

An introduction to accounting and the fundamental principles of accounting as applied to a sole proprietorship; the meaning and purpose of accounting; accounting statement; balance sheet and profit and loss statement; the theory of debits and credits; accounts and the trial balance; journals, ledgers, payroll; the complete accounting cycle.

2.767 Accounting (4 Class Hrs/Wk) Term Units 4

Partnerships, cash control, negotiable instruments, asset valuation, sales, taxes, adjusting and closing, use of worksheets. Prerequisite: Accounting 2.766.

2.768 Accounting (4 Class Hrs/Wk) Term Units 4

Corporation formation, equity accounting, bonds and investments, manufacturing, product cost, analysis of financial statement, budgeting and special sales situations. Prerequisite: Accounting 2.757.

2.769 Accounting (3 Class Hrs/Wk) Term Units 3

An advanced study of accounting records, merchandising and manufacturing accounts, end-of-year procedures, corrections of profits of prior periods, accounting statements, anlysis of working capital, analytical and comparative per cent, analytical ratios. Prerequisite: Accounting 2.768 or equivalent.

2.771 Payroll Acocunting (3 Class, 1 Lab Hrs/Wk) Term Units 3

Federal and State old age, unemployment, and disability insurance laws; state and local sales taxes. Accounting records which involve the numerous regulations of governmental bodies. Prerequisite: Accounting 2.766 or approval of instructor.

3.300 Automotive Chassis (2 Class Hrs/Wk) Term Units 2

This course is designed to give students an understanding of the principles of operation of automotive chassis components. Fundamentals of front suspension and steering geometry, diagnosis of steering and suspension troubles, and overhaul techniques of steering and suspension systems are studied. Prerequisite: Practical Physics 4.300 should be taken concurrently.

3.301 Automotive Chassis Laboratory (3 Lab Hrs/Wk) Term Unit 1

A course to develop the ability to use basic hand tools, measuring tools, and shop equipment in the process of overhauling and adjusting various types of suspension and steering systems. It is the practical application of the theory studied in Automotive Chassis 3.300. Prerequisite: Automotive Chassis 3.300 should be taken concurrently.

3.302 Automotive Chassis (2 Class Hrs/Wk) Term Units 2

The purpose of this course is to familiarize students with the functions and principles of operation used on all major types of automotive brake systems. The student should acquire knowledge of brake trouble shooting, procedures for overhauling both conventional and power brakes, and service techniques. Prerequisite: Automotive Chassis 3.300 and 3.534 or equivalent. Practical Physics 4.302 should be taken concurrently.

3.303 Automotive Chassis Laboratory (3 Lab Hrs/Wk) Term Unit 1

This is the practical application of the theory studied in Automotive Chassis 3.302. Prerequisite: Automotive Chassis 3.302 should be taken concurrently.

3.304 Internal Combustion Engines (2 Class Hrs/Wk) Term Units 2

This course is designed to give the student an understanding of the principles of operation of various types of internal combustion engines. Students should acquire a knowledge of the construction and operation of the automotive engine, all components, and accessories. Prerequisites: Practical Physics 4.300 and Mathematics 4.202 should be taken concurrently.

3.305 Internal Combustion Engines Lab. (3 Lab Hrs/Wk) Term Unit 1

This is the practical application of Internal Combustion Engines 3.304, consisting of basic service and overhaul techniques commonly used on automotive engines. Removal and replacement of all engine and accessory components, with a detailed study of the function of each part, is supervised by the instructor. Prerequisites: Practical Physics 4.300, Mathematics 4.202, and Internal Combustion Engines 3.304 should be taken concurrently.

3.306 Internal Combustion Engines (2 Class Hrs/Wk) Term Units 2

This course is intended to provide the student with knowledge of overhaul methods, trouble shooting, general engine performance and testing, and service techniques covering valve, cylinder, and bearing systems. Prerequisites: Internal Combustion Engines 3.304 and 3.305. Practical Physics 4.302 should be taken concurrently.

3.307 Internal Combustion Engines Lab. (6 Lab Hrs/Wk) Term Units 2

A shop course designed to provide experience in practical engine reconditioning. Diagnosis of troubles directly related to the engine and its performance is practiced with the use of test instruments. A companion course for Internal Combustion Engines 3.306. Prerequisites: Practical Physics 4.300, Internal Combustion Engines 3.306. Practical Physics 4.302 should be taken concurrently.

3.308 Automotive Electricity (3 Class Hrs/Wk) Term Units 3

This course is designed to provide the student with an understanding of the fundamental principles of electricity as used by the auto mechanic. Construction and function of automotive electrical components, including storage batteries, switches, ignition, and cranking systems are studied in detail with the aid of demonstrations, cutaway, and mock-up equipment. Prerequisite: Practical Physics 4.304 should be taken concurrently.

3.309 Automotive Electricity Lab. (3 Lab Hrs/Wk) Term Unit 1

This is the practical application of the theory studied in Automotive Electricity 3.308. Prerequisites: Practical Physics 4.304 and Automotive Electricity 3.308 must be taken concurrently.

3.310 Fuel Systems and Carburetion (2 Class Hrs/Wk) Term Units 2

A course designed to give the students an understanding of the fundamental principles of carburetion, an overview of principles of engine fuel systems and fuels, operation and function of all types of fuel systems, and an understanding of the simple automotive carburetor. The student should acquire a basic knowledge of carburetor circuits. Prerequisites: Internal Combustion Engines 3.306 and 3.307, Practical Physics 4.302 should be taken concurrently.

3.311 Fuel Systems and Carburetion Lab. (3 Lab Hrs/Wk) Term Unit 1

This course is designed to enable the student to develop skill and understanding in overhaul of all types of simple automotive fuel systems and carburetors, analyzing the function of each component and circuit. Diesel and LPG fuel systems are disassembled by the student for study of construction and function of components and reassembled. Prerequisites: Internal Combustion Engines 3.304; Fuel Systems and Carburetion 3.310 should be taken concurrently.

3.312 Fuel Systems and Carburetion (2 Class Hrs/Wk) Term Units 2

An advanced course in techniques and procedures for overhaul and service of carburetors and carburetion accessories, including all types of single and multiple throat models. Principles of operation and special carburetion equipment, such as supercharger and automotive fuel injection, are studied. Diagnosis and testing procedures involving carburetion systems are covered. Prerequisites: Fuel Systems and Carburetion 3.310 and 3.311.

3.313 Fuel Systems and Carburetion Lab. (3 Lab Hrs/Wk) Term Unit 1

Developing skills in service and overhaul of all types of single and multiple throat carburetion systems. Detailed servicing procedures on various types of carburetor circuits, using laboratory equipment. Basic trouble-shooting procedures are practiced on operating engine components. Prerequisites: Fuel Systems and Carburetion 3.310 and 3.311. Fuel Systems and Carburetion 3.312 should be taken concurrently.

3.314 Power Steering (1 Class, 3 Lab Hrs/Wk) Term Units 2

This is a course in practical power steering work covering trouble shooting, dismantleing, inspection of parts, reassembly, and adjustments to cover principal repair procedure on those power steering units common to the automotive trade. Principles of operation will be studied in the classroom and applied directly to power steering units in the laboratory. Prerequisite: Second year standing or instructor's approval and Fluid Mechanics and Fuels 3.545.

3.316 Power Trains (2 Class Hrs/Wk) Term Units 2

This is a course covering all components of the power train, including clutch, standard and overdrive type transmissions, drive line, and final drive. These components will be studied in detail in the classroom, using lecture and visual aids, to determine the function and operation of each unit to form a basis for subsequent overhaul procedures. Prerequisite: Automotive Chassis 3.302 and 3.535 or equivalent.

3.317 Power Trains Laboratory (6 Lab Hrs/Wk) Term Units 2

This course is designed for building skill and utilizing practical work covering overhaul and trouble shooting all units of the automotive power train. All work is performed on laboratory units in conjunction with concurrent attendance in the Power Trains Course. Prerequisite: Power Trains 3.316 should be taken concurrently.

3.318 Front End Alignment (2 Class Hrs/Wk) Term Units 2

This course provides a detailed study of wheel alignment. Wheel alignment factors, equipment, and procedures are covered in detail. Wheel balance methods and machines are studied, as well as alignment troubles. Prerequisite: Automotive Chassis 3.300 and 3.534.

3.319 Front End Alignment Laboratory (3 Lab Hrs/Wk) Term Unit 1

This is a practical application of the theories studied in Front End Alignment. The student should become skilled in the manipulations of different styles of alignment equipment, as well as familiar with the front end systems of various makes of automobiles. Prerequisites: Automotive Chassis 3.300 and 3.534 or equivalent. Front End Alignment 3.318 must be taken concurrently.

3.322 Automotive Electricity (3 Class Hrs/Wk) Term Units 3

This course is a continuation of Automotive Electricity 3.308 covering automotive lighting, charging, and indicating systems. Students will acquire the ability to diagnose minor troubles in these systems as well as be able to interpret and trace automotive wiring diagrams. Common types of minor electrical accessories are studied. Prerequisite: Automotive Electricity 3.308 and 3.309 or equivalent.

3.323 Automotive Electricity Laboratory (3 Lab Hrs/Wk) Term Unit 1

This is a practical application of the theory studied in Automotive Electricity 3.322. Prerequisite: Automotive Electricity 3.322 to be taken concurrently.

3.324 Tune-Up and Diagnosis (2 Class Hrs/Wk) Term Units 2

This course is designed to give students the ability to recognize and diagnose malfunctions in the automotive engine and its accessory systems. Advanced methods of testing electrical and carburetion systems are studied. The students should develop the ability to analyze the operation of all engine accessories directly to engine performance. Prerequisites: Second year standing and Automotive Electricity 3.322 and 3.323.

3.325 Tune-Up and Diagnosis Laboratory (6 Lab Hrs/Wk) Term Units 2

This course is a practical application of the theory studied in the Tune-Up and Diagnosis course. Live automotive or laboratory equipment will be used by students in diagnosing and correcting troubles. Various types of tune-up equipment are used, enabling the students to develop skill in their use. Prerequisites: Second year standing. Tune-Up and Diagnosis 3.324 should be taken concurrently.

3.326 Automatic Transmission (3 Class Hrs/Wk) Term Units 3

This course covers automatic transmission work, including principles of operation, trouble shooting and overhaul procedures on hydraulically operated transmissions, torque converters, and fluid couplings used with automatic transmissions common to the automotive field. Prerequisites: Fluid Mechanics and Fuels 3.545 and Power Trains 3.316 and 3.317 or equivalent.

3.327 Automatic Tranmissions Laboratory (4 Lab Hrs/Wk) Term Unit 1

This course is a practical application of the theory studied in Automatic Transmissions 3.326, using the various types of automatic transmissions found in automotive equipment. Prerequisite: Automatic Transmissions 3.326 must be taken concurrently.

3.329 Mechanical Systems Laboratory (9 Lab Hrs/Wk) Term Units 3

This is a shop course in which the students can develop additional abilities and understanding through diagnosis and repair of operating automotive equipment. Conditions and practices similar to automotive repair shops in industry. It will include overhaul and maintenance procedures and practices on suspension systems, brakes, power trains, and engines. Students will develop skills in analyzing typical problems, outlining job procedures, conservation of working time, and following up with actual overhaul of the defective units. Prerequisites: Second year standing or instructor's approval. Automotive Electricity 3.322 and 3.323 to be taken concurrently.

3.331 Mechanical Systems Laboratory (9 Lab Hrs/Wk) Term Units 3

This course is a continuation of Mechanical Methods Lab 3.329 in further developing the students' abilities and knowledges. Skills developed in previous courses will be improved, with emphasis on automotive electricity and automatic transmission units. Diagnosis, testng, and overhauling of units will be practiced under industrial conditions. Prerequisites: Mechanical Methods Lab 3.329 or equivalent. Automatic Transmissions 3.326 and 3.327.

3.332 Automotive Service Management (2 Class Hrs/Wk) Term Units 2

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 building facilities. Appreciation of good relationship with customers, labor and management groups, and individuals is emphasized. Prerequisite: Second year standing or equivalent.

3.333 Mechanical Systems Laboratory (9 Lab Hrs/Wk) Term Units 3

This course is a continuation of Mechanical Methods Lab 3.331 to further develop the students' abilities in diagnosis and repair of automotive units with emphasis on power steering and tune-up procedures.Power accessories are serviced as time and availability permit. Prerequisite: Mechanical Methods Lab 3.331 or equivalent.

3.338 Automotive Repair Estimating (2 Class Hrs/Wk) Term Units 2

This course is designed to give the student an understanding of proper diagnosing and estimating of labor and material costs involved in the repair and service of automotive equipment. Emphasis will be on the use of typical manuals and price lists used in the industry. The students will make practical application of the theories studied in this course on units to be repaired in the shop. Prerequisite: Second year standing or equivalent.

3.545 Fluid Mechanics and Fuels (2 Class Hrs/Wk) Term Units 2

A study of the practical uses of hydraulic power transmission and application. The fundamental principles are reviewed and the uses of hydraulic pressure and fluid flow in brakes, pumps, power steering units, fluid couplings, torque converters, and power accessories are covered thoroughly. A study of petroleum products as used in fuels and lubricants is also included. Prerequisite: Practical Physics 4.300 and 4.302.

3.800 Diesel Engines (2 Class Hrs/Wk) Term Units 2

This is a beginning course specifically related to diesel engines and is designed to give the student an understanding of the types and construction of these engines with emphasis on the fundamentals, and includes a study of cooling and lubrication systems. Prerequisite: Second year standing in Automotive Mechanical Curriculum or equivalent.

3.801 Diesel Engines Laboratory (6 Lab Hrs/Wk) Term Units 2

Practical application of the principles and information studied in Diesel Engines 3.800 is centered around laboratory or shop-type work consisting of the removing, replacing, inspecting, and adjusting of the various accessories and components studied. Prerequisite: Diesel Engines 3.800 or equivalent.

4.100 Introduction to Fabrication Prac. (1 Class, 6 Lab Hrs/Wk) Term Units 3

An introductory course of observation and drafting. Students will be assigned drawing projects and will normally view the physical object of the drawing in order to develop their visualization of the subject on the drafting board. Frequent field trips should be made to observe modern methods of manufacturing, casting, forging, construction, and assembly at local industry. Emphasis will be placed on materials, methods of fabrication, glossary, scaling for drawing, and visualization of fabricated objects or assemblies. Prerequisite: Drafting 4.101 may be taken concurrently.

4.101 Drafting (4 Lab Hrs/Wk) **Term Units 2**

This is a fundamental course in drafting designed to give the student a basic understanding of drawing techniques. Emphasis will be 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. Prerequisite: High school algebra or approval of department head. Mathematics 4.202 may be taken concurrently.

4.103 Electrical Drafting (4 Lab Hrs/Wk) **Term Units 2**

This course covers the techniques required for the electrical and electronic fields. It includes charts, graphs, chassis layout, schematic and pictorial wiring diagrams, routing diagrams (power distribution, lighting, conduit and ducts, underground wiring and ducts), and location drawings. Standard Schematics such as motor starters, annunciators, AM receivers, and other typical industrial circuits will be covered. ASA and EEIA approved symbols will be used. Prerequisites: Drafting 4.101 or equivalent.

4.105 Drafting (4 Lab Hrs/Wk) **Term Units 2**

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 4.101 or equivalent.

4.109 Mechanical Drafting (4 Lab Hrs/Wk) **Term Units 2**

An advanced course emphasizing mechanical design. It includes sketching, cam and gear layout, isometric drawings, welding drawings, tolerances and allowances, and tool jig drawings. Simplified drawing techniques will be covered and general shop procedures will be discussed. Emphasis will be placed on the Industrial requirements of drawings. Prerequisite: Third term standing or approval of department head.

4.111 Strutural Drafting (6 Lab Hrs/Wk) **Term Units 2**

An advanced course emphasizing civil and structural drafting procedures. It includes the function and design of: the general plan, stress diagrams, shop drawings, foundation or masonry plans, erection diagrams, falsework plans, and sheet metal layout. Also, bill of materials, rivet lists, drawing indexes, design considerations, and strength of joints will be covered. The student will become acquainted with structural shapes, and principles of bridge building, dam and earthwork constructions. Prerequisites: Drafting 4.105 and Applied Physics 6.370 or equivalent.

4.119 Project Drafting (9 Lab Hrs/Wk) **Term Units 3**

This course emphasizes working conditions of the industrial drafting room. Students will be assigned projects that will include one or more drawings requiring all of the skills previously acquired. Instruction will include the methods for detail layout, reading specifications, common materials of fabrication, checking and back-checking drawings, and material take-offs. Discussion will cover the administration of the drafting room, issuing drawings, and revisions. Speed and accuracy will considered of paramount importance. Prerequisite: Drafting 4.105 which may be taken concurrently.

4.121 Project Drafting (8 Lab Hrs/Wk) **Term Units 3**

A continuation of the emphasis on industrial working conditions. Students will be assigned projects (requiring use of all previously learned skills and principles) that will familiarize them with many of the specialized fields of drafting. Instruction will include the basic methods for layout and detailing assemblies and subassemblies, reading specifications, common materials of fabrication, checking and back-checking drawings, and materials take-offs. Drafting room standards of various local industries will be discussed. Speed and accuracy will be considered of paramount importance. Prerequisite: Project Drafting 4.119 or equivalent.

4.150 Welding (1 Class, 3 Lab Hrs/Wk) **Term Units 2**

4.151 Welding (1 Class, 3 Lab Hrs/Wk) **Term Units 2**

Setup and operation of oxy-acetylene and electric arc welding 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. Technical information is correlated with actual practice to provide the student with an understanding of the composition of the various metals and methods of fabrication used in construction, maintenance, and repair industries. This is one course; two consecutive terms.

4.200 Mathematics

This is a course in basic mathematics intended as a review of arithmetic. It includes arithmetical operations: addition, subtraction, multiplication, and division; fractions, decimal fractions, percentage, ratio, and proportion; tables and graphs; geometric measuration; measurement; and weights and measures.

4.202 Mathematics (3 Class, 2 Lab Hrs/Wk) Term Units 4

This is a course in practical mathematics including the fundamentals of applied algebra and applied geometry, including symbols, equations, ratio and proporation, exponents, radicals, formulas, geometric lines and shapes, common geometric constructions, and introductory applied trigonometry. Prerequisite: Mathematics, general high school, or equivalent.

4.204 Mathematics (3 Class, 2 Lab Hrs/Wk) Term Units 4

This course concentrates on problems encountered by workers in industrial occupations. It applies arithmetic, algebra, geometry, trigonometry, and their various phases to jobs encountered. Emphasis on actual problem solving aspects. Prerequisites: Mathematics 4.202 or equivalent.

4.300 Practical Physics (3 Class, 2 Lab Hrs/Wk) Term Units 4

This is an introductory course in practical physics covering matter, measurements, mechanics, and machines. Laboratory time is provided for demonstrations and experiments to help clarify the principles and procedures covered in class. Prerequisite: Mathematics 4.202 should be taken concurrently.

4.302 Practical Physics (3 Class, 2 Lab Hrs/Wk) Term Units 4

This is an introductory course in practical physics covering heat, light, and sound. Laboratory time is provided for demonstrations and experiments to help clarify the principles and procedures covered in class. Prerequisite: Mathematics 4.202 or equivalent.

4.304 Practical Physics (3 Class, 2 Lab Hrs/Wk) Term Units 4

This is an introductory course in practical physics covering magnetism and electricity. Laboratory time is provided for demonstrations and experiments to help clarify the principles and procedures covered in class. Prerequisite: Mathematics 4.202 or equivalent.

4.400 Surveying

A eginning course in surveying techniques designed to give the student an understanding of the fundamentals of chaining, leveling and transit work, care and adjustment of surveying instruments, and office procedures. Provision is made by appropriate field work for practical application of the techniques learned.

4.401 Surveying

This is a fundamental course which is a continuation of Surveying 4.400. It is designed to familiarize students with stadit, topographic, planetable, and boundary surveys. Meridian determination and uses of aerial photogrammetry are considered.

4.402 Surveying

This course is a continuation of Surveying 4.401. It is designed to familiarize the student with route, mine, and hydrographic surveying. The techniques are applied to subdivisions and boundary surveys. Principles of Geodesy are introduced.

4.410 Mapping

Some of the areas coverde in this course are: advanced map plotting; legal description; subdivision planning; and simulated problems of construction. Advanced earth work, geodetic computation, computing machines, and professional practices are also covered. Prerequisite: Surveying 4.401, with Surveying 4.402 to be taken concurrently.

5.200 Introduction to Law Enforcement (3 Class Hrs/Wk) Term Units 3

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) Term Units 3

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 (2 Lab Hrs/Wk) **Term Units 1**
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 (2 Lab Hrs/Wk) **Term Units 1**
A continuation of Defensive Tactics 5.204.

5.208 Criminal Law (3 Class Hrs/Wk) **Term Units 3**
The structure definitions and the most frequently used section of the Penal Code and other criminal statutes.

5.210 Traffic Control (2 Class, 3 Lab Hrs/Wk) **Term Units 3**
Traffic law enforcement, regulation and control, fundamentals of traffic accident investigation; Oregon Motor Vehicle Code.

5.212 First Aid (2 Lab Hrs/Wk) **Term Units 1**
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 a successful completion of course, a standard First Aid card may be secured.

5.213 First Aid (2 Lab Hrs/Wk) **Term Units 1**
A continuation of First Aid 5.212.

5.214 First Aid (2 Lab Hrs/Wk) **Term Units 1**
A continuation of First Aid 5.213.

5.216 Criminal Investigation (2 Class, 3 Lab Hrs/Wk) **Term Units 3**
Fundamentals of investigation; crime scene search; sketching and recording; collection and preservation of physical evidence; scientific aids; modus operandi; sources of information; interviews and interrogation, follow-up and case preparation.

5.217 Criminal Investigation (2 Class, 3 Lab Hrs/Wk) **Term Units 3**
Continuation of 5.216 including collection and preservation of physical evidence; scientific aids; modus operandi; sources of information interviews and interrogation, follow-up and case preparation.

5.218 Criminal Investigation (2 Class, 3 Lab Hrs/Wk) **Term Units 3**
A connituation of Criminal Investigation 5.217.

5.220 Patrol Procedures (2 Class, 3 Lab Hrs/Wk) **Term Units 3**
Purpose of patrols — perception and observation — protection — prevention — suppression — identification and apprehension — types of patrols — purpose — hazards — assignments — response to emergencies — action to be taken — officers approach on foot — in an auto — home, building or room, operation of motor vehicle.

5.222 Criminal Evidence (2 Class, 3 Lab Hrs/Wk) **Term Units 3**
The kinds and degrees of evidence and the rules governing the admissibility of evidence in court.

5.226 Firearms (2 Lab Hrs/Wk) **Term Units 1**
The moral aspects, legal provisions, safety precautions and restrictions covering the use of firearms; firing of the side-arm, riot shotgun, and other weapons. Combined lecture and laboratory (range).

5.227 Firearms (2 Lab Hrs/Wk) **Term Units 1**
A continuation of Firearms 5.226.

5.228 Firearms (2 Lab Hrs/Wk) **Term Units 1**
A continuation of Firearms 5.227.

5.230 Field Work (2 Lab Hrs/Wk) **Term Units 1**
Actual field practice (as a member of the Campus Police) in traffic control, buildings and g ounds security, crowd control at campus functions; further practice in police report writing, communications and maintenance of records; civil service procedu es.

5.231 Field Work (2 Lab Hrs/Wk) **Term Units 1**

A continuation of Field Work 5.230.

5.232 Jail Procedures (2 Lab Hrs/Wk) **Term Units 1**

Basic instruction covering the receiving, booking, and searching of prisoners and their care and custody; the laws relative to commitments, holding orders, and warrants; duties and responsibilities of the officer as outlined in the law regarding property and belongings of prisoners. Detention of prisoners for outside agencies.

5.234 Problems of Physical Evidence (2 Class, 3 Lab Hrs/Wk) Term Units 3

Techniques of locating, collecting, and identifying physical evidence. Use of fingerprinting, casts and molds, photography, and sketching. Basic laboratory aids and the use of scientific equipment in the evidence process.

5.236 Juvenile Procedures (2 Class, 3 Lab Hrs/Wk) **Term Units 3**

The organization, functions, and jurisdiction of juvenile agencies; the processing and detention of juveniles; juvenile case disposition; juvenile statutes and court procedures.

5.238 Criminal Law (3 Class Hrs/Wk) **Term Units 3**

A continuation of Criminal Law 5.208.

5.240 Report Writing (3 Class Hrs/Wk) **Term Units 3**

This is a course which supplies knowledge of the principles of composition and basic forms of writing reports. The subjects covered are: why reports are written, types of reports, makeup 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.

5.501 Professional & Vocational Relationships **Class Hrs. 78**

This course consists of studies to aid the student to understand herself and her relationship with other people, especially patients and fellow workers. It presents the picture of her personal health in relationship to herself and the health of the community. This section also touches on nursing, past, present and future and its legal aspects. Prerequisite: Registration in the Practical Nurse program.

5.502 Nursing Care in Conditions of Illness **Class Hrs. 129**

This course consists of studies of the causes, symptoms and treatment of disease conditions of the human ody's system. It includes the principles of nursing care of mothers, infants and children, medical and surgical conditions and mental illness. It also covers study of rehabilitation and of the prevention and control of disease. Prerequisite: Registration in the Practical Nurse program.

5.503 Normal Health, Growth & Development **Class Hrs. 128**

This course consists of studies of anatomp and physiology, the nutritional needs of the healthy body with meal planning, and the orgwth and development of the human being from gestation through childhood, adulthood and into the aging process. This study covers physical, mental and emotional aspects. Prerequisite: Registration in the Practical Nurse program.

5.504 Nursing Skills **Class Hrs. 181**

This course consists of studies, and practice and demonstration, of the principles and methods used in the physical care of the sick. Prerequisite: Registration in the Practical Nurse program.

5.525 Clinical Practice **Approximately 1232 Hours**

This consists of the actual nursing care in the hospital. It is divided into the following major items:

Hospital Organization & Nursing Procedure	80 Hours
Surgical Nursing	256 Hours
Medical Nursing	256 Hours
Obstetrical Nursing (Including New Born)	256 Hours
Pediatric Nursing	128 Hours
Geriatrics & Long Term Illness	128 Hours
Recovery Room	64 Hours
Central Supply	64 Hours

6.101 Plane Surveying (1 Class, 4 Lab Hrs/Wk) Term Units 3

A beginning course in surveying techniques designed to give the student an understanding of the fundamentals of chaining and leveling, care and adjustment of surveying instruments and office procedures. Provision is made by appropriate field work for practical application of the techniques learned. Prerequisite: Mathematics 4.202 or equivalent.

6.103 Plane Surveying (1 Class, 4 Lab Hrs/Wk) Term Units 3

A continuation of Plane Surveying 6.101 desinged to familiarize students completely with the engineer's transit. Uses of the transit are considered and practical problems put the theory into practice. Prerequisites: Technical Mathematics 6.261 and Plane Surveying 6.101 or equivalent. Technical Mathematics 6.262 may be taken concurrently.

6.107 Strength of Materials (2 Class, 3 Lab Hrs/Wk) Term Units 3

A study of the stresses and strains that occur in bodies when subjected to tensile, compressive and shearing forces, including the common theory of beams. The distribution and magnitude of stresses are examined in welded and riveted joints, thin wall cylinders, torsional members and beams. Practice problems emphasize the materials studied. The laboratory phase of this course covers: Testing of principal construction materials; the major testing machines and their calibration. Applied Mechanics 6.266 and Technical Mathematics 6.109 should be taken concurrently.

6.108 Materials of Construction (2 Class Hrs/Wk) Term Units 2

Comparisons of various materials, their source, method of manufacture, physical and chemical properties; grading under a variety of conditions; soil and terrain as encountered in construction work.

6.109 Applied Mechanics (2 Class, 3 Lab Hrs/Wk) Term Units 3

The course consists of a study of energy at rest (equilibrium). This includes resolution of forces, equilibrants of forces in one plane, simple machines, and equilibrants of nonconcurrent forces. Time is provided for demonstrations and experiments to help clarify the principles and procedures covered. Prerequisite: Technical Mathematics 6.262 and Applied Physics 6.371 or equivalent.

6.110 Construction Estimating (2 Class Hrs/Wk) Term Units 2

The student is helped to develop skills in estimating the amount and cost of materials required and labor cost involved in various types of construction. An opportunity is provided for the application of these skills by requiring the student to make estimates of material and labor quantities and costs for representative type of construction. Prerequisite: Fifth term standing or permission of instructor.

6.111 Applied Mechanics II (2 Class, 3 Lab Hrs/Wk) Term Units 3

A study of energy in motion. The course covers the principles of friction, centroids, inertial characteristics, motion and velocity, force and acceleration, curvilinear motion and rotation, and advenced concepts of work, power and energy. Time is provided for demonstrations and experiments to help clarify the principles and procedures covered. Prerequisite: Applied Mechanics 6.109 or the equivalent.

6.112 Hydraulics I (3 Class Hrs/Wk) Term Units 3

The first course in the study of hydraulics covers the fundamental properties of fluids, principles of hydrostatic pressure — including Pascal's Law, the hydrostatic Paradox, the Archimede's Principle — measurement by manometer, the measurement of fluid properties. The relationship of hydrostatic pressure and center of gravity and the effect of hydrostatic pressure exerted against plane surfaces will also be discussed. Time is provided for demonstrations and experiments to help clarify the principles and procedures covered. Prerequisites; Applied Physics 6.371 and Technical Mathematics 6.266 or equivalent.

6.114 Hydraulics II (3 Class Hrs/Wk) Term Units 3

The second course in hydraulics consists of the fundamentals of fluid flow, Bernoulli's theorem, flow profiles, stream restrictions (such as weirs, flumes, metering runs), distribution of energy in the stream, flow through pipe, Reynold's Law, Newton's Laws of hydrodynamics, vector representation, hydraulic similitude, and dimensional analysis. Time is provided for demonstration and experiments to help clarify the principles and procedures covered. Prerequisite: Hydraulics 6.112 or equivalent.

6.115 Electrical Mathematics (3 Class, 2 Lab Hrs/Wk) Term Units 4

An applied course in mathematics for electronic engineering technicians. Includes an introduction to calculus, covers graphical methods, differentiation, and integrates with direct application to electronic and electrical circuits. Prerequisites: Technical Mathematics 6.266 or equivalent.

6.118 Contracts and Specifications (3 Class Hrs/Wk) Term Units 3

This is a course designed to acquaint the student with common usage and practice in the preparation of contracts and attendant specifications. Examination of existing contracts covering current jobs will be used whenever possible with practical problems designed to teach the application of theory learned. Prerequisite: Second year standing or approval of instructor.

6.120 Foundations of Structures (3 Class Hrs/Wk) Term Units 3

A study of various materials, devices, and designs used in structural foundations such as footings, cofferdams, caissons, abutments, piers, and underpinnings. Prerequisites: Applied Mechanics 6.111 and Technical Mathematics 6.266 or equivalent.

6.122 Construction Codes (2 Class Hrs/Wk) Term Units 2

A study of the required practices as stated in local, state and federal construction codes.

6.123 Concrete Construction & Design (2 Class, 5 Lab Hrs/Wk) Term Units 3

Theory of designing: retaining walls, combined irregular and pile footings, combined direct stress and bending, short span concrete bridges, ultimate strength design, structural elements of combined steels and concrete. Prerequisite: Applied Mechanics 6.109 and Technical Mathematics 6.266 or equivalent.

6.124 Soil Mechanics (2 Class, 3 Lab Hrs/Wk) Term Units 3

Physical and mechanical properties of soil; specific gravity grain size distribution, plasticity, shrinkage, permeability, compressibility, consolidation, and shear characteristics. Analysis with respect to stability of slopes, earth pressures, stress distribution, and settlement carrying capacity. Prerequisite: second year standing or approval of instructor.

6.125 Timber and Steel Constr. (3 Class, 3 Lab Hrs/Wk) Term Units 4

Elementary design principles of steel and wooden structures. The course includes fasteners and connectors and physical and chemical characteristics of materials. Prerequisites: Structural Analysis and Design 6.130 or equivalent.

6.126 Technical Report Writing (3 Class Hrs/Wk) Term Units 3

This is a course which 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. Prerequisite: Communication Skills 1.100 or equivalent.

6.127 Practical Descriptive Geometry (4 Lab Hrs/Wk) Term Units 2

This course gives a brief view of advanced drafting problems and takes the student further into the field of descriptive geometry principles. In the production of detailed drawing from assembly drawing the principles of Descriptive Geometry are necessary to the skilled draftsman. Prerequisites: Third term standing or approval of department head.

6.128 Strength of Materials (2 Class, 3 Lab Hrs/Wk) Term Units 3

This is a continuation of Strength of Materials I. In addition to advanced theory in the area of materials characteristics, field trips will be taken to enable the student to observe use of different materials in actual installations. A continuation of material testing is included in the laboratory. Prerequisite: Strength of Materials 6.107 or equivalent.

6.130 Struct. Analysis & Design (1 Class, 3 Lab Hrs/Wk) Term Units 2

The course deals with the determination of stresses induced by loads on structures of wood, steel, concrete, selections of appropriate structural members and suitable connections; loading conditions causing compression, tension, shear, torsion, and bending; practical design procedures, relating to various structural members, beams, girders, columns and footings. Prerequisites: Applied Mechanics 6.109 and Technical Mathematics 6.266 or equivalent.

6.131 Mapping and Computing (4 Lab Hrs/Wk) Term Units 2

Advanced map plotting, earthwork computation, field surveying from maps; legal description; subdivision planning and simulated problems of construction are used. Prerequisites: Surveying Computations 6.500 and Technical Mathematics 6.266 or equivalent.

6.133 Mapping and Computing (6 Lab Hrs/Wk) Term Units 2

Advanced earthwork computation; office procedure; government surveys; surveying laws; professional practices. Simulated problems are used. Prerequisite: Mapping and Computing 6.131 or equivalent.

6.135 Engineering Problems (2 Lab Hrs/Wk) Term Unit 1

This course of study in engineering problems is one in which the student is instructed in the development of accurate, effective, and efficient work and study habits. The course is intended to train the student to organize his analysis and record them in clear, concise form so that they can be interpreted. Prerequisites: One year of high school algebra or equivalent.

6.136 Engineering Problems (2 Lab Hrs/Wk) Term Unit 1

This course aims to develop the skill of gathering together and sorting research results and problems solving records into logical summation. Mathematical and graphical analysis of data will be emphasized in the presentation of information in the report. Prerequisite: Engineering Problems 6.135.

6.200 Electrical Theory (DC) (3 Class, 2 Lab Hrs/Wk) Term Units 4

Presents an introduction to electronics on the basis of direct currents with an emphasis on contemporary techniques as a supplement to basic concepts. Covers the principles of electron physics, unidirectional current and factors affecting its magnitude, series-circuit analysis, parallel-circuit analysis, series-parallel circuit analysis, complex unidirectional-current circuits, the phenomena of magnetism and electro-magnetism, inductance and its characteristics of capacitance, and electrical measurement instruments. Prerequisites: High school algebra or equivalent.

6.202 Electrical Theory (AC) (3 Class, 2 Lab Hrs/Wk) Term Units 4

A continuation of electrical theory on the basis of alternating currents with an emphasis on contemporary techniques as a supplement to basic concepts. Covers the analysis of the sine wave, series circuits with a sine wave input, series resonance, parallel circuits with a sine wave input, parallel resonance, the non-resonant and the resonant transformer and attenuators and pads. Prerequisites: Second term standing or approval of the department head.

6.204 Electrical Circuits (3 Class Hrs/Wk) Term Units 3

A continuation of electrical theory with an emphasis on the analysis of the characteristics of complex waveform circuits. Covers passive filter networks, bi-directional waveforms, complex waveform analysis of series R-C circuits, waveform analysis of series R-L circuits, and waveform analysis of combined networks. Prerequisite: Third term standing or approval of department head.

6.205 Electrical Circuits Lab (6 Lab Hrs/Wk) Term Units 2

Practical application of the theory studed in Electrical Circuits. Involves the construction and testing of passive filter networks including the constant k, the series m-derived, and the shunt m-derived types. Response of simple circuits involving diodes, resistance, inductance, and capacitance to square-wave, triangular-wave, saw-tooth-wave, and rectangular-wave pulses is analyzed. Various R-L-C combinations are designed and tested for low and high-frequency response, rise and fall times are measured, and integrator and differentiator circuits are constructed and analyzed. Prerequisites: Third term standing or approval of department head.

6.210 Vacuum Tube & Transistor Analysis (3 Class Hrs/Wk) Term Units 3

An introductory course to the anlysis of the electrical characteristics of vacuum tubes and transistors. Includes a review of electron physics with emphasis on electron devices including hot and cold-cathode vacuum and gas diodes and semiconductor diodes; three-element vacuum tubes and transistors; multi-grid tubes including tetrodes, pentodes, and beam-power tubes; special transistors and diodes. includes a review of auxiliary electronic components including potentiometers, transformers, and relays, and a review of several electronic circuits involving series and parallel resonance, bandwidth, and coupled-circuit theory. Also covers elementary filter design, harmonic analysis, network theorems, and four-terminal networks. Prerequisites: Third term standing or approval of department head.

6.211 Vacuum Tube & Transistor Analysis Lab. (3 Lab Hrs/Wk) Term Unit 1

Practical application of the theory studied in Vacuum Tubes and Transistor Analysis. involves the disassembling of diodes, triodes, tetrodes, pentodes, and multigrid tubes, and transistors to observe their construction. Also includes the plotting of the electrical characteristic curves of vacuum tubes and transistors. The plotted curves are used to determine the transconductance, the amplification factor, and the plate-resistance of vacuum tubes and the current-gain of junction transistors in various circuit configurations. The operation of the Thyratron is tested with A-C and D-C plate voltages, using a phase-shifter for grid-control. Includes the testing of Zener and double-based diodes and special transistors such as the PNPN. Transformer-coupled theory is verified by testing out under-coupled, optimum-coupled, and over-coupled coils. Gain of amplifiers is computed in decibels and auxiliary audio elements such as microphones, speakers, and tape-recorders are reviewed. Prerequisites: Third term standing or approval of department head.

6.212 Oscillator Circuits and Design (2 Class Hrs/Wk) Term Units 2

A continuation of vacuum tube and transistor analysis. Involves the study of single-phase rectifier circuits and filters with caluculation of the ripple-factor. Introduces the fundamental feedback equation and covers positive and negative feedback. Various types of feedback oscillators including the Hartley and Colpitts are analyzed. Covers negative-resistance oscillators, miscellaneous sine-wave oscillators, non-sinusodial oscillators including various multivibrator circuits. The principles of AM and FM modulation and detection are studied and the theory and application of the cathode-ray oscilloscope is included. Prerequisites: Fourth term standing or approval of department head.

6.213 Oscillator Circuits and Design Lab. (6 Lab Hrs/Wk) Term Units 2

Practical application of the theory studied in Oscillator Circuits and Design. Involves the testing of half-wave and full-wave single-phase rectifier circuits and measurement of the D-C output and ripple-voltage. Includes the construction and testing of Hartley, Colpitts, Armstrong, electon-coupled, crystal, tri-tet, phase-shift, Wein-bridge, and other types of feedback and negative-resistance oscillators. Grid, cathode, screen and plate AM modulation are tested and checked for percentage by means of an oscilloscope. The reactance-tube modulator is constructed and tested for FM modulation. The cathode-ray oscilloscope circuits are analyzed. Frequency-comparisons are made with Lissajous' patterns and Z-axis modulation. Applications and proper techniques for use of the oscilloscope are also included. Prerequisites: Fourth term standing or approval of department head.

6.214 Amplifier Circuits and Design (3 Class Hrs/Wk) Term Units 3

A continuation of oscillator circuits and design. Covers the application of vacuum tubes and transistors in amplifier circuits. Analyzes the vacuum tube amplifier into its basic and equivalent circuit. Includes load-lines, distortion, and pentode and beam-power tube consideration. Analyzes transistor amplifiers in various circuit configurations and covers biasing methods. Also includes transformer analysis, transformer-coupled amplifiers, and R-C coupled amplifiers. Special amplifiers using vacuum tubes and transistors are studied. Includes push-pull circuit analysis and phase inversion; Class-C amplifier analysis, and high-frequency amplifiers. Prerequisite: Fifth term standing or approval of department head.

6.215 Amplifier Circuits and Design Lab. (6 Lab Hrs/Wk) Term Units 2

The application of theory studied in Amplifier Circuits and Design. Involves the design, construction, and testing of various types of vacuum type and transistor amplifiers employing direct, transformer, and R-C coupling. Several push-pull circuits utilizing different types of phase inverters are built and tested and the principle of complementary symmetry is demonstrated in the operation of transistors in push-pull. Class-C power amplifiers are constructed and adjusted for proper operation and different types of high-frequency amplifiers are also built and tested. Prerequisites: Fifth term standing or approval of department head.

6.216 Advanced Electronic Circuits (2 Class, 3 Lab Hrs/Wk) Term Units 3

A course designed to simulate problems in industry. Covers six electronic areas including computors, communications, industrial controls, electronics, microwaves, and radar. Class meetings involve overview of each area and study of current problems and opportunities. Lab involves construction, testing, and reporting performances of assigned circuits. Prerequisites: Sixth term standing or approval of department head.

6.218 Industrial Electronics (2 Class, 3 Lab Hrs/Wk) Term Units 3

An introductory class and laboratory course covering the principles and applications of electronics in industry. Involves a review of the principles of D-C motors and generators, and covers D-C motor controls with emphasis on electronic controls. Also covers relays and time-delay circuits; industrial photo-electric control and typical applications; electronic power-control with saturable-core reactors and the amplidyne; and the electronic control of welding. Prerequisites: Fifth term standing or approval of department head.

6.228 Industrial Television (2 Class, 3 Lab Hrs/Wk) Term Units 3

A theory and lab course designed to cover television systems, scanning and synchronization, composite video signal, frequency-modulation, television receivers and monitors, picture tubes, power supplies, video amplification, practical design of video amplifiers, brightness-control and d-c reinsertion video dection, automatic gain-control and sync-separation, and deflection oscillator and amplifier circuits. Prerequisites: Fifth term standing or approval of department head.

6.234 Wave Generator and Shaping (2 Class, 3 Lab Hrs/Wk) Term Units 3

A class and laboratory course designed as an introduction to pulse techniques. Begins with an introduction to pulses, giving their historical development, typical applications, nomenclature, importance of pulse shapes, and responses of frequency-selective circuits to pulses. Includes the theory and operation of limiter and clipper circuits, differentiating and integrating circuits, and D-C restoration. Various multivibrator circuits, synchronization circuits, and applications of multivibrators are studied. Also covers blocking oscillators of several types, their principles of operation, and application. Prerequisites: Fourth term standing or approval of department head.

6.235 Industrial Television (1 Class, 2 Lab Hrs/Wk) Term Unit 1

A theory and laboratory course covering closed-circuit television systems, picture transmission, scanning process and the composite signal, camera tubes and circuits, camera video amplifier systems, camera sync and deflection generators, and several types of commercial industrial cameras with emphasis on circuit anlysis, set-up procedure, operation and adjustment. Prerequisites: Sixth term standing or approval of department head.

6.236 Servo Systems (1 Class, 3 Lab Hrs/Wk) Term Units 2

Presents the principles of servo and data transmission systems with emphasis on fundamentals. Covers control systems and servo-mechanisms, elementary forms of control systems, servo systems, synchros, servo element, electronic and magnetic amplifier, direct current servomotors, performance improvers, methods for servos and measurement, and examples of servos and servo systems. Prerequisites: Fourth term standing or approval of department head.

6.240 Electronic Data Processing (3 Class Hrs/Wk) Term Units 3

An introduction to the principles of electronic digital computers. Covers the application and programming of computers in business, industrial, and scientific organizations. Reviews the decimal and binary numbering systems as they relate to computers; analyzes computer circuitry with emphasis on transistor and diode switching circuits; presents the fundamentals of logical design with an introduction to Boolean Algebra and the use of block diagrams; analyzes the major divisions of a digital computer in terms of the arithmetic element, the memory element, input and output devises, and the control element. Prerequisites: Fifth term standing or approval of department head.

6.242 Microwaves (2 Class, 3 Lab Hrs/Wk) Term Units 3

A theory and laboratory course designed as an introduction to microwaves. Begins with the study of ultra-high frequencies to develop a good foundation for the development of waveguides and microwave circuitry. Covers UHF transmission lines, the application of quarter-wave lines, matching stubs, and standing-wave measurements. Transmission of microwave energy through waveguides is analyzed and the TE and TM modes of transmission are studied. Various types of waveguide plumbing including choke joints, directional couplers, flap-attenuators, horns, guide partitions, and flexible waveguides are studied. Includes also cavity resonators, high-frequency oscillators, magnetron and klystron oscillators, the resnatron, traveling wave tubes, and other high-frequency tubes and devices. Various types of UHF and microwave antennas and receiver circuitry are included. Microwave measurements involve the use of thermocouple voltmeters, bolometers, cavity wavemeters, slotted lines, and directional couplers. Prerequisites: Sixth term standing or approval of department head.

6.244 Automation Systems (3 Class Hrs/Wk) Term Units 3

This course is devoted to the study of the techniques of automation. Introduces the basic concepts of automation and covers automatic controls, pneumatic control devices, hydraulic control devices, and electronic and electric control devices. The application of automation is studied from examples in the areas of materials handling and assembling, production of metals, metal casting processes, mechnaical working of metals, pressworking of metals, metal cutting operations, heat treating of metals, metal joining operations, and inspection and quality control. Prerequisite: Sixth term standing or approval of department head.

6.246 Industrial Electronics (3 Class Hrs/Wk) Term Units 3

A continuation of industrial electronics with emphasis on A-C principles and applications in industry. Covers alternating current characteristics, generation of A-C, vector diagram analysis, properties of electric circuits, and graphical representation of resistance, reactance and impedance. Single-phase circuits are analyzed in terms of power factor, and three-phase wye and delta combinations are studied. Also includes transformers and regulators, alternating-current generators, polyphase induction motors, synchronous motors and self-synchronous devices, single-phase motors, circuit-protective and switching equipment, electrical instruments and electrical measurement. Prerequistes: Sixth term standing or approval of department head.

6.247 Industrial Electronics Lab (3 Lab Hrs/Wk) Term Unit 1

The practical application of the theory studied in Industrial Electronics 6.246. Alternating-current theory and principles are verified by the construction and testing of circuits involving series resistance, inductance, and capacitance. Phase-angle, reactance, and impedance are calculated and checked, and vector diagrams are drawn to show current and voltage relationships. Three-phase transformers are wired in various delta-wye combinations and output voltages are calculated and verified. Small transformers are designed to deliver specified outputs. Alternating-current generators, poly-phase induction motors, synchronous motors, selsyn transmitters and receivers, and single-phase motors of all types are disassembled and their construction studied Various circuit-protective and switching equipment are connected from a test panel to motors and tested. All types of electrical measuring equipment are tested by application and a D-C, A-C vacuum tube voltmeter is constructed and tested. Prerequisites: Sixth term standing or approval of department head.

6.261 Technical Mathematics (3 Class, 2 Lab Hrs/Wk) Term Units 4

This is an applied course in mathematics on the technician level, covering the slide rule, tables and interpolation, additional applications in geometry, a review of fundamental algebraic operations, system of linear equations, functions and graphs, advanced applications of exponents and radicals, and quadratic equations in one unknown. Prerequisites: High school algebra or equivalent.

6.262 Technical Mathematics (3 Class, 2 Lab Hrs/Wk) Term Units 4

This is an applied couse in mathematics on the technician level, including logarithms, right and oblique triangle problem solving, trigonometric applications and review, vectors, trigonometric formulas, identities and equations and graphs of trigonometric functions. Prerequisite: Technical Mathematics 6.261 or equivalent.

6.266 Technical Mathematics (3 Class, 2 Lab Hrs/Wk) Term Units 4

This is an applied course in mathematics on the technician level, covering simultaneous quadratic equations, ratio and proportion, binomial theorem, arithmetic and geometric progressions, mathematics of investment, exponential functions, complex notation and vector algebra. Prerequisite: Technical Mathematics 6.262 or equivalent.

6.270 Technical Mathematics (3 Class, 2 Lab Hrs/Wk) Term Units 4

This is an introduction to differential and integral calculus. It is an applied course covering graphical methods, differentiation, and integration. Prerequisite: Technical Mathematics 6.266.

6.366 Applied Physics (3 Class, 2 Lab Hrs/Wk) Term Units 4

Magnetism and electricity, including basic electric currents, sources, electro-magnetism, alternating current, generators, and motors. Lab time is provided for demonstrations and experiments to clarify principles and procedures covered in class. Prerequisite: Technical Mathematics 6.262 or equivalent.

6.370 Applied Physics (3 Class, 2 Lab Hrs/Wk) Term Units 4

Physical laws and theories and mechanical principles, including mechanics of measurement, properties and structure of matter, solids, liquids, and gases, simple machines, work, power, and energy are studied. Laboratory time is provided for demonstrations and experiments to clarify principles and procedures covered in class. Prerequisites: Technical Mathematics 6.261 or equivalent. May be taken concurrently.

6.371 Applied Physics (3 Class, 2 Lab Hrs/Wk) Term Units 4

Covers principles of heat, light, and sound, including the study of temperature and the effects of heat, heat and change of state, heat transfer, heat engines, refrigeration, air conditioning, sound, application of sound, and nature of light. Laboratory time is provided for demonstrations and experiments to clarify principles and procedures covered in class. Prerequisite: Applied Physics 6.370 or equivalent.

6.401 General Forestry (2 Class, 4 Lab Hrs/Wk) Term Units 3

This course is an introduction to American forestry and past forest practices. The laboratory periods are devoted to the teaching of the use and handling of the tools used in forestry including the staff compass chain, abney, diameter tape, builtmore sticks, and drafting instruments.

6.402 General Forestry (2 Class, 3 Lab Hrs/Wk) Term Units 3

A survey of the technical fields of forestry and their relation to forest management and the dependent economic community. Field work in site stocking and growth measurements is combined with the use of aerial photographs in order to recognize forest types and conditions.

6.404 Forest Engineering I (2 Class, 4 Lab Hrs/Wk) Term Units 3

This is a beginning course in forest engineering methods and procedures. Both the laboratory and classroom are used to give the student a proficiency in the use of surveying instruments in such practical field work as grade lines, "P" line, retracement of section lines and the field use and geometry of aerial photographs.

6.405 Forest Engineering II (2 Class, 4 Lab Hrs/Wk) Term Units 3

Engineering procedures and methods with special emphasis on road location and the rectangular survey system. This course correlates closely with the beginning course in Forest Operations so that the student may associate the engineering with the planned construction result.

6.406 Forest Engineering III (2 Class, 4 Lab Hrs/Wk) Term Units 3

The student is trained to a working proficiency in planning and pursuing forest survey work with all instruments presently available. Projects in special surveys such as vertical and horizontal control for aerial photographic maps, construction and site surveys are used to promote standards of performance.

6.407 Forest Mensuration I (2 Class, 4 Lab Hrs/Wk) Term Units 3

This course is a beginning course in the measurement of forest products including cruising and scaling.

6.408 Forest Mensuration II (2 Class, 4 Lab Hrs/Wk) Term Units 3

This course deals with more advanced methods and concepts in forest measurement including the use of prisms, forest inventory procedures and type mapping emphasizing the use of aerial photographs and individual proficiency in obtaining acceptable results.

6.409 Forest Protection (2 Class, 3 Lab Hrs/Wk) Term Units 3

A study of the agents of forest destruction, the methods, agencies and equipment used in their prevention and suppression. This includes the study of the control measures applied to fire, insects, disease, wildlife, and domestic animals. The laboratory periods are devoted to the observation and practice of control measures and surveys to identify the damaging agent.

6.410 Forest Operations I (2 Class, 4 Lab Hrs/Wk) Term Units 3

This is the first of a three term series dealing with the production and utilization of forest products. The first term covers logging transportation systems including road construction.

6.411 Forest Operations II (2 Class, 4 Lab Hrs/Wk) Term Units 3

The second of a three part series covering logging, forest nursery, planting and seeding operations and the production of wood products.

6.412 Forest Operations III (2 Class, 4 Lab Hrs/Wk) Term Units 3

This phase deals with the industrial conversion of logs to marketable products with emphasis on pulp, fiber and chemical conversion processes.

6.414 Forest Contracts (3 Class Hrs/Wk) Term Units 3

The student is taught the elements of the various types of forest contracts. Also the individual roles in the administration of contracts to obtain the desired management results. Emphasis is placed upon the personal responsibilities of timbersale administrators, the records, and actions which may or may not be taken.

6.449 Forest Botany (2 Class, 2 Lab Hrs/Wk) Term Units 3

A study of some of the basic principles of plant science as related to forestry. Part of a curriculum designed to prepare persons for entry into various forest industries.

6.450 Technical Chemistry (3 Class, 3 Lab Hrs/Wk) Term Units 4

An introduction to chemistry including, a description of atoms and how they combine to form compounds, the states of matter, and a description of the chemistry of hydrogen and oxygen.

6.452 Technical Chemistry (3 Class, 3 Lab Hrs/Wk) Term Units 4

The second term of Technical Chemistry covering: the chemistry of solutions, descriptive chemistry of the metals and nonmetals, and electrochemistry.

6.454 Technical Chemistry (3 Class, 3 Lab Hrs/Wk) Term Units 4

The third term of chemistry covering organic chemistry. The chemistry of: functional groups of both alkyl and ami compounds, stereochemistry, and the chemistry of macromolecules.

6.500 Surveying Computations (1 Class, 4 Lab Hrs/Wk) Term Units 3

A review of trigonometry and logarithms with application to surveying. The course includes: Computing machines, planometers in application to irregular areas, calculations relating to traverses, subdivision of land and stadia. Survey plotting is also covered. Prerequisites: Plane Surveying 6.101, 6.103 and Technical Mathematics 6.262.

9.110 Carburetion for Auto Mechanics (3 Hrs/Wk) Term Units 1

A course providing an overall knowledge of fuel systems beginning with basic carburetion theory and circuitry to be applied to common types of carburetors, including four barrel and multiple carburetor installations. Lab experience is provided on representative types of modern carburetors. The course is aimed toward up-grading skills of students having previous automotive experience. Prerequisite: Employment in the field and consent of instructor.

9.111 Electrical Systems for Auto Mechanics (3 Hrs/Wk) Term Units 1

A course beginning with basic electrical theory and automotive electrical system fundamentals which are applied to starting, ignition, and generating systems. Lab experience is provided in repair, adjusting, and testing of the various units in the electrical system. Prerequisite: Employment in the field and consent of instructor.

9.112 Tune-up for Auto Mechanics (3 Hrs/Wk) Term Units 1

An advanced course to provide students with knowledge of tune-up procedures and to develop diagnostic ability. Lab experience consists of demonstration and use of mdoern testing and analysis instruments. Recommended prerequisite: Employment in the field and consent of instructor.

9.150 Welding (Beginning) (1 Class, 3 Lab Hrs/Wk) Term Units 2

Instruction in set-up, adjusting and operation of oxy-acetylene and arc welding equipment. Theory of identification and selection of proper electrodes and materials. Demonstration and practice in flat and horizontal position in all basic welding joints. Students learn to evaluate quality of welds by nick-break and guided bend testing methods. Prerequisite: Consent of instructor and employment in the field.

9.161 Welding (Advanced) (1 Class, 3 Lab Hrs/Wk) Term Units 2

Advanced theory and techniques in oxy-acetylene and arc welding, including the inert gas shielded arc welding of ferrous and non-ferrous metals. Demonstration and practice is provided in all positions of welding including pipe welding. Standard industrial fabrication practices are also taught. Work is evaluated by both break and bend test methods. Prerequisite: Completion of 9.150 and consent of instructor.

APPRENTICE RELATED INSTRUCTION COURSES

The following apprentice related instruction courses are offered by the College as needed. Apprenticeship training periods vary from three to six years according to the individual occupation. Each course provides related classroom instruction for apprentices registered under the Oregon Law and Plan of Apprenticeship. Classroom instruction is related to on-the-job training experiences outlined in apprenticeship standards.

9.186 Carpenter Apprentice (5 Hrs/Wk) Term Units 1½

9.187 Industrial Electrician Apprentice (5 Hrs/Wk) Term Units 1½

9.188 Inside Wireman Apprentice (5 Hrs/Wk) Term Units 1½

9.189 Power Lineman Apprentice (5 Hrs/Wk) Term Units 1½

9.190 Plumber Apprentice (5 Hrs/Wk) Term Units 1½

9.191 Sheetmetal Apprentice (5 Hrs/Wk) Term Units 1½

9.192 Machinist Apprentice (5 Hrs/Wk) Term Units 1½

9.193 Automotive Mechanic Apprentice (5 Hrs/Wk) Term Units 1½

9.194 Painter Apprentice (5 Hrs/Wk) Term Units 1½

9.200 Administrative Management Seminar (3 Class Hrs/Wk) Term Units 3

The Administrative Management Course presents in a practical setting those principles and techniques of modern management of particular value in the solution of the problems of small business. In a series of meetings utilizing conference discussions, case studies, guest lectures, and supervised readings, the course provides an opportunity for its participants to discuss their specific problems and analyze current business practices.

9.202 Small Business Records Management (3 Class Hrs/Wk) Term Units 3

For present or prospective owners or managers of small businesses. Designed to provide a proper understanding of the record keeping necessary to meet requirements of governmental agencies, financial institutions, to give the owner a better picture of his needs for cash, credit control, cost analysis, gross and net profit.

9.301 Fire Training — Basic "A" (30 Hours) Term Units 1

A beginning course to acquaint the student with fire behavior, the organization of his department, how he should conduct himself in the department and responding to alarms and training to develop skills in the use of small tools, ropes, knots, hose lines and ladders.

9.302 Fire Training — Basic "B" (30 Hours) Term Units 1

A continuation of Fire Training 9.301 designed to train the student in the use of portable fire extinguishers, in methods of overhaul and salvage, in the principles of fire control in natural cover crops, in forcible entry tactics and in ventilation and rescue procedures. Prerequisite: Fire Training 9.301.

9.303 Fire Training — Basic "C" (30 Hours) Term Units 1

A continuation of Fire Training 9.302, the study of fire streams, fire apparatus, pre-fire planning, flammable liquids and gasses, structure fire problems and practice evolutions. Emphasis is placed on demonstration, practice and drill. Prerequisite: Fire Training 9.302.

9.304 Fire Training — Basic "D" (30 Hours) Term Units 1

A continuation of Fire Training 9.303, intended to review for the student fire control tactics, then apply these principles to specific types of buildings and hazards. Included are; air crash and rescue, mills factories and large structure fires, and motor vehicle fires. Prerequisite: Fire Training 9.303.

9.500 Elements of Supervision (3 Class Hrs/Wk) Term Units 3

A basic introductory course covering 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 Communications for Supervisors (3 Class Hrs/Wk) Term Units 3

Rveiew of writing mechanics covering grammer, punctuation, sentence structure and paragraph structure. Business 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) Term Units 3

A course to assist the supervisor in understanding the people with whom he works, with emphasis in such areas as psychological aspects, perceptions, learning processes, emotions, attitudes and personalities.

9.503 Oral Communications for Supervisors (3 Class Hrs/Wk) Term Units 3

How we communicate. Effective speaking and listening. Kinds of supervisory communications. Saying what we mean, which covers oral versus written communications. Understanding what is communicated as related to intent and effect. Conference leading and practice for supervisors.

9.504 Developing the Employees Through Training (3 Class Hrs/Wk) (Teacher Training) Term Units 3

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 and management development. Use of outside agencies. Advisory committees.

9.505 Report Writing for Supervisors (3 Class Hrs/Wk) Term Units 3

Types of reports: statistical, financial, narrative, technical. Steps in preparing the report. Gathering and sorting information. Designing and organizing the report. 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. Prerequisite: Written Communications for Supervisors 9.501 or equivalent.

9.506 Human Relations (3 Class Hrs/Wk) Term Units 3 (Developing Supervisory Leadership)

The practical application of basic psychology in building better employer-employee relationships by studying human relations techniques. Prereuisite: Basic Psychology for Supervisors 9.502.

9.507 Reading Improvement for Supervisors (3 Class Hrs/Wk) Term Units 3

General approach to better reading through the proper use of text material, 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) Term Units 3

The history and development of the Labor Movement. Development of the National Labor Realtions Acts, the Wagner Act, the Taft-Hartley Act. The supervisor's responsibility for good labor relations. The union contract and grievance procedure.

9.512 Methods Improvement for Supervisors (3 Class Hrs/Wk) (Work Simplification) Term Units 3

The supervisor's responsibility for job methods improvement. The basic principles of work simplification. Administration and the problems involved. Motion study fundamentals for supervisors. Time study techniques.

9.514 Cost Control for Supervisors (3 Class Hrs/Wk) Term Units 3

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, quantity control, control of time.

9.516 Supervisor's Responsibility for Management of Personnel (3 Class Hrs/Wk) Term Units 3

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) Term Units 3

The supervisor's responsibility for planning, organizing, directing, controlling, and coordinating. Acquaints the supervisor with these basic functions of an organization and his responsibility in carrying them out in accordance with the organization's plan. Establishing lines of authority, 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) Term Units 3

The history of wages. Inequalities in rates of pay. Management and union movement toward a "fair wage" plan. The supervisor and job descriptions, job specifications, job evaluations, and job classifications. The wage plan 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) Term Units 3

Problems of accidents 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 regulations. The First Aid Department and the line supervisor's responsibility. Job instruction and safety 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) Term Units 3

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 and organization.

9.700 Typing (1 Class, 3 Lab Hrs/Wk) Term Units 2

This is a beginning course in typing for those with no previous typing instruction. It covers the parts and construction of the more common makes of typewriters, learning of the keyboard, and the basic techniques of the touch system. The student should develop rhythm in his movements and attain an acceptable typing speed. He is introduced to simple forms or letters, tabulations, and manuscripts.

9.703 Typing (1 Class, 3 Lab Hrs/Wk) Term Units 2

A continuation of 9.700 or 2.501. Individual units of study for those desirous of extending their present typing ability. These units are (1) correspondence, (2) tabulation, (3) manuscript, and (4) speed/accuracy development. Ideal for both brush-up and intensive development of superior skills.

9.721 Shorthand (2 Class, 2 Lab Hrs/Wk) Term Units 3

An introduction to theory, reading and writing outlines of abbreviated words, phrasing and contexual material. Course includes dictation and longhand transcription of familiar previewed material. Aims at dictation speed of 60 words a minute. Prerequisite: Satisfactory grade in high school English or pass qualifying English test. One term of typing or concurrent enrollment in typing.

9.722 Advanced Shorthand (2 Class, 2 Lab Hrs/Wk) Term Units 3

Individual units of study for use of those desiring to extend their present shorthand ability. Each unit will be made up of two sections (1) general revue and (2) individual unit material. Individual units are (1) dictation speed development, (2) transcription proficiency (3) specialized dictation, and (4) shorthand note reading development.

9.920 Basic Clothing Construction (3 Hrs/Wk) Term Units 1

This course is designed for homemakers who wish to learn the basic techniques of sewing and for those who are interested in improving and learning new methods. The course covers fabric selection, simple pattern alteration, selection and use of equipment pressing techniques, as well as the basic techniques of clothing construction needed to enter the more advanced classes. Projects include apron, blouse, skirt and dress.

9.922 Basic Fitting and Shirtmaking (3 Hrs/Wk) Term Units 1

The course covers techniques for making a basic dress from percale for use as a fitting shell. These garments are then used as a guide in drafting a basic pattern of pellon, which is then used as a guide for making perfectly fitted clothes and used as a base for creating original designs. Construction of a man's wool shirt or jacket is also included in the course.

9.923 Children's Clothing (3 Hrs/Wk) Term Units 1

This course is designed for homemakers who wish to increase their general sewing skill and gain more experience and confidence in their sewing abilities before going on to the more advanced courses. Construction of children's sleepwear, girls' dresses, garments of nap fabric, boys' slacks, various neckline and sleeve finishes for children's garments are covered in this course.

9.924 Tailoring a Coat (3 Hrs/Wk) Term Units 1

This course is designed to give students better knowledge of tailoring techniques, experience in working with heavier wool fabrics and lining materials. Instruction in specific coatmaking techniques are included. Some of the items covered are: interfacing a cut-on facing, lining a garment with raglan sleeves, making and applying a notched collar, slot or modified welt pocket and tailored buttonholes.

9.925 Tailoring a Suit (3 Hrs/Wk) Term Units 1

This more advanced course in tailoring presents the techniques in making a suit. Some techniques are repeated learnings from dressmaking and Tailoring a Coat. Included is a more advanced method for setting in sleeves, separate front facing, cuffs, shoulder shapes, linings and walking pleats.

9.942 Home Furnishing and Decorating (3 Hrs/Wk) Term Units 1

This course covers the fundamentals of home furnishing and decorating, including the use of design, color, texture, space and form. The selection and use of floor coverings, window treatments, wall finishes, furniture, lighting, and accessories are all studied so the homemaker can evaluate and improve her own home in terms of comfort, convenience, beauty, and suitability to the individual needs.

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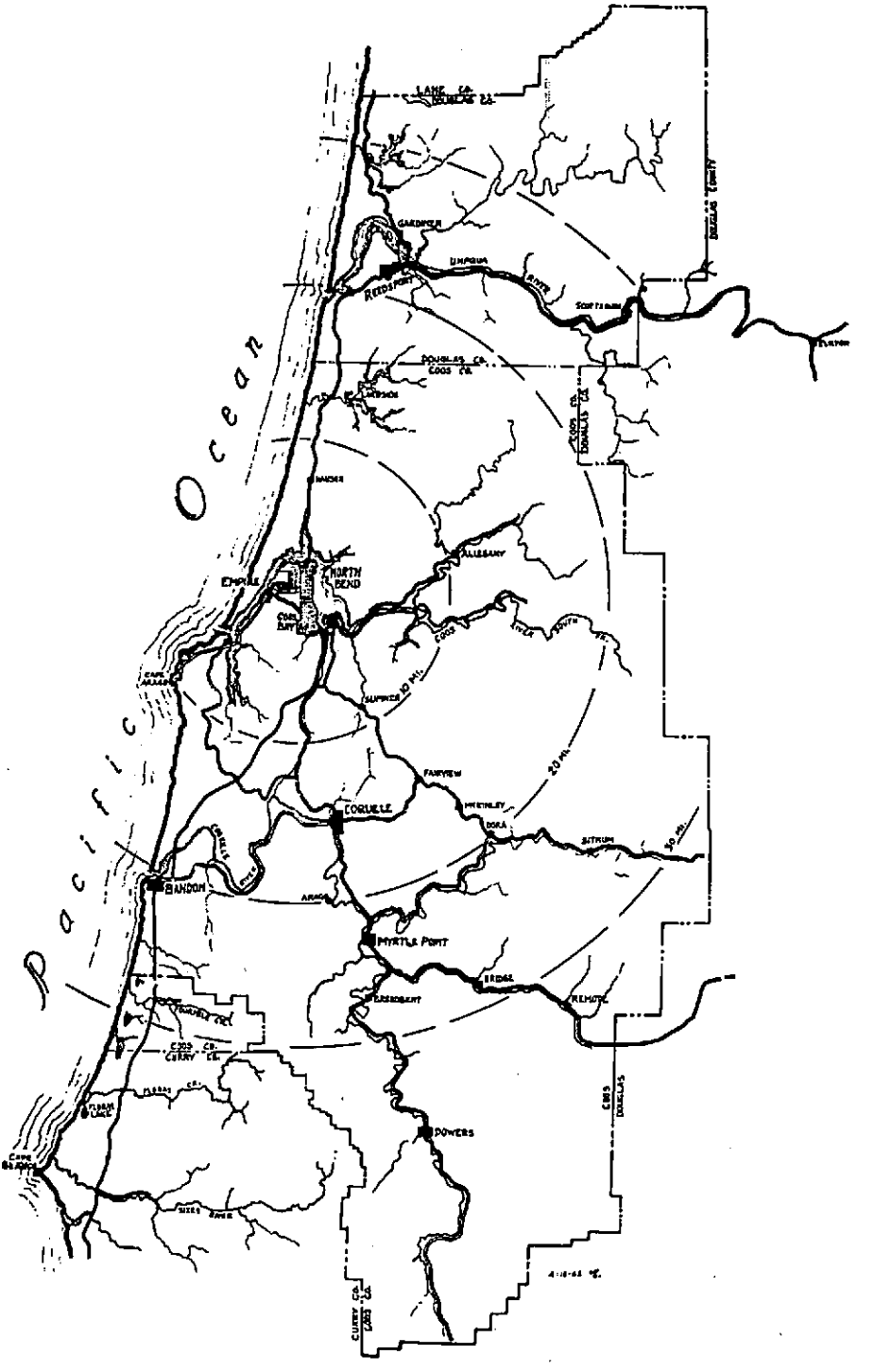

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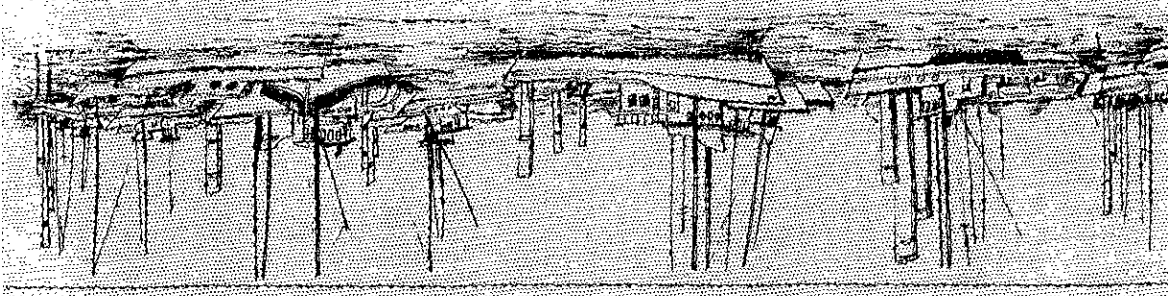

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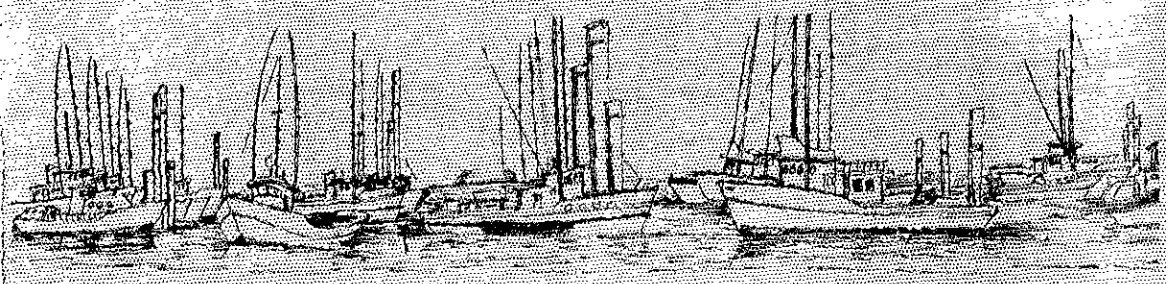

APPLICATION FOR ADMISSION

SOUTHWESTERN OREGON COLLEGE

P. O. BOX 518, EMPIRE STATION, COOS BAY OREGON 97421

NAME _____
Last Name First Name Middle Initial

MAIDEN NAME _____ SEX _____ TELEPHONE NO. _____

PERMANENT LEGAL ADDRESS _____
Number Street City County School Dist. State

LOCAL ADDRESS IF DIFFERENT _____
Number Street City Community How Long There

PLACE OF BIRTH _____ DATE OF BIRTH _____ AGE _____

VETERAN? Yes_____ No_____; U.S. CITIZEN? Yes_____ No_____.

MARRIED? _____ NO. DEPENDENTS _____ HUSBAND OR WIFE'S NAME _____

MINOR STUDENTS MUST LIST PARENTS OR GUARDIAN; OTHERS LIST NEXT OF KIN.

Father or Guardian	Street or Box	City & State	Occupation
Mother or Guardian	Street or Box	City & State	Occupation
Next of Kin	Street or Box	City & State	Occupation

HIGH SCHOOL

SCHOOL	LOCATION	DATE OF GRADUATION

COLLEGES PREVIOUSLY ATTENDED

NAME	LOCATION	DATES FROM Month, Year	DATES TO Month, Year

I have ☐, have not ☐, requested that College Entrance Examination Board Scholastic Aptitude and Achievement test scores be sent to the college.

I have requested a transcript of my record sent to Southwestern Oregon College from the above schools on _____. (High School senior send after graduation).

I am applying for admission for training as a Practical Nurse. ☐ Yes ☐ No.

I hereby apply for admission as a full-time_____, part-time_____, student in Southwestern Oregon College for the _____ term starting in the month of _____, 19_____.

In order to complete registration, students must file transcripts of high school courses and previous college courses with the Registrar's office. All documents become the property of the college.

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