# COLLEGE OF THE DESERT



CATALOG
1973 \* 1974

#### COLLEGE OF THE DESERT

A California Public Community College

## CATALOG and ANNOUNCEMENT of COURSES

## Twelfth Year

Volume XII No. 1 1973-1974

43-500 MONTEREY AVENUE PALM DESERT, CALIFORNIA 92260 TELEPHONE (714) 346-8041

## ACADEMIC CALENDAR 1973-1974

#### **FALL SEMESTER 1973-1974**

June 25	Last day to apply for placement examinations			
July 21	Placement examinations (8:00 a.m. — 2:00 p.m.)			
August 15	Last day to apply for admission			
September 3	Labor Day — Holiday			
September 4, 5, 6	Advising and registration			
September 7	No classes			
September 10	Observance of Admission Day — Holiday			
September 11	Classes begin			
September 18	Last day for full-time students to register or add courses			
October 15	Deficiency report due			
October 20	Placement examinations (8:00 a.m. — 2:00 p.m.)  (Applications must be made prior to September 18)			
October 22	Observance of Veterans Day — Holiday			
November 13	Mid-semester grades due			
November 22, 23	Thanksgiving Vacation			
November 27	Last day to withdraw or drop courses without responsibility for grades			
December 8	Placement examinations (8:00 a.m. — 2:00 p.m.) (Applications must be made prior to November 2)			
December 24 —				
January 4	Christmas Vacation			
January 7	Classes resume			
January 10	Last day to apply for admission for spring semester			
January 14-18	Closed week to all activities			
January 21-24	Fall semester final examinations			
January 24	Fall semester ends			
January 25	No classes — Semester break			
	Spring Semester 1974			
January 28, 29, 30	Advising and registration			
January 31	Classes begin			
February 7	Last day for full-time students to register			
	or add courses			
February 12	Lincoln's Birthday — Holiday			
February 18	Observance of Washington Day — Holiday			

February 23	Placement examinations (8:00 a.m. — 2:00 p.m.)  (Applications must be made prior to January 18)			
March 11	Deficiency report due			
April 5	Mid-semester grades due			
April 8-12	Spring Vacation			
April 15	Classes resume			
April 24	Last day to withdraw or drop courses without responsibility for grades			
April 27	Placement examinations 8:00 a.m. — 2:00 p.m.) (Applications must be made prior to March 22)			
May 27	Observance of Memorial Day — Holiday			
May 28-31	Closed week to all activities			
June 3-7	Spring semester final examinations			
June 7	Commencement			
June 7	Spring semester ends			
	SUMMER SESSION 1974			
June 15	Placement examinations (8:00 a.m. — 2:00 p.m.) (Applications must be made prior to May 10)			
June 17	Registration and classes begin			
June 19	Last day to register or add courses			
July 4	Independence Day — Holiday			
July 8	Last day to withdraw or drop courses without			
	responsibility for grades			
July 26	Summer session final examinations			
July 26	Summer session ends			

#### SUMMARY OF SCHOOL DAYS

Fall Semester		Spring Semester		
1973		1974		
September	17	January	4	1
October	22	February	18	
November	20	March	21	
December	15	April	17	
January	<u>14</u>	May	22	
	88	June	_5	
			87	
		Total:	175	

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## **ADMINISTRATION**

#### **BOARD OF TRUSTEES**

The members of the Board of Trustees for the College of the Desert are elected by the people of the Coachella Valley Junior College District for a term of four years. The present Board consists of the following persons:

- John F. Outcault, Palm Desert. Appointed 1962 to fill unexpired term of William Cook, resigned. Clerk of the Board 1964 to 1968. Vice-President of the Board 1968 to 1972. Re-elected President of the Board July, 1973. Term expires 1977.
- Mrs. Helen Staley, Palm Springs. Appointed 1961 to fill unexpired term of William A. Mason, deceased. Clerk of the Board 1968 to 1973. Elected Vice-President of the Board July, 1973. Term expires 1975.
- John McFadden, Cathedral City. Elected Clerk of the Board July, 1973. Term expires 1977.
- Don H. Mitchell, Indio. Elected 1958. President of the Board 1958 to 1964. Term expires 1975.
- Raymond R. Rummonds, Indio. Elected 1958. President of the Board 1968 to 1972. Term expires 1975.

#### OFFICERS OF THE COLLEGE.

F. D. Stout, President and District Superintendent Edwin T. Ingles, Dean of Instruction M. W. Ellerbroek, Dean of Business Services

## **GENERAL INFORMATION**

#### **OBJECTIVES**

College of the Desert, a two-year, public institution of higher education created by and for the people of its community, is dedicated to the concept that individual talent and integrity constitute the nation's most valuable resources and should therefore be developed and protected to the fullest possible extent. Accordingly the College has established the goal of providing full educational opportunity for the youth and adults of its community, and has instituted the corollary requirement of high standards of performance on the part of all who participate in its benefits.

Toward the end of realizing its objectives, the College strives for a well conceived curriculum, rich in content and broad in scope, a superior staff capable of outstanding teaching, an environment conducive to learning, library resources and laboratory equipment to facilitate study, emphasis upon independence of thought and action as essential ingredients of a functioning democracy, and the development of value judgments and self-discipline as the sine qua non of education. It is expected of all students that they develop competence in the fundamental processes of reading, writing, speaking, listening and computation; an appreciation of the scientific method in the solution of problems; an awareness of the unique values of our American heritage, including our democratic way of life and the primacy of moral and spiritual concerns; a sense of the inherent responsibilities of citizenship; and an insistent desire to become and to remain vocationally competent. It shall further be incumbent upon all students to manifest their respect for free educational opportunity by reciprocal behavior in the form of regular attendance, exemplary conduct, and diligent application of effort to the end that each may improve himself and therefore his opportunity to contribute to society in a degree commensurate with his capacity.

More specifically, the College curriculum is organized around three major categories of goals:

#### 1. Academic Preparation for Advanced Study

As an integral unit of the California tri-partite system of public higher education, College of the Desert is prepared to meet its obligation to provide lower division education leading to upper division majors in the four-year colleges and universities of the state and nation. It aspires to do this in such a manner that students may transfer without loss of time or credit or scholarship standing virtually regardless of their choice of major.

#### GENERAL INFORMATION

#### 2. Occupational Training

For those students desiring to complete an occupational curriculum within two years, the College will offer technical training in all fields where promise of student enrollment justifies the necessary expenditures for facilities and staff. Individual courses will be offered on the same principle in those areas where a full curriculum cannot be justified. In both instances the College's aim will be vocational competence for its trainees; also a corollary competency in citizenship.

#### 3. General Education

The College strives to cultivate attitudes and impart knowledge and skills essential to effective living for all students.

#### HISTORY

The Coachella Valley Junior College District, the legal birth certificate for College of the Desert, was approved on January 21, 1958 by the voters of Palm Springs Unified School District and the Coachella Valley Joint Union High School District by a majority of approximately ten to one.

More than ten years of study and planning by the governing boards of the two districts, in cooperation with the State Department of education, preceded the election through which the College was born.

On April 15, 1958 the initial five member Board of Trustees was elected from a score of candidates. On July 1, 1958 the elected Board members were officially seated and the new District thus became "effective for all purposes."

The Board and a limited administrative staff spent three years studying junior college education, and planning curriculum, buildings, and policies, before contracts were let in the summer of 1961 for actual construction of the initial nine buildings on the 160 acre site at Monterey and 44th Avenues in Palm Desert. The College's first students were received in the fall of 1962.

In the fall of 1966 the voters of the Morongo Unified School District elected to join the Coachella Valley Junior College District. The area comprises the communities of Morongo, Yucca Valley, Joshua Tree, Twentynine Palms, and Twentynine Palms Marine Base.

#### ACCREDITATION

The College of the Desert is accredited by the Western Association of Schools and Colleges, which is the official National Accrediting Agency for this region.

#### **FACILITIES**

The campus of College of the Desert is a 160 acre tract in Palm Desert at Monterey and 44th Avenues. Although it is masterplanned for 2500 full-time students, the eighteen buildings completed to date will accommodate conveniently about 1800 regular students and 3500 part-time students and adults.

All buildings are of concrete and steel, designed for permanence, utility, and beauty, but also planned for flexibility to accommodate temporarily some categories of specialized instruction which will in due time justify specialized buildings.

The Library, designed to occupy the focal center of the campus, and thus planned in size, esthetics, and function to justify that location, was omitted from the first increment of buildings for financial reasons. However as a result of a second bond election, the library is now a reality.

Other buildings are designed in groups according to function. The Campus Center group is composed of three buildings: Administration, Dining Hall, and a Student Center. The Science group comprises in the first phase a Laboratory Building and a Lecture Hall. The Liberal Arts Building is the first of a classroom group which will ultimately house the humanities and social sciences. The Health and Physical Education group is composed of a gymnasium, a locker-shower unit, a shallow pool for swimming, a deep pool for diving, and six tennis courts. Three technology buildings house varied laboratory units for courses in trades, technology, agriculture, and engineering. An agricultural building, and a related greenhouse and lathhouse accommodate other classes and laboratories in ornamental horticulture and general agriculture. A Nursing Building was completed in 1968, and a Business Building in 1969. Warehouse and maintenance buildings are located in the campus date garden. In this area also are Temporary Classroom Buildings which house the Learning Laboratory and some aspects of the programs offered by the Music and Art Departments. A campus residence for the president's family was included with the site as purchased. Bleachers to seat 1,000 have been completed and a playing field is lighted.

#### **EVENING CLASSES**

Two types of classes are scheduled in the late afternoon and evening, the Extended Day Classes and the Classes for Adults.

Extended Day Classes. Classes in this program are made up from courses listed in the regular catalog which are scheduled in the late afternoon or evening for the convenience of students who work part time or adults who wish to enroll in the regular transfer or occupational courses. Extended day courses parallel the day courses in prerequisites, course content, time devoted to preparation of

#### GENERAL INFORMATION

assignments, and examinations. These courses carry credit identical with the day courses, but instructors, on occasion, may modify their methods and assignments in recognition of adult problems or points of reference.

Classes for Adults. These classes make up part of what is coming to be known as the Community Service Program. Such a program consists not only of classes for adults, but seminars, lecture series, recitals, conferences, institutes, and workshops are included as a means of serving the people of the College District. This program is encouraged vigorously, partly in recognition that education is a life-long process, and partly because of the demonstrated value of courses for adults in rendering service to the community.

With the exception of classes leading to a high school diploma, classes for adults are not part of any curriculum, but are offered in response to a demonstrated demand to meet a specific community requirement. They do not carry credit toward a degree or transfer requirement.

Regular students are not excluded from adult classes. Actually such "repair" or remedial courses as are needed in English, mathematics and other selected subjects are offered in the adult program for the purpose of attempting to correct college preparation deficiencies, and these courses do not carry academic credit.

Any individual or community group desiring to initiate an adult class or desiring to enroll in one should contact the coordinator of the community service program at any time during the year. Adult classes may be arranged to start or terminate at any time during the calendar year. The office of counseling and guidance maintains a day and evening schedule in order to make its services available to all students in extended day and adult classes.

#### COUNSELING AND GUIDANCE

Many students need assistance in occupational and educational planning, and some need help in the solution of personal adjustment problems caused by transition from high school to college. To meet this need, an extensive guidance program has been organized as a function of the College.

The counseling and guidance program at College of the Desert actually begins in the high schools which the College serves. Working in conjunction with the high school counseling staff, representatives from the College visit the high schools and discuss occupational and educational plans with students who plan to attend College of the Desert. During the summer the College counselors are available to discuss the student's program with the student and his parents. Prior to registration all new students are counseled and given assistance in planning their programs.

Most entering freshmen at College of the Desert are enrolled during their first semester in a course in group guidance called Orientation to College, which meets the first half of the semester as a regular class. During this period the student is given orientation to campus life, study habits, reading techniques, and other study skills which will help him with his college work, a depth study of his interest and potential in relation to choice of a career and appropriate preparation for it.

In the second half of the semester in the Orientation to College course, the student confers individually with his general counselor. The counselor and student go over the various tests and determine their significance in relation to the individual; that is, whether the student's proposed objective is advisable in the light of his capabilities and interests. The counselor also helps the student to view his college program in the light of his individual ability.

The instructor of the student's course in Orientation to College becomes his general counselor during his entire stay at the College. In addition, an adviser who is a specialist in the student's major field, is available for consultation. The counselor and adviser arrange individual conferences, supplementing the basic guidance materials prepared in the orientation course, to help the student efficiently plan his educational program. The adviser signs the student's study list each semester prior to completion of registration.

#### STUDENT SERVICES

Health Services. The College has a nurse on duty to provide health consultation, first aid and general health services. The College employs a physician who is on call for necessary medical services.

Employment Services. A placement service is maintained for students wishing part-time employment while attending college, and for students seeking full-time employment upon graduation. Students desiring the services of the placement office are asked to file applications with that office as promptly as possible in order to receive full consideration.

Food Services. Breakfast and lunch are served each weekday in the College Dining Hall. The facilities are open evenings for snacks. Every attempt is made to keep the price of food reasonable by reducing administrative overhead. ALL WHO USE the Dining Hall are asked to assist in keeping the cost of food low by placing dishes and paper on the dishroom conveyor belt. Tables and floor areas should be left clean and tidy for the enjoyment of incoming patrons.

Housing. No housing is maintained by the College. It is necessary that students from out of the District choose their housing in person.

Bookstore. The bookstore is operated jointly by the Governing Board and the Associated Students. Profit from its operation is returned to the Student Body treasury. Books and supplies used in the classroom may be purchased at the bookstore from a list recommended by the instructors. The bookstore is a self-service store open daily except Saturday and Sunday, from 8:00 a.m. until 4:00 p.m., and 6:30 to 9:00 p.m. Monday thru Thursday.

Transportation and Parking. Students are expected to provide their own transportation to and from College. The Associated Students assist students in securing transportation by organizing "share the ride" groups. Information may be secured at the office of the Dean of Students.

Student parking is permitted in designated areas on campus provided the vehicle is properly registered and the parking permit is displayed on the vehicle in the manner requested by the College. Violators are subject to disciplinary action.

Student Center. A well-equipped, conveniently-located Student Center is provided for student use. Students are encouraged to rest and relax in the Center when their time is not needed for other activities.

#### SCHOLARSHIPS, AWARDS, AND LOANS

Scholarships, grants, and loans are available to worthy students at College of the Desert through the generosity of friends and organizations in the district. Information about such assistance may be obtained from the Financial Aids Office.

#### Scholarships

#### Listed Chronologically by Date Established

Palm Desert Woman's Club Loan Fund. (\$1000) Established the four-teenth day of May, 1962. This fund is available to academically qualified sophomore students or to graduates of the College of the Desert.

Palm City Woman's Club Loan Fund. (\$300) Established the fourteenth day of January, 1963. This fund is to be used for loans or grants at the discretion of the Dean of Students.

Palm Desert Rotary Club Scholarship Fund. (\$1000) Established the second day of February, 1963. Both loans and grants are available through this fund.

Harboe Scholarship. (\$250) Established the twelfth day of February, 1963. A grant for a student, or students, graduating in Agriculture or Agribusiness. Awarded on the basis of scholarship, character, and need for assistance in advanced study of Agri-business.

Faculty Women's Club of College of the Desert. Varying amounts to be awarded annually to deserving students. Established the nineteenth day of May, 1963. To be awarded to full-time regular students who will be returning to the College of the Desert as a sophomore.

Palm Desert Woman's Club Scholarship Fund. (\$250) Established the fifteenth day of May, 1963. To be awarded to students who: (a) have graduated from high school within the College district, (b) have attended College of the Desert during their freshman year, (c) are preparing for a teaching career, and (d) have demonstrated exemplary citizenship and satisfactory scholarship.

Alfred and Viola Hart Award. (\$1000) Established the twenty-second day of June, 1964. The income from this fund is to be used for an award to a student of Mexican, Oriental, Indian, or Negro ancestry. It is to be based on financial need rather than scholastic attainment while the student is at College of the Desert.

Palm Springs Rotary Club. (\$50) Established in the Spring of 1965. Scholarships are awarded each semester to a worthy student.

Garden Club of the Desert. (\$250) Established Fall, 1965, Awarded to a deserving student in the field of ornamental horticulture.

Mr. and Mrs. Leo E. Owens Scholarship Fund. Since their first \$3,000 gift in 1966, Mr. and Mrs. Owens have annually given as high as \$5,000 to be used at the discretion of the Scholarship Committee for loans and grants to worthy students.

Rancho Mirage Woman's Club Scholarship. (\$200) Established in the Spring of 1966. To be awarded to two students who, (a) have attended College of the Desert the previous year, (b) are capable and deserving

students, and (c) possess good citizenship. Preference will be given to residents of Rancho Mirage community.

Soroptimist Club of Palm Desert Scholarship. (\$200) Established May, 1966. To be awarded to a woman student who (a) has attended College of the Desert during her freshman year, (b) has a financial need, (c) possesses good scholarship and citizenship.

California Nurses' Association District #34. Established Fall, 1966. One \$50 award for a first-semester student accepted as full time in nursing. One \$100 award per semester for a continuing full-time nursing student.

Shadow Mountain Palette Club, Inc., Scholarship Fund. (\$250) Established in 1968. To be awarded to two students who, (a) are Art majors and have attended College of the Desert for one semester, (b) attend College of the Desert for one year after receiving the grant, (c) have average or above average artistic ability, (d) have a total grade point of approximately B, and (e) have a financial need for the scholarship.

Bank of America Community College Awards. Established 1966. Local and state competition based on scholarship, college activities, community service, and a written application. One hundred fifty dollars local winner; \$2000 state winner.

California Congress of Parents and Teachers, Inc., Patient Nursing Scholarship Fund. (\$100) Established Fall, 1968. Awarded to a second-year student in the Registered Nurse Program. The student shall assume obligation to serve in the nursing field in California for one year upon graduating.

Harry Holt and Company Scholarship Fund. (\$300) Established in the Spring of 1969. To be awarded to two second-year students involved in the general area of business who are graduates of either Coachella Valley High School or Indio High School. The students must be in financial need.

Palm Springs National Bank Scholarship Fund. (\$500) Established in the Spring of 1969. Two \$250 scholarships are available annually to College of the Desert students, one in Business Education and one in Liberal Arts.

Women's Auxiliary of the Desert Hospital Scholarship Fund. (\$1,000) Established the ninth day of March, 1970. To provide grants to full-time vocational nursing students who are residents of Coachella Valley Junior College District and enrolled at College of the Desert.

Eisenhower Medical Center Auxiliary A.D.N. Scholarship Fund. (\$5000) Established July 17, 1970. For students in the Associate Degree Nursing Program who qualify for, and continue to meet, the A.D.N. standards. In all cases determination of need must be made.

Pearl McCallum McManus Scholarship Fund. Earnings of approximately \$2,500 annually from sale of property given by the McCallum Desert Foundation, established by Mrs. McManus in her will. To be awarded to deserving vocational students beginning 1972.

Peter A. Marx Memorial Scholarship Fund. Established August, 1972. Earnings of approximately \$100 annually from interest on permanent fund. To be awarded yearly to a College of the Desert student who is majoring in music.

Thomas Arthur Davis Memorial Scholarship Fund. (\$700) Established September, 1972. Two scholarships of \$350 each to be awarded annually to worthy students in financial need. Donors: Parents, Charles and Athor Davis.

Jerry Codekas Memorial Scholarship Fund. Established November, 1972. Approximately \$50 in interest earnings from \$1100. Awarded yearly to a student who transfers from College of the Desert to a four-year institution.

Dr. Peter William Dykema Memorial Scholarship Fund. (\$6,000) Established November, 1972. Interest of approximately \$300 to be awarded yearly to a music student chosen by a committee of the music faculty and Mrs. Helen Dengler, donor.

College of the Desert French Scholarship. (\$50) Established December 1, 1972. Awarded to students of French showing high academic potential or performance as well as need. Need not major in French but must have at least one semester in French at College of the Desert.

Bob Hope Desert Classic Scholarship Fund. (\$5,000) Established January, 1973. Income approximately \$300 annually to vocational students only, who: (1) Have record of good citizenship, (2) Can demonstrate financial need, and (3) Meet adequate scholastic achievement as specified by the Scholarship Committee.

Border Patrol Wives' Scholarship Fund. Established January, 1973. To be awarded to second-year law enforcement student who: (1) Has demonstrated exemplary citizenship and is a citizen of the U.S.A., (2) Has a B average the first semester and will complete 30 units by the end of two semesters, (3) Has financial need, and (4) Who accepts no other scholarship. One hundred dollars renewable each semester upon successful completion of 15 units per semester. Must be a resident of the College of the Desert district.

F. X. McDonald, Jr. — Vin Riley Music Scholarship Fund. (\$1,000) Established May, 1973. Interest earned annually from this fund to be used to help a deserving Voice, or Piano, student defray his expenses in the College of the Desert Music Department.

Velma McCall Perpetual Scholarship. (\$1,000) Established in May, 1973 in her honor by the Faculty Women's Club of College of the Desert. Earnings from the Principal Sum shall be awarded annually to a deserving student.

Several other scholarships and loans not administered by College officials are available to deserving students upon application.

#### Law Enforcement Education Program

Loans to full-time students majoring in law enforcement and grants to in-service law enforcement personnel are available. Applications and specific details on these programs can be obtained at the Financial Aids Office.

#### Long-Term Loans

Federally Insured Student Loans. These long-term, low-interest federal loans up to \$1,000 per year will be made by banks and credit unions and provide deferred payment and interest until graduation or the termination of higher education.

National Defense Student Loan. Loans up to \$500 per semester are available if the borrower is: (a) a full-time student, (b) in need of the amount of the loan to pursue his course of study, and (c) capable of maintaining good standing. Special consideration will be given to students whose majors are in teaching, science, mathematics, engineering, or modern foreign language.

#### Emergency Loans (Short-Term)

Indio Rotary Club Student's Emergency Loan Fund. (\$3,000) Established the third day of October, 1962.

College of the Desert Faculty Women's Club Emergency Loan Fund. (\$475) Established the twenty-first day of September, 1966.

California Congress of Parents and Teachers, Inc., Emergency Loan Fund. (\$500) Established in March, 1967.

Soroptimist Club of Coachella Valley Emergency Loan Fund. (\$750) Established the sixteenth day of June, 1964.

These emergency loan funds are available to responsible and worthy students who are in temporary need of financial assistance for educational purposes while attending College of the Desert. Short-term (no-interest) loans in amounts up to \$100 will be made.

#### Grants

Economic Opportunity Grants. UNDERGRADUATE students with EXCEPTIONAL FINANCIAL NEED, who require assistance to attend College of the Desert, will be eligible. The federal grant ranges from \$200 to \$1,000 an academic year, and can be no more than one-half of the total assistance given the student.

The grant is not a form of loan and does not require repayment. In order to be and continue to be eligible for such a grant, a student must maintain a fully enrolled status and satisfactory grades. The grant is awarded for a maximum of four years or until termination of undergraduate status. The grant may be adjusted if the student's financial need changes.

#### Eisenhower Medical Center Auxiliary Grants

Students majoring in nursing who are eligible for Economic Opportunity Grants may receive matching assistance up to \$500 a year under this program. The student must be recommended by the nursing department for consideration.

#### McManus Vocational Grant

These funds are available on an annual basis to vocational students maintaining at least a C average in their vocational classes. Awards of \$200 a year are used to match Economic Opportunity Grants. The student must be eligible for an Economic Opportunity Grant before being considered.

#### STUDENT ACTIVITIES

Associated Students. The opportunity for self-government has been extended to the students of College of the Desert by the Governing Board and the Administration of the College, in order to promote and direct student activities which stimulate the intellectual, physical, social, and moral life on the campus, and provide an expanded educational and social life for all students. The Associated Students of College of the Desert is the official organization of student government. It includes all enrolled students who purchase student body membership cards. Membership is required for participation in all student activities and for use of student equipment. Student body fees support all activities of the Associated Students organization.

The administration of the Associated Students' business is to be carried on by elected executive and legislative departments, together with faculty advisers. Any member of the Associated Students is able to bring matters of importance to the attention of these departments and is always welcome at meetings.

The Associated Women Students is a supplementary organization which coordinates women's activities on the campus.

The Associated Men Students coordinates similar functions among the men of the College.

Club Organizations. Social, honorary, service, and special interest clubs contribute actively to the program of the College. All clubs have faculty advisers or sponsors. Clubs are organized under the supervision of the Office of Dean of Students, and additional detailed information may be obtained at that office.

The Women's Recreation Association provides an opportunity for athletic competition with representatives from other colleges and universities, promotes good sportsmanship, and furthers recreation and sports. W.R.A.

is open to all women on campus who hold ASCOD cards and who are interested and would like to participate in the sports offered.

Athletics. College of the Desert is a member of the Desert Conference for all sports except swimming. Intercollegiate athletic competitions are initiated in major and minor sports as feasible from the standpoint of student interest and enrollment.

Eligibility rules for intercollegiate competition are prescribed by the Athletic Code of the California Junior College Association. Students who plan to compete in athletics should establish their eligibility well in advance of the opening of the season.

Cultural Activities. The various academic departments supplement their regular instructional activities by sponsoring extra programs, open to students and the public, which make important contributions to the cultural life of the entire community.

#### ACADEMIC REGULATIONS COMMITTEE

Because it is not possible to develop academic regulations that apply equally and fairly to all students under all situations, an Academic Regulations Committee composed of several faculty members has been designated to review and take action on students' requests for waiver or modification of college academic regulations.

Petitions for such privileges must be submitted through the Office of the Dean of Students.

#### CLASSIFICATION OF STUDENTS

Freshman: A student with less than 30 units of college credit.

Sophomore: A student who has completed 30 or more units of college credit

Post-Graduate: A student who has completed all graduation requirements and has enrolled for further study.

Full-Time Student: Student enrolled for 12 or more units.

Part-Time Student: Student enrolled for less than 12 units.

Adult Student: Student who has attained his eighteenth birthday and who has enrolled in less than 10 class hours.

Special: A student who is not a candidate for transfer or graduation, or who is unable to meet entrance requirements.

Matriculated: A student who is a candidate for transfer, graduation, or a certificate, and has met the entrance requirements.

#### UNIT OF CREDIT

The term "unit of credit" or "semester unit" is a measure of time and study devoted to a course. Each hour of a regular class period per week, or three hours per week of a laboratory session for one semester, is considered one unit. Many courses are made up of a combination of regular class sessions and laboratory sessions. Students are not permitted to audit courses.

#### **GRADING SYSTEM**

The results of the student's work in each course are reported to the Registrar in scholarship grades, as follows:

A, Excellent; B, Good; C, Fair; D, Passing; F, Failed; W, Withdrawal; WF, Withdrawal Failing; and I, Incomplete.

The designations P "passed" and NP "not passed" may be used in reporting the results of certain courses recommended by the curriculum committee.

An "incomplete" must be made up during the following semester with the consent of the instructor, without repetition of the course, by passing a further examination or by performing other tasks required by the instructor.

Grade F denotes a record so poor that it may be raised to a passing grade only by repeating the course. (See page 19, Withdrawal.)

Grade W indicates approved withdrawal from a course, provided the student was passing at the time of withdrawal; otherwise the student's record for such withdrawal is reported as WF.

#### **GRADE POINTS**

The College of the Desert uses the same system of grade points used by most colleges and universities in the state to give an overall appraisal of the student's level of achievement.

Semester grades are assigned grade points as follows:

Α	4 grade points per unit earned
В	3 grade points per unit earned
C	2 grade points per unit earned
D	1 grade point per unit earned

Semester marks with no assigned grade points are as follows: F, I, P, NP, W, and WF.

Grade Point Average. The total grade points accumulated by a student are divided by the total number of units attempted and the quotient is called the student's grade point average. After each semester of work both the units attempted and the grade points are added to the student's previous record in computing the total or cumulative point average.

#### **DEAN'S LIST**

Students earning 12 or more units in a semester with a grade point average of 3.50 or better are cited on the "Dean's List" which is the highest academic honor in the College.

#### HONOR ROLL

Students earning 12 or more units in a semester with a grade point average between 3.0 and 3.49 are listed on the "Honor Roll."

#### ACADEMIC PROBATION

Students having a GPA below 2.00 or C either for semester or cumulatively are automatically on probation (unless subject to disqualification). Students on probation are subject to the following restrictions:

- 1. They may have the amount of course work limited.
- 2. They may forfeit receipt of financial aid from the College.
- 3. They may be dismissed from classes at any time unsatisfactory attendance or performance occurs.

#### DISQUALIFICATION

Disqualifications occur when a student either, (a) maintains less than 2.0 GPA for two consecutive semesters, or (b) falls below deficiency tolerances listed below. Most disqualifications occur only after the student has attempted at least 15 units.

Deficiency Tolerances. Students whose cumulative grade point averages fall below the following standards will be disqualified:

			GRADE POINTS
Units Taken	GPA	GRADE POINTS	Below 2.00
15	1.00	15	-15
20	1.50	30	-10
30	1.70	51	- 9
40	1.80	72	- 8
50	1.90	95	- 5
62	2.00	124	

Transfer students from other schools will not be accepted at College of the Desert when their academic records are below these tolerances, or when they have been disqualified from the previous college or university.

#### SCHOLARSHIP REPORTS

Students are notified of deficiency in scholarship at the end of the fifth week of each semester. Failing students will be referred to advisers for program adjustments when feasible. At the close of each semester grade reports are sent directly to the student. However, the Registrar will send grade reports to parents upon request.

#### FINAL EXAMINATIONS

Final examinations are obligatory in all courses except those specifically designated as requiring special treatment in lieu of final examination. All

examinations will so far as practicable be conducted in writing, and a maximum time will be assigned beforehand for each examination.

#### CREDIT BY EXAMINATION

Provision is made whereby a student, while registered in the College and in good standing, may under certain conditions take examinations for credit either (a) in courses offered in the College, without formal enrollment in them, or (b) in subjects appropriate to the student curriculum but not offered as courses by the College. The results of such examinations, with grades and grade points, are entered upon the student's record in the same manner as for regular courses of instruction.

Some specific provisions are as follows:

- 1. Course and unit credit by examination is allowed.
- 2. A letter grade for the course is given as though the student completed the course normally. Likewise the student who fails the examination receives an F for the course which is recorded on his transcript.
- 3. The maximum credit allowable by examination is 10 semester units.
- 4. College of the Desert will accept credit that was granted by examination at other colleges, but such credits will be included in the maximum allowed by examination.
- 5. The minimum residence requirement prior to taking examination for credit is 12 semester units.

Students desiring to challenge a course by examination should submit a petition to the Academic Regulations Committee. The petition should be endorsed by the student's adviser and the instructor who would be giving the examination.

#### REPETITION OF COURSES

A student who receives a grade of D or lower may repeat the course and receive a new grade and grade points appropriate to that grade; however, the listing of the original grade must remain as part of the permanent record. The units will count only once toward graduation; however, all units attempted will be included in computing the grade point average.

A student need not repeat a course in which he has failed unless the course is a prerequisite to another course or is required for graduation or transfer.

#### CHANGE OF PROGRAM

A change of program includes the following: dropping a class, adding a class, adding or reducing units to a class for which the student is already registered, or changing sections of the same course.

A student is expected to plan his schedule carefully with the aid and approval of his adviser and then to make a vigorous endeavor to maintain it throughout the semester. Program change applications must be initiated with the student's adviser. The student must attend all classes in which originally enrolled until the requested change is officially authorized.

To be official, all program changes must be filed by the student in the Registrar's Office.

#### WITHDRAWAL

Official Withdrawal. The student is held accountable for every course for which he has registered. To become official, any withdrawal from College or withdrawal from a class must be made by application properly completed and filed in Registrar's Office; otherwise the student will receive a grade of F for the course.

Unofficial Withdrawal. This occurs when a student stops attending one or all classes without filing the proper applications for withdrawal within the deadlines established for official withdrawal. A student unofficially withdrawn from class or from College will receive a grade of F in all courses from which he unofficially withdraws. When an instructor is convinced that a student is persistently neglecting the work of, or attendance in, a course, a request that such student be dropped from the class may be made by filing an official notification with the Dean of Students. In such cases, when dropped, a grade of F will be recorded.

Withdrawal Dates and Penalties. A student in good standing may arrange with his adviser to withdraw officially from College or from a class by the end of the tenth week of classes; a grade of W will be recorded upon his permanent record for each class from which he officially withdraws. If he withdraws after the tenth week, either a W or a WF will be recorded, depending upon whether he is passing or failing the course on the date of making application for withdrawal.

#### TRANSCRIPT

An official transcript of the student's record may be obtained from the Office of the Registrar by written application. Transcripts sent directly from the College to the destination requested by the student are official. Transcripts given to the students are unofficial. A fee of \$1.00 per transcript will be charged in excess of two transcripts.

#### STUDENT CONDUCT

When a student enters College of the Desert, it is taken for granted by the College authorities that he has an earnest purpose and that his conduct will demonstrate the validity of this assumption. If, however, he should be guilty of unbecoming conduct or should neglect his academic duties, the College authorities will take such action as in their opinion the particular offense requires. The degree of College disciplinary actions are: (a) informal reprimand, (b) formal reprimand, (c) administrative probation, (d) a definite period of suspension, (e) an indefinite period of suspension, and (f) expulsion.

#### STUDENT RESPONSIBILITY

Each student is responsible for compliance with the regulations printed in this catalog and with other official notices distributed throughout the campus or posted on bulletin boards.

#### CLASS ATTENDANCE

A student is expected to attend all sessions of the classes in which he is registered. It is the student's responsibility to contact instructors regarding any absence incurred. Unexcused absences in excess of the number of units for the class may result in the instructor dropping the student from the class.

The acceptance of an excuse for absence other than illness or official leave of absence is at the discretion of the individual instructor. When absences are excused due to personal illness, or to serious illness or death of a member of the student's family, or to a field trip, or to an authorized absence in behalf of the College, all work assignments to be made up must be described by the instructor to the student in advance of the absence when possible. It is the student's responsibility to make up all class work missed to the satisfaction of the standards for the course.

#### LEAVES OF ABSENCE

A student who has need to withdraw for a short time, but who wishes to retain his status in classes and resume work before the end of the current semester, should apply for a Brief Leave of Absence, which expires on a definite date. If the student must depart suddenly, as in a family emergency, he should write the Dean of Students as soon as possible requesting a leave to be away from classes. Brief Leaves also may be issued upon recommendation of the student health service in cases of illness. A petition for a Brief Leave of Absence may be secured from the Office of the Dean of Students.

No excuse for absence will relieve a student from the need to complete all work in each course to the satisfaction of the instructor. For any College exercise other than final examination, the Brief Leave of Absence should be presented to the instructor in charge.

Leave to be absent from a final examination must be obtained by written petition to and with the approval of the Academic Regulations Committee.

#### RELEASE POLICY

The Governing Board of the College of the Desert and the College officials recognize that under certain conditions it may be desirable for students residing in the Coachella Valley Junior College District to attend junior colleges elsewhere.

The Board of Trustees of College of the Desert has established the following policy concerning releases which will prevail for the school year 1973-74:

- Students who require a college credit program which is not offered at College of the Desert may be released to attend another California junior college.
- Students may be released to attend any junior college in California which will not make a charge to College of the Desert for the attendance of the student.
- 3. The provisions of release specified above apply equally to youths and adults and to full-time and part-time students.
- 4. Release forms are available at the Office of Dean of Students.
- Students who have been granted a release to attend another junior college for one year must reapply for permission to attend for a second year.
- 6. Releases should be applied for in person at the College office, 43-500 Monterey Avenue, Palm Desert, California 92260.
- 7. It is important that the policies stated above be strictly interpreted. Deviations may be made only by written application to the Board of Trustees, stating carefully the reason for the exception.

#### LIBRARY SERVICES

The College Library serves the entire College community, including day and evening students and faculty members. As the materials center of the College, the library provides books, periodicals, pamphlets, government documents, and audio-visual materials to supplement classroom instruction and laboratory experiments. On the main floor of the new, centrally located, three-story College Library are the general book, reserve, reference, periodical, and microfilm collections; temporarily located on the mezzanine are classrooms, faculty offices, reading laboratory, and reading skills

laboratory; on the lower floor are the non-book instructional materials such as closed circuit TV, language laboratory, listening rooms, and classrooms.

In the library collection are approximately 34,000 volumes, 400 periodical titles, and 3,800 reels of microfilm. Approximately 4,000 volumes are being added annually.

Through the cooperation of the users of the library it has been possible to operate without charging fines for overdue materials.

#### Audio-Visual and Radio-Television Service

Located in the basement of the College library the Audio-visual and Broadcasting Service functions as a supplementary and enrichment service for the instruction in the classroom, laboratory and community.

The Service offers instructional aids, materials, equipment, and resource personnel to day and evening students, faculty, and public school personnel on a limited basis.

It performs a variety of services including film and videotape projection, opaque and transparent material projection, sound reinforcement, radio and television recording and reproduction, still, motion picture, and graphic arts, instructional materials, preparation laboratory, and stockroom. This service is also in charge of the dissemination of instructional and educational materials broadcast over radio and television and the maintenance of all recording, reproducing, sound, projection, and electronic equipment on campus.

Housed in the Audio-visual and Radio-Television Service Center are:

- A 24-station listening (language) laboratory complete with individual tape recording facilities.
- 2. Three individual study-listening rooms equipped with stereophonic recording and playback capabilities.
- 3. Three small group study-listening rooms equipped with stereophonic recording and playback capabilities.
- A studio and control room for recording, playback, and dubbing audio and video materials.
- 5. Master control of the campus closed circuit television system.
- 6. Instructional materials preparation laboratory and stockroom.
- 7. Still picture, motion picture, audiotape, videotape, and record circulation libraries.

#### **ADMISSION**

After receipt of satisfactory credentials, the following applicants are eligible for admission:

- 1. Any high school graduate.
- Any person over 18 who has not graduated from high school who is capable of profiting from the instruction offered.
- 3. Any student with credit and an honorable dismissal from other collegiate institutions.
- 4. Any postgraduate student.

Admission of Residents of the Coachella Valley Junior College District. Students whose residence is in one of the high school districts comprising the Coachella Valley Junior College District (Palm Springs, Indio, Coachella Valley, Eagle Mountain, Yucca Valley, and Twentynine Palms high schools) are qualified to enroll at College of the Desert under the above conditions.

Admission of Students from California Districts Not Maintaining a Junior College. Students who reside in a high school district not maintaining a junior college are eligible to attend College of the Desert, but must complete a residence statement at the time of application for admission.

Students Residing in California Districts Maintaining a Junior College. Students whose official residence is in another junior college district will not be permitted to enroll in College of the Desert until a release or a permit from the home district has been received, and until they have presented evidence of acceptable living arrangements, good citizenship, and academic competency.

Admission of Out-of-State Students. High school graduates and students with advanced standing from out of state are eligible to enroll at College of the Desert provided acceptable transcripts of past achievement are presented, and when they have presented evidence of acceptable living arrangements, good citizenship, and academic competency.

Foreign Students. Foreign students are welcome at College of the Desert, but no special program has been developed for such students. To be admitted, foreign students should provide evidence of the equivalent of high school graduation, and must demonstrate by examination their proficiency in English to profit from regular college classes. Foreign students wishing to transfer to College of the Desert from other U.S. institutions are expected to complete one year of satisfactory course work at the U.S. college or university initially admitting them. In addition, they must have

presented evidence of acceptable living arrangements, good citizenship, and academic competency.

#### APPLICATION

An application blank may be obtained in person, or by writing or telephoning the Registrar's Office. Applicants should submit applications and transcripts well in advance of the beginning date of the semester for which they wish to be admitted. Those who fail to supply accurate and complete information will not be considered for admission, nor allowed to remain in attendance if discrepancies are discovered after enrollment.

All students enrolling for the first time must submit an official Application for Admission.

Entrance Requirements. A high school graduate or any person 18 years of age or over may enroll at College of the Desert. Not more than 6 units of course work may be taken for credit unless the student has:

- 1. Completed an Application for Admission prior to registration.
- 2. Submitted transcripts of all high school and college records.
- 3. Taken the college placement examinations.
- 4. Completed and submitted other required forms (for out-of-district applicants).

If accepted, the student then becomes an admitted or *matriculated* student. A matriculated student who interrupts his education for a semester must re-apply for admission.

Transcript of Record. In addition to filing the application, the student should arrange to have complete transcripts of his academic record sent to the Office of the Registrar. A high school senior should have the transcript sent after graduation. Transcripts must be mailed directly from one institution to another and cannot be considered official if they are delivered in person.

Applicants without high school diplomas may be required to demonstrate by means of examinations that they are qualified to undertake work at the college level.

No student may register until the application and complete transcript of previous high school or college work has been received. A student may not disregard his previous college record. Failure to reveal prior college attendance could lead to immediate dismissal.

Polio and Measles Immunization. No student will be admitted to College of the Desert until written evidence of immunization against polio and measles is provided as required by California law. The law does not apply to any person who has graduated from high school located in California who is seeking admission to a junior college, or to students 18 years of

age or older who are seeking enrollment in an adult school or class for adults.

Placement Examinations. All entering freshmen are required to take college placement tests prior to registration. The scores of these tests will be used in advising the student in selecting courses suitable to his academic performance and subject interests. Students with advanced standing are excused from these tests if they have completed twelve semester hours including satisfactory completion of a college course in English composition.

Probationary Entrance Program. Students who are in need of additional basic skills for projected academic achievement, on the basis of placement examinations, will be guided into an individualized probationary entrance program designed to meet the particular needs of each student. Counselors have the responsibility of counseling with these students in determining their individual programs.

The counselors, with assistance from instructors will evaluate periodically the progress of these students on individual bases.

A student who has made satisfactory progress by the end of one semester may, with the assistance of a counselor either (1) designate a major area of study and pursue study in that area under the advice of an academic adviser, or (2) remain as a counselee of the counselor in an "undeclared major" status until a major has been specified.

A student who has not met required standards of performance may be denied further enrollment in the College, except as a special status student.

Disqualified Transfer Student Program. Students who have been disqualified at other institutions are not eligible for admission to College of the Desert until at least one semester has elapsed following the semester in which disqualification took place.

Probationary Transfer Student Program. Applicants whose scholastic achievement at another college represents less than a C average may be admitted for a restricted academic program. Better than average grades on this work may allow admission to subsequent semesters. Admission on probation is a privilege granted, not a right of the applicant.

Expenses. No tuition is charged California residents at College of the Desert. Out-of-state residents and students of foreign countries will be charged a tuition fee, the amount of which will be determined annually by the State Board of Education. Military personnel and their dependents, regardless of residence, are exempt from out-of-state fees. All students should be prepared for the following types of expenditures:

- 1. Board and lodging if not living within commuting distance.
- 2. Textbooks, supplies, and special clothing, available in the College bookstore, are estimated at \$100 per year.

- Library fines and laboratory breakage costs are assessed as circumstances warrant.
- Associated Student membership fee: Full-time students, \$10.00; adult students, \$2.00.

#### REGISTRATION

A time schedule of classes is published approximately one month before each semester and summer session which contains carefully planned registration procedures.

The office of the Coordinator of Community Services will be open from 1-9 p.m., Monday through Thursday, to advise adult students.

Late Registration. Although specific days are set aside at the beginning of the semester for registration of full-time students, other students may register for something less than a full class load by reporting to the Office of the Registrar any Monday morning during the school year, as a short-term student.

- 1. Full-time Students: A full-time student (one taking 12 or more units) may register late upon the recommendation of his adviser and the approval of the Academic Regulations Committee. This may be accomplished by reducing the student's load from the normal 15-17 units to something near the minimum of 12 units, and by selecting certain classes that are more conducive to make-up work, or by registering in certain classes such as First Aid which begins at mid-semester. Any full-time student who is approved for late entrance will be required to make up all work missed.
- 2. Short-term Classes: A student who finds it impossible to register during the time designated at the beginning of the semester may enroll any Monday morning during the academic year or summer session. Such an enrollment may be accompanied by the following procedure:
  - a. Make prior appointment through the Registrar's Office for the services of a counselor.
  - b. Complete that portion of normal registration procedure to the point of being assigned to an instructor-adviser who will instruct and coordinate the assignments for the student during the remainder of the semester. Possible assignments might be:
    - (1) Registration in certain courses that start at mid-semester.
    - (2) Special tutoring in remedial courses required to correct deficiencies discovered in placement examination.
    - (3) Participation in special seminars when sufficient students of similar academic needs are discovered.
    - (4) Special tutoring for "examinations for credit" in those courses

where such is appropriate. This assignment is encouraged for the very able student.

Unit Load Limitations. A normal class load is considered to be 15-17 units, plus a class in physical education. Students working full time are encouraged to carry a reduced load. Students with advanced standing, and having a C average or better, will be permitted to enroll in 18 units plus physical education.

Students wishing to obtain a variance from the above limitations may petition the Academic Regulations Committee.

#### **PROGRAMMING**

Selection of a Major. The selection of a major is an indication of the goal toward which the student concentrates his efforts. This goal may be the mastery of a field of knowledge, the foundation for which may be found in the transfer program; or it may be the development of skills or other competencies found in the various occupational curricula in the College.

A major consists of at least 20 units of credit in a specified field of study.

American History and Institutions Requirement. Students who are candidates for the Associate in Arts degree and students who plan to obtain a bachelor's degree at another California school must during their college career, demonstrate a knowledge of American History and the principles of American institutions under Federal and State Constitutions. The requirement for the A.A. degree may be met in the following ways:

- Successful completion of one of the following courses or combination courses:
  - a. Political Science 30 (American Institutions)
  - b. Political Science 1 and History 17A
  - c. Political Science 1 and History 17B
  - d. History 17A and History 20
  - e. History 17A and History 17B
- 2. Credit by comprehensive examination in the fields of U.S. History and U.S. Constitution. Examination will be given once each year under the supervision of the Committee on American History and Institutions.

Graduation Requirements for the Associate in Arts Degree. The completion of graduation requirements does not necessarily qualify the student to transfer with junior standing to a state college or university. The A.A. degree may be earned by completing either requirement A or B below plus items C, D, E, and F.

- A. The Transfer Program (Pre-Major). Complete both 1 and 2 below:
  - 1. Complete substantially all the lower division requirements of the major listed in the catalog of the transfer institution at which the student expects to receive his four-year baccalaureate degree.
  - 2. Complete a minimum of forty units of General Education as described on page 30.
- B. The Occupational Program (Major). Complete both 1 and 2 below:
  - Complete a minimum of 20 units of the required sequence of courses in an occupational curriculum.
  - 2. Complete the following minimum General Education Requirements as follows:
    - a. Two courses in English to be selected from English 3A, 3B, 41, 51, English-Speech 1A, 1B, Speech 1 or 4, Business 30 or Technology-Reports 41. This requirement can be met also by demonstrated proficiency.
    - b. One Mathematics course or demonstrated proficiency.
    - c. A minimum of three units in U.S. History, Political Science, or a demonstrated proficiency.
    - d. One course in Reading or a demonstrated proficiency.
    - e. One course in Natural Science.
    - f. One course in Humanities.
- C. Physical Education Activity Requirement. Students must complete two semesters of physical education activity. Enrollment in an activity class is required in each of the first two semesters in which a student is enrolled in nine units or more. Exceptions are made for the following reasons:
  - 1. Over 21 years of age.
  - 2. A medical excuse (requires a physician's statement).
  - 3. Veteran with at least one year of active military duty.
- D. Unit Requirement. Completion of sufficient additional units to bring the total to at least 62.
- E. Scholarship Requirement. A cumulative grade point average of not less than 2.0 (C average) is required for graduation.
- F. Residence Requirement. At least 15 units of C or better must be taken at College of the Desert.

Transfer to Other Colleges. Even though the transfer requirements of the colleges and universities vary greatly, a student at College of the Desert, by proper planning, may complete the first two years of a college or university program and transfer to the college or university of his choice without loss of credit or time. At the 19 campuses of the California State

University and Colleges (CSUC), and the 9 campuses of the University of California, a maximum of 70 semester units earned in a community college may be applied toward the Bachelor's degree.

In general, the student planning to transfer should follow the procedures outlined below:

- Catalog. Examine catalogs of prospective colleges or universities.
  Reference copies of catalogs are available in the library. Study carefully the sections of the catalog covering requirements for admission of transfer students.
- Plan Program at College of the Desert. Certain courses are required of all transfer students and specific ones may be required for certain majors. These can be identified by consulting the different college catalogs.
- 3. Application Filing Period. A student should carefully check the dates of the application filing period, that is, the time between the first date when applications will be received and the deadline. In all cases, application early in this period is recommended.
- 4. Transcripts of Record. It is the responsibility of the student to order transcripts from all collegiate institutions attended and from all high schools attended. Transcripts must be sent directly to the college, not handled by the student.
- 5. Financial Aid. In general, a student desiring financial aid must obtain the address of the financial aids office (from the catalog), send for an application, and ultimately send transcripts of record in addition to transcripts which are sent for admission. Scholarship application blanks should be acquired early during the application period.
- 6. Letters of Recommendation and Rating Forms. Some colleges require letters of recommendation or rating forms. Since colleges often require that these be filled out by faculty members, students should get to know their academic adviser and several instructors well enough so that they can comment adequately on the students' characteristics.
- 7. Scholarship Requirements. Many colleges require higher than a 2.0 (C) grade point average. Study the catalogs carefully for all requirements.
- 8. California State University and Colleges (CSUC). Application for the fall term should be made during the month of November—10 months before classes begin. Application booklets are available by November 1st from the transfer counselor in the Guidance Center. If a student expects to enter lower division (less than 60 units), he must take either the American College Test (ACT) or the Scholastic Aptitude Test (SAT), whichever is required by the college. Students whose high school records and test scores would make them eligible

may transfer to a CSUC campus at any time providing they are in good standing and have a grade point average of 2.0 (C) in all college work. Students not eligible as freshmen may transfer when they have completed 60 semester units of approved courses with a 2.0 average. Filing multiple applications within the system of nineteen colleges is not allowed. Requirements are uniform and eligible students for whom space is not available are given the privilege of having their application and supporting documents transferred to another campus without additional fees.

- 9. University of California. All nine campuses of the University of California accept applications during the month of November for admission to the fall quarter which begins ten months later. A student who does not qualify for admission directly from high school must earn at least a 2.4 grade point average, 2.8 for non-resident students, in 56 acceptable semester units. Booklets containing application forms are available by November 1st in the Office of the Transfer Counselor. It is extremely important that community college students submit their applications early during the initial application filing period.
- 10. Independent Colleges and Universities. In general, the requirements of independent colleges and universities are similar to those of the lower division of the College of Letters and Science at the University of California. However, because of the additional unique requirements in most private colleges and universities, all prospective transfer students to these institutions are urged to check most carefully the requirements for transferring by consulting college catalogs.
- 11. Transfer Counselor. The Transfer Counselor is responsible for helping students make decisions about transferring to other colleges and universities. In his office can be found the latest available transfer information concerning the California State University and Colleges and the University of California, and many private colleges and universities. The Transfer Counselor is available throughout the academic year to help find information and answer questions that students cannot find on their own from college catalogs and other sources. Prior to seeing the Transfer Counselor, students planning to transfer to another institution should obtain a copy of the guide Planning for Transfer to Another College, available in the Guidance Center.

## GENERAL EDUCATION REQUIREMENTS FOR THE CALIFORNIA STATE UNIVERSITY AND COLLEGES

Students who wish to be certified by this college as having completed the General Education requirements for the State University and Colleges must complete courses as indicated below in each of four areas. At least

40 units total is required in General Education courses selected from the following list.

AREA I. NATURAL SCIENCES (2 courses including one lab, one course must be physical, the other biological science.)

A. One of the following biological sciences:

AgNR 35—Conservation of Natural Resources (3)

Bi 1A or 1B—General Biology (4-4)

Bi 4—Elements of Biology (3)

Bi 8-Animal Biology (4)

Bi 13—Plant Biology (4)

B. One of the following physical sciences:

A 2—Descriptive Astronomy (3)

Ch 3—Introductory General Chemistry (3)

Ch 4—Biorganic Chemistry (3)

G 1—Physical Geology (4)

G 2—Historical Geology (4)

G 10-Earth Science (3)

G 10L-Earth Science Laboratory (1)

Met 1—Descriptive Meteorology (3)

C. Special options (Ordinarily applying only to pre-majors and pre-professionals):

Bi 2A, 2B—Introductory Biology (4-4)

Bi 15—General Microbiology (3)

Bi 16—General Microbiology Supplemental Lab (1)

Bi 22A-B-Anatomy and Physiology (4-4)

Ch 1A, 1B—General Chemistry (5-5)

G 3—Elementary Mineralogy (4)

Ph 1A, 1B, 1C—General Physics (4-4-4)

Ph 2A, 2B—General Physics (4-4)

#### AREA II. SOCIAL SCIENCES (three courses required)

A. Anth 1-Physical Anthropology (3)

Anth 2—Cultural Anthropology (3)

B. Econ. 1A, 1B—Principles of Economics (3-3)

C. Geog 1—Physical Geography (3)

Geog 2-Cultural Geography (3)

Geog 5A, 5B-Economic Geography (3-3)

D. Hist 4A, 4B—Western Civilization (3-3)

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ACADEMIC PROCEDURES
     Hist 17A, 17B—United States History (3-3)
 E. Phil 8—Traditional Logic (3)
     Phil 9—Symbolic Logic (3)
        (May count in only one Area—II, III, or IV.)
     PS 1—Introduction to Government (3)
     PS 2—Introduction to Comparative Government (3)
     PS 4—Introduction to International Relations (3)
 F. Psy 1—General Psychology (3)
     Psy 2—Experimental Psychology (3)
G. Soc 1—Introductory Sociology (3)
     Soc 2—Sociological Analysis—Social Problems (3)
AREA III. HUMANITIES (three courses required)
  Student must take one from at least three of the following five sections.
A. Art 2A, 2B—History of Art (3-3)
     Art 3A—Basic Design and Color (3)
     Art 10-Introduction to Art (3)
     Art 12—Survey of Modern Art (3)
     Art 15A-B-C-Survey of Art History (1-1-1)
 B. English-Speech and Dramatic Arts
     Eng 10A, 10B—American Literature (3-3)
     Eng 11A, 11B—Survey of English Literature (3-3)
     Eng 12—World Literature (3)
     Eng 14—Shakespeare (3)
     Eng 16—Literature of the Desert (3)
     Eng 30—The Bible as Literature (3)
     DA, 1A, 1B—Acting (3-3)
     DA 5—Introduction to Theater (3)
     DA 7—The Motion Picture: History and Criticism (3)
     DA 10A, 10B—Dramatic Literature (3-3)
     DA 12A, 12B—History of the Theater (3-3)
     J1—Introduction to Mass Communications (3)
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Sp 4B—Group Discussion and Leadership (3)

Sp 2—Oral Interpretation of Literature (3)

Sp 7—Argumentation (3)

C. Foreign Languages

Fr 1, 2, 3, 4—Elementary and Intermediate French (4-4-4-4)

#### ACADEMIC PROCEDURES

- Ger 1, 2, 3, 4—Elementary and Intermediate German (4-4-4-4)
- Ital 1, 2, 3, 4—Elementary and Intermediate Italian (4-4-4-4)
- Russ 1, 2, 3, 4—Elementary and Intermediate Russian (4-4-4-4)

Span 1, 2, 3, 4, 5, 6—Elementary, Intermediate, and Advanced Spanish (4-4-4-3-3)

- D. Mus 1A, B, C, D-Musicianship (2-2-2-2)
  - Mus 2A, B, C, D—Harmony (2-2-2-2)
  - Mus 4—Counterpoint (2)
  - Mus 10—Introduction to Music (3)
  - Mus 12—Fundamentals of Music (3)
  - Mus 3A, B-Survey of Music History (3-3)
- E. Phil 6A, 6B—Introduction to Philosophy (3-3)
  - Phil 7A—History of Ancient and Medieval Philosophy (3)
    - Phil 7B—History of Modern and Contemporary Philosophy (3)
  - Phil 8-Traditional Logic (3)
  - Phil 9—Symbolic Logic (3)
    - (May count in only one area—II, III, or IV.)
  - Phil 12—Religions of the World (3)
  - Phil 14—Introduction to Ethics (3)

## AREA IV. BASIC SUBJECTS (two courses, of which one must be English)

- A. ES 1A—Composition and Reading (4)
  - ES 1B-Literature and Composition (4)
  - Eng 3A—Freshman Composition I (3)
  - Eng 3B—Freshman Composition II (3)
- B. Math 1A, 1B, 2A, 2B—Analytic Geometry and Calculus (4-4-4-4)
  - Math 3—Introduction to Mathematics (3)
  - Math 10—College Algebra (3)
  - Math 5—Trigonometry (3)
- C. Phil 8-Traditional Logic (3)
  - Phil 9—Symbolic Logic (3)
    - (May count in only one area—II, III, or IV.)
- D. Soc 3—Statistical Methods (3)
- E. Any Foreign Language listed under III, C.
  - (A course may not count in both requirements, however.)
- F. SE 1—Reading Improvement (2)

#### ACADEMIC PROCEDURES

## ADDITIONAL COURSES IN GENERAL EDUCATION

Each student must take a total of 32 units from the above four areas. Enough additional units to total 40 must be taken from the General Education Requirements.

Planning Occupational Program. The College of the Desert occupational programs are designed for the student who wishes to extend his education by completing two years of college and to prepare himself for employment at the end of that time.

Occupational programs established at the College include such specific vocations as secretary, salesman, laboratory technician, electronic technician, engineering technician, and nursing.

Other occupational and semi-professional competencies may be obtained as a result of enrollment in a combination of courses. See page 36 for a suggested list of courses to enhance employment in certain occupational fields. This chart is designed to show the student how he may combine the requirements of a vocational program with graduation requirements in order to qualify for the Associate in Arts degree from College of the Desert.

Planning for High School Completion. Although College of the Desert cannot grant a high school diploma, nor does it include high school courses in the curriculum, students over 18 years of age may, upon the recommendation of high school officials, complete their high school graduation requirements by taking adult education or college courses.

A student who wishes to obtain a high school diploma in this manner should bring to the office of Coordinator of Community Services a statement from the principal of the high school from which he desires a diploma indicating:

- 1. The subjects necessary for completion of the requirements for graduation and the number of college units in each.
- 2. Suggestions, if possible, of courses at College of the Desert which may satisfy the above high school requirements.
- 3. The total number of units required including electives.
- The acceptability of credit for courses to be taken at College of the Desert.

High school credit for courses taken at College of the Desert normally will be allowed on the basis of 10 high school semester periods for each 3-unit course and 5 high school semester periods for each 2-unit course. If courses which fulfill high school graduation requirements do not constitute a full program, the student may enroll in additional courses for college credit for which he qualifies. College courses used to meet high school requirements will not be counted as part of the 62 units required for the Associate in Arts degree at College of the Desert.

#### **ACADEMIC PROCEDURES**

In addition to college transfer courses, the College, through its *Learning Laboratory*, offers a complete day and night curriculum of high school level courses which lead to completion of the requirements for a High School Diploma. Also included are classes in preparation for the General Educational Development Test.

Upon completion of the college courses to be applied toward high school graduation, the student should request the Registrar at College of the Desert to send a transcript of his college record to the high school. The diploma will be issued in accordance with a procedure to be determined by the high school.

Notice of Intent to Graduate. A Notice of Intent to Graduate must be filed by each student who wishes to receive the Associate in Arts degree from College of the Desert. The Notice should be filed at the Registrar's office before the beginning of the semester in which the student plans to complete the requirements for graduation. Requirements may be completed during any semester, but the degree will not be conferred until the graduation ceremony at the close of the succeeding spring semester.

# COURSE RECOMMENDATIONS

Course Recommendations for Various Occupational and Professional Preparations. A student who plans a one- or two-year occupational program is referred to as an occupational student and will be required to obtain a "major" which consists of a special grouping of required courses in the area of the major or specialization. A transfer student will be required to obtain a "pre-major" which will be the specialized and general education courses required in the lower division of the proposed major at a given transfer institution.

Lists of the courses required to satisfy the major and pre-major requirements are distributed to all students at registration. Lists are also available during the year in the counselors' offices and library.

A faculty adviser is assigned for each of the occupational and professional areas listed. Students are expected to register with the aid of the adviser who can assist them in scheduling their courses each semester.

While every effort is made to keep the list up to date, the transfer student is responsible for checking and complying with the lower division requirements in the latest catalog of the college of his choice.

Some of the major and pre-major programs that can be completed at the College of the Desert are listed below. Students should inquire from advisers about any desired programs not listed.

		2-Year Career	Transfer (Pre-
Curricula	Certificate	(Major)	Major)
Accounting	×	×	×
Agri-Business	x	x	
Agriculture, General	x	x	x
Agricultural Mechanics	x	x	x
Air Conditioning/Refrigeration	, <b>x</b>		x
Architectural Drafting	x	x	
Architecture			x
Architecture-Environmental Design			x
Art		x	x
Astronomy			x
Automotive Mechanics	x	x	
Automotive Technology		x	
Bacteriology			x
Biological Science			x
Botany			x
Business Administration	х	x	x
Business Management	x	x	x
Criminology		x	

# COURSE RECOMMENDATIONS

		2-Year Career	Transfer Pre-
Curricula	<u>Certificate</u>	(Major)	(Major)
Data Processing	x	x	x
Dentistry			x
Diesel Mechanics	x	х	
Distributive Education		<b>x</b>	x
Drama		x	x
Economics			x
Electronics	x	x	-
Engineering			x
English			х
Escrow	x	х	x
Finance			х
Fire Science	x	x	x
Foreign Language			x X
Geography			
Geology			X
Health Education			x
Heavy Equipment Operation			
and Maintenance	x		x
History		x	X
Home Economics		х	X
Industrial Arts Education		x	^
Industrial Drafting	х	X	x
Industrial Education		x	•
Industrial Supervision	х		x
Industrial Technology	x	x x	x
Instructional Aide	х	x	x X
Interior Decoration			x
International Trade			x
Journalism			x
Labor and Industrial Relations			x
Landscape Architecture		x	^
Landscape Engineering		^	х
Law Enforcement	x	x	×
Librarianship	^	•	x
Library Technology	x	x	
Linguistics	^	-	х
Literature			x
Machine Shop and Metals	x	x	
Machinery Technician	^	x	x
Marketing	x	x	x
Mathematics			x
Mechanical Engineering Technology		x	
Mechanics Technician		x	
Medical Assisting		x	
Medicine			x
Metals Technology	x	x	
Meteorology			х
Ministry (see Philosophy)			x
Music			x

# COURSE RECOMMENDATIONS

		2-Year	Transfer
Curricula	Certificate	Career	Pre-
· · · · · · · · · · · · · · · · · · ·	Certificate	(Major)	(Major)
Natural Resources		x	x
Nursing		x	x
Occupational Therapy			x
Office Administration	x	x	x
Office Technician	x	x	x
Ornamental Horticulture		х	x
Parks and Recreation		x	
Pharmacy			x
Philosophy			x
Physical Education			x
Physical Therapy			x
Physics			x
Physiology			x
Plant Science		x	
Political Science			х
Psychology			x
Public Health			x
Radio-TV Broadcasting			x
Radio-TV Production:			
Acting		x	
Directing		x	
Engineering		x	x
Sales/Management		x	
Writing		x	
Real Estate	x	x	x
Recreation			x
Registered Nurse			
(A.A. Degree)		x	
Secretarial Science	x	x	x
Social Welfare		x	x
Sociology			x
Speech			x
Surveying			(1 yr) x
Teaching—Elementary			x
Teaching—Secondary			x
Theater		x	x
Turf Grass Management		x	
Veterinary Science			x
Vocational Nurse		x (1 yr)	
Welding	х	x	
Zoology			x

## CLASSIFICATION AND NUMBERING OF COURSES

There are three types of courses offered by College of the Desert:

- 1. Credit Courses. Courses numbered 1-99 are designated as "credit courses." A credit course is part of an approved educational program. The credit awarded by College of the Desert for completion of the course is accepted as completion of a portion of an appropriate educational sequence leading to an associate degree or baccalaureate degree by the University of California, the California State University and Colleges, or an accredited independent college or university.
- 2. Courses for Adults. Courses numbered above 100 are designed for adults who are not candidates for graduation and work in such courses is not applicable toward graduation. Adult courses are not listed in this catalog but will be printed and distributed throughout the district several weeks before the opening of classes each semester.
- 3. Remedial Courses. Courses designated by letters instead of numbers are remedial, refresher, or make-up type courses. They are usually required of students who must remove certain deficiencies before enrolling in specific courses in the program for graduation. No credit is given for remedial courses.

#### CREDIT VALUE

The number in parentheses after the course title indicates the number of units of credit given for the semester. The course description English 14 Shakespeare (3) would indicate that the course is one semester in duration and that 3 units of credit are available. The number of lecture and laboratory hours per week is then given. Drama 1A - B Acting (3-3) 2 Lec 3 Lab would describe the fact that the course extends throughout the year and carries 3 units of credit each semester; furthermore, it indicates that 2 hours per week are devoted to lecture and 3 to laboratory work. Where laboratory work is not indicated, the course is considered to be a lecture type primarily. The word "lecture" in the course description does not mean to imply that class discussion or participation is not an essential part of the course work.

#### **PREREQUISITES**

The prerequisites for each course as shown in the description of the course must be met before enrollment in the course will be permitted. Prerequisites stated are intended to insure that the student will have sufficient preparation to assure a reasonable chance of success in the course.

#### SCHEDULE OF CLASSES

The College reserves the right to make additions or deletions to the list of course offerings during the year, or to cancel those sections in which the enrollment is too small to justify continuance.

The Schedule of Classes each semester is the official list of courses offered.

## INDIVIDUAL STUDY PROJECT (1-3)

Available to matriculated students only.

This course can be taken in any subject area and is designed as course number 49; i.e., Business 49, Radio-Television 49, History 49, and provides an opportunity for the student to work closely with the instructor in order to encourage the student to extend his knowledge and understanding of some particular problem or topic, or to allow the student to complete a specific project. The exact nature of the individual assignment would depend upon the special interest of the student and the instructor. A maximum of six units of individual study will be accepted toward the A.A. Degree.

Forms for individual study are available in the Registrar's Office during DROP and ADD period. The instructor of an individual project shall submit Individual Study Project application through department chairman to Dean of Instruction prior to undertaking work at the beginning of the semester.

## DEPARTMENTAL SEMINAR (1-3)

Departmental Seminars may be conducted by any department. They are designed to provide an opportunity for students to work in small groups with one or more instructors. The course provides the students an opportunity to participate and interact with instructors' colleagues to extend their knowledge and understanding of some particular problem or topic within the general scope of departmental offerings which are not contained in scheduled courses. The exact nature of the individual assignments would depend upon nature of the study and topic involved, but all seminar students whould be expected to complete one or more, but are not limited to the following topics: projects, field studies, surveys, written reports, and term papers.

Seminars are an excellent means of recruiting the active and retired personnel resources in the community to work with faculty and students to extend depth, imagination, and applicability to the programs of instruction.

A maximum of six units of seminar will be accepted for the A.A. degree.

The instructor of a proposed seminar offering shall submit a Seminar Application through department chairman to the Dean of Instruction prior to advertising and scheduling a seminar.

Seminars may begin at any time during the school year for a length of time commensurate with the units of work contemplated. This is calculated roughly at 17 class hours per unit.

#### WORK EXPERIENCE EDUCATION

Work Experience Education encompasses a systematic program whereby college students, while enrolled in an occupational education program, gain realistic employment experience through part-time work performed under all of the following conditions:

- 1. The program operates as a cooperative activity between the school, the student and the employer.
- 2. The college insures that work done by students is of a useful, worthwhile nature, that specific learning experiences are beneficial to the student and that the work-activity performed is consistent with the occupational on-campus courses in which the student is enrolled. Students may enroll in one, but not both, of the work experience programs described below, in any given semester.
- 3. The student, in conference with the college and the employer, will identify specific learning objectives to be accomplished during his work experience. Successive semesters of work experience will be given credit only when new job skills and learning activities can be identified and accomplished.
- 4. The college, with the help of the employer, evaluates work done by students, assigns credit work successfully accomplished and records pertinent facts concerning the student's work. The college provides for the recording of credits on the student's college transcript for the work experience activity and related class work.

#### Work Experience, Vocational

Credit for vocational work experience may be earned at the maximum rate of four units per semester, with a maximum total of sixteen credit units. One semester unit of credit for one lecture-discussion period and an average of five hours of supervised employment per week (75 hours of work per semester unit of credit). Students accepted into the vocational work experience education program may receive both pay from the employer and college credit for their work. Vocational work experience is classified according to the occupation or occupations within which employment is secured. These classifications include, but are not necessarily

limited to, the following:

Agricultural Occupations
Distributive Occupations
Office Occupations
Trade Industrial Occupations
Technical Occupations
Apprenticeships
Public Service Occupations

## Work Experience, General

Credit for general work experience may be accrued at the rate of three credit units per semester, with a maximum total of six credit units. One semester unit of credit for one lecture-discussion period and an average of five hours supervised employment per week (75 hours of work per semester unit of credit). Students accepted into the general work experience education program may receive both pay from the employer and college credit for their work. This form of work experience is generally limited to those students who lack experience in the world of work.

# **AGRICULTURE**

The program in agriculture at College of the Desert is designed to serve both vocational and transfer students.

Agriculture courses as such primarily serve students who wish to go immediately into an agricultural occupation after graduation. The courses are designed to provide practical experience for each major offered and to fit the needs of the community.

Students who wish to prepare for four-year colleges will find not only the necessary required transfer courses in English, science, mathematics, and related subjects available to them, but also practical agricultural courses related to their eventual majors.

Students should consult the agricultural counselor to see which agricultural courses fit into their special major and program of the college to which they plan to transfer.

Curricula leading to a Certificate or Associate in Arts Degree at the College of the Desert, or transfer to a four-year college or university include:

- 1. Agricultural Business
- 2. Agricultural Mechanics
- 3. Diesel Mechanics
- 4. General Agriculture
- 5. Heavy Equipment Operation and Maintenance
- 6. Landscape Architecture
- 7. Landscape Engineering
- 8. Natural Resources
- 9. Ornamental Horticulture
- 10. Parks and Recreation Management
- 11. Plant Science
- 12. Turf Grass Management
- 13. Veterinary Science
- 14. Welding

## AGRICULTURE—ANIMAL SCIENCE

30 General Animal Husbandry (3)

2 hours lecture and 3 hours laboratory. Survey of sources of the world's supply of animals and their products; distribution and factors influencing domestic animals in the United States; selection, breeding, feeding, and management of cattle, sheep, and swine on California farms; breed characteristics and origin of the important breeds.

#### **AGRICULTURE**

#### 32 Elements of Horse Production (3)

2 hours lecture and 3 hours laboratory.

An introductory course to acquaint the student with the field of horse production, breeds and types of horses, feeding, judging, unsoundness, diseases, and different uses of horses.

#### AGRICULTURE—BUSINESS

#### 10 Elements of Agriculture Economics (3)

2 hours lecture and 3 hours laboratory.

A consideration of factors of production, basic economic laws and farm prices, farm organization and management, marketing, facilities, and state and federal farm programs affecting the farmers' economic position.

#### 11 Management Records (3)

2 hours lecture and 3 hours laboratory.

A study of farm accounting and types of farm records; reasons for their use; and a study of how to use measures of earnings to improve management efficiency. Farm income tax problems.

## Farm Management (3)

2 hours lecture and 3 hours laboratory.

Background of California agriculture. Application of principles of farm organization, work simplification, and measurement of earnings in determining production efficiency. There will be on-the-spot study and reorganization of a given farm. A term paper will be required.

## 15 Concepts of Modern Agriculture (3)

Plant science, animal science, soils and the relationships of the three. Basic principles of plant and animal production including Ornamental Horticulture.

## 59A-B-C-D Agricultural Experience Program (1-3)

Practical experience program required of all agricultural students, either through a "self-owned" program or a "placement" program with an approved farmer or businessman. Records required of each student. Consideration of enterprise problems. Student is responsible for his own program, but will be guided by the instructor in selection and operation of the program.

#### 61 Farm Supervision (1)

Designed to train farm foremen, superintendents, and crew leaders to understand and use principles of good supervision; maintain effective relationships with workers; handle personnel and relationship problems as they occur; instruct new and inexperienced workers in how to perform farm jobs; and analyze and break down jobs to determine time- and labor-saving shortcuts.

70 Special Problems (1-3)

Supervised placement for experience with nurseries, florists, landscape contractors, golf courses, and other established ornamental horticultural enterprises. Designed to provide experience in the major areas of interest through directed nonreimbursed participation by students majoring in the ornamental horticultural field and closely allied areas of employment. Spring and Fall

#### AGRICULTURE—DIESEL MECHANICS

20 Truck Operation and Maintenance (4)

2 hours lecture and 6 hours laboratory.

Prerequisite: AgEg 43 or consent of the instructor.

A study of the regulatory codes applicable to the truck operation, types and application of trucking equipment, load characteristics and loading. Experience in servicing, maintaining and operating trucks, truck-tractors, trailers and semi-trailers. Same as Technology Diesel Mechanics 20. May be taken for credit only once.

25 Truck Chassis (4)

2 hours lecture and 6 hours laboratory.

Prerequisite: Consent of the instructor.

This course covers the function, design, specifications of truck chassis components and gives live shop experience in inspection, service, adjustments, repair, rebuilding and installation of components for various classes of truck chassis, including axles, brakes, clutches, differentials, drive lines, frames, power dividers, steering, suspension, tires, transfer cases, transmissions and wheels. Trailers and semi-trailers as an integral part of the complete unit are also studied. Same as Technology Diesel Mechanics 25. May be taken for credit only once.

61 Diesel Mechanics I (4)

2 hours lecture and 6 hours laboratory.

Prerequisites: Two years high school automotive mechanics or Automotive and Power 11

Diesel engine theory, operation and maintenance. Includes horsepower determinations, micro-measuring, maintenance, preventative maintenance, storage, trouble-shooting, and tune-up. Same as Technology Diesel Mechanics 61. May be taken for credit only once.

62 Diesel Mechanics II (4)

2 hours lecture and 6 hours laboratory.

Prerequisite: AgDM 61 or consent of the instructor.

Two-cycle diesel engine overhaul. Includes cleaning, inspecting, measuring, servicing, rebuilding and replacing engine components. Same as Technology Diesel Mechanics 62. May be taken for credit only once.

63 Diesel Mechanics III (4)

2 hours lecture and 6 hours laboratory.

Prerequisite: AgDM 61 or consent of the instructor.

Four-cycle diesel engine overhaul. Includes cleaning, inspecting, measuring, servicing, rebuilding, and replacing engine components. Same as Technology Diesel Mechanics 63. May be taken for credit only once.

#### **AGRICULTURE**

#### 64 Diesel Mechanics IV (4)

2 hours lecture and 6 hours laboratory.

Prerequisite: AgDM 61 or consent of the Instructor.

Diesel Air, Fuel, and Governors. The course includes the servicing and overhaul of injection pumps, injectors, blowers, turbochargers, governors; and advanced tune-up and trouble-shooting. Same as Technology Diesel Mechanics 64. May be taken for credit only once.

#### 65 Diesel Engine Accessories (4)

2 hours lecture and 6 hours laboratory.

Prerequisite: AgDM 61 or consent of the Instructor.

Includes the servicing of diesel engine accessories such as hydraulics, engine brakes, pumps, air compressors, tractor air conditioners, and electrical systems. Same as Technology Diesel Mechanics 65. May be taken for credit only once.

#### AGRICULTURE—ENGINEERING

#### 16 Basic Mechanical Skills (2)

1 hour lecture and 3 hours laboratory.

Study of principles, practices, and materials used in agricultural mechanics and application of same under actual shop conditions. Same as Technology General 16. May be taken for credit only once.

#### 40 Agricultural Engineering-Construction (3)

2 hours lecture and 3 hours laboratory.

Study and practice in the selection and use of farm structural and mechanical equipment. Includes farm wiring, carpentry, painting, metalwork and welding, and blueprint reading.

#### 42 Agricultural and Industrial Power (3)

1 hour lecture and 6 hours laboratory.

Principles and applications of internal combustion engines. Tune-up and trouble-shooting gasoline and diesel engines. Power transmission devices.

## 43 Tractor Operations (3)

2 hours lecture and 3 hours laboratory.

The selection, operation, service, maintenance, adjustment, handling, and minor repair of wheel and track type tractors. Same as Technology-Automotive and Power 43. May be taken for credit only once.

#### 44 Agricultural Equipment (3)

2 hours lecture and 3 hours laboratory.

Operation, selection, adjustment, servicing, and care of seedbed preparation equipment, fertilizer distributor, cultivators, and other equipment used in the area. Actual repair, maintenance, and operation of equipment will be done during the laboratory periods. Same as Technology Automotive and Power 44. May be taken for credit only once.

## 45 Irrigation and Drainage (3)

2 hours lecture and 3 hours laboratory.

A study of the practices and methods of irrigation. Includes soil moisture relationships, pumping and water measurements, and water requirements. Methods of land reclamation.

#### 47 Basic Surveying (2)

1 hour lecture and 3 hours laboratory.

Use and care of surveying instruments, fundamental surveying methods, field practices in measuring, staking, turning, note taking, and cut and fill maps on a plane.

### 70 Fundamentals of Auto Air Conditioning (2)

11/2 hours lecture and 11/2 hours laboratory.

Includes physics involved in automotive air conditioning. The refrigerated air conditioning and heating system — installation, trouble shooting, and servicing. Same as Technology Air Conditioning and Refrigeration 70. May be taken for credit only once.

## 90 Heavy Equipment Operation and Maintenance (3)

1 hour lecture and 6 hours laboratory.

Selection, operation, service, adjustment of heavy equipment (dozers, carryalls, trucks, cranes, backhoes, etc.) Same as Technology Automotive and Power 90. May be taken for credit only once.

#### 91 Basic Hydraulics (2)

1 hour lecture and 3 hours laboratory.

Familiarization with theory, application, and component parts of hydraulic systems. Same as Technology Automotive and Power 91. May be taken for credit only once.

#### 92 Hydraulic Systems Maintenance and Repair (3)

2 hours lecture and 3 hours laboratory.

A continuance of Basic Hydraulics including advanced practices in maintenance and repair of hydraulic systems. Same as Technology Automotive and Power 92. May be taken for credit only once.

## AGRICULTURE—NATURAL RESOURCES

35 Conservation of Natural Resources (3)

Intelligent use and protection of natural resources in soil, water, minerals, plant and animal life, with particular attention to Southern California conditions. Includes the role of ecology, history of the conservation movement, modern problems in resource use, and the citizens' role in Conservation.

36 Introduction to Forestry (3)

History of forestry and the lumber industry. The forest resource, its management, conservation and utilization. Forestry terminology and the use of basic engineering equipment. Silviculture, dendrology, cruising and sealing are studied. Job opportunities in public and private forestry. One all-day field trip will be required.

#### **AGRICULTURE**

## 37 Introduction to Wildlife Management (3)

Prerequisite: AgNR 35 or concurrent enrollment.

A study of the principles of wildlife biology as related to wildlife management. An introduction to basic skills involved in conservation and production of wildlife. Develop an understanding of the relationships between wildlife, man, and outdoor recreation. Includes: basic ecological concepts; wildlife habitats and nutrition; fish, bird, and mammal identification; fish and game laws; and career opportunities.

# 37L Introduction to Wildlife Management Laboratory (1)

3 hours laboratory.

Prerequisite: Concurrent or prior enrollment in AgNR 37.

Primarily a field study of wildlife management. An introduction to basic skills involved in conservation and production of wildlife. Includes identification, life histories and ecology of important wildlife species, and habitat improvement. Saturday field trips will be required.

#### 60 Agricultural Science (3)

2 hours lecture and 3 hours laboratory.

Physiological and environmental factors affecting plants and animals, as well as other biological implications in relation to their application to the agricultural industry.

#### 71 Wildlife Law Enforcement (3)

Wildlife law enforcement in the United States and California. Federal, state, county, and city law enforcement as a wildlife management tool. Duties and responsibilities, professional qualifications for wildlife law enforcement officers. Enforcement procedures. Fines and forfeitures. Hunter Safety Program. Public responsibility in wildlife law enforcement. Same as Law Enforcement 71. May be taken for credit only once.

## AGRICULTURE—ORNAMENTAL HORTICULTURE

## 4 Turf Grass Management (3)

2 hours lecture and 3 hours laboratory.

This course is designed to bring about an understanding of the major factors controlling the production of good turf grasses and the modifying effects of these factors upon each other.

# 5A Ornamental Plant Identification and Materials (3)

2 hours lecture and 3 hours laboratory.

Identification, growth habits, culture, and ornamental use of house plants, vines, groundcovers, annuals, perennials, small shrubs adapted to the climates of the central valleys of California. Saturday field lab will be required each semester.

#### 5B Ornamental Plant Identification and Materials (3)

2 hours lecture and 3 hours laboratory.

Identification, growth habits, culture, and use of larger shrubs and trees adapted to the climates of the central valleys of California. Saturday field lab each semester will be required.

## 6 Horticultural Practices (3)

2 hours lecture and 3 hours laboratory.

A general course in ornamental horticulture with emphasis on nursery operation. Including nursery structures and layout, seeding, transplanting, potting, balling, canning, fertilizing, pest control, plant diseases, and abnormalities. Propagating and planting mediums, their preparation and use. The use and maintenance of the common tools and equipment.

## 7 Home Nursery Practices (3)

2 hours lecture and 3 hours laboratory.

Study and application of horticultural principles and practices applicable to the home owner and retail nurseryman. Includes plant science, landscape design, plant identification, and legal information pertinent to home landscaping.

# Park and Nursery Management (3)

2 hours lecture and 3 hours laboratory.

Designed to bring about an understanding of skills and knowledge of the various areas of the plant installation and maintenance fields; to develop proficiency in those skills necessary for the student to qualify as a technician in this area. Special interest will be directed through the Agriculture 8 course to provide specific skills in such areas as Forestry, City Parks, Highway Maintenance, State Parks.

## 9 Landscape Planning and Design (3)

2 hours lecture and 3 hours laboratory.

Prerequisite: AgPS 1, AgOH 5A, 5B, or approval of instructor. This course is designed for students interested in the planning and designing of landscaped areas. Emphasis will be placed upon the location of lawns, trees, shrubs, walks, driveways, patios, planters, and other landscape structures for home and park landscaping. Same as Architecture 9. May be taken for credit only once.

# 13 Floral Design (3)

2 hours lecture and 3 hours laboratory.

A course designed to introduce the student to the floral industry. Includes the basic skills and design principles used in corsages and flower arrangements. Emphasis will be placed on the basic kinds of corsages, floral arrangements, and the most common flowers and related materials used in decorating the home.

## 14 Landscape Nursery Salesmanship (3)

1 hour lecture and 6 hours laboratory.

Prerequisites: AgOH 6, AgOH 9, AgOH 72, and/or consent of the instructor.

This course is designed for the sophomore student majoring in Ornamental Horticulture who plans to enter the retail nursery business. He will organize the nursery for retail sales, talk to prospective customers, and be prepared to answer any questions pertaining to landscaping of the home with plants, trees, shrubs, ground covers, flowers, and house plants that will grow in our area. The student will be assigned to work in blocks of 3 hours to help facilitate sale of surplus plants grown in the college nursery.

#### **AGRICULTURE**

### 46 Landscape Engineering (3)

2 hours lecture and 3 hours laboratory.

This course is designed to bring about a thorough understanding and appreciation of the major tools, equipment, supplies, and machinery used in the landscape engineering field. Emphasis will be placed upon both the principles and practices involved in the mechanical areas of the landscaping field.

### 48 Landscape Equipment (3)

2 hours lecture and 3 hours laboratory.

Principles and practices in the maintenance, operation, and selection of equipment and power units used in the horticultural field.

### 70 Special Problems (1-3)

Supervised placement for experience with nurseries, florists, landscape contractors, golf courses, and other established ornamental horticultural enterprises. Designed to provide experience in the major areas of interest through directed nonreimbursed participation by students majoring in the ornamental horticultural field and closely allied areas of employment. Spring and Fall.

## 72 Ornamental Plant Identification (3)

5 hours lecture and laboratory.

Identification, growth habits, culture, and ornamental use of plants. Special emphasis will be given to plants adapted to conditions existing in this area and of use in landscaping.

## 74 Landscape and Nursery Management (3)

The course is designed to meet the needs of the homeowner and professional gardener who would like to upgrade their skills in landscape and nursery maintenance. It will cover the following subjects: Identification, propagation, pruning, pest and disease control techniques, fertilization, and environmental factors which affect ornamental trees, shrubs, flowers, and ground covers commonly grown in the lower desert.

#### Theory of Turf Grass Management (2)

Designed to meet the needs of the homeowner and the professional turf grass manager. It covers the major types of grass grown in the desert and the major factors that control the production of good turf grasses. Emphasis will be placed on management practices used to grow good turf in our desert area.

#### 85A Park and Nursery Maintenance (1)

Designed to train park and golf course maintenance workers to understand and use, (1) the principles of good turf grass maintenance; (2) the principles used in selecting, planting and maintenance of trees, shrubs, ground covers, and flowers.

## AGRICULTURE—PLANT SCIENCE

#### 1 Soils and Plant Nutrition (3)

2 hours lecture and 3 hours laboratory.

Soil derivation, classification and general characteristics; properties of soil and soil evaluation, soil maps and their interpretation; use of soils and their management, including fertilizers, and soil moisture. Structure, cultivation, organic materials, and microbiology; alkali and saline soils and reclamation.

#### 10 Environmental Gardening (3)

2 hours lecture and 3 hours laboratory.

Fundamentals of growing vegetables, flowers, and herbaceous perennials, ornamental shrubs and trees, and fruit trees organically and inorganically. Equipment, soil preparation, plant propagation, fertilizers, irrigation, pest control, and pruning will be covered. Plant structure, growth, and classification are included. The role of plants in the environment and their relationship to man will be emphasized.

#### 20 Field Crops (3)

2 hours lecture and 3 hours laboratory.

Field crops common to locality. Study of representative crops; cultural sequence and related factors; marketing, cost analysis, and risk. Environmental relationships, moisture, temperature, general weather influence. Relation of local crops to national crop economy. Field trips.

#### 23 Viticulture (3)

2 hours lecture and 3 hours laboratory.

California grape production; study of varieties, characteristics, uses and adaptions. Production practices, propagation, planting, training, thinning, girdling, and pruning systems. Grape pests and diseases, including recognition and control.

#### 25 Citrus and Date Culture (3)

2 hours lecture and 3 hours laboratory.

Growing and marketing of oranges, lemons, grapefruit, avocados, and dates plus minor subtropical fruits. Field trips and orchard practice.

#### Fruit Production (3)

2 hours lecture and 3 hours laboratory.

Study of characteristics, areas of production, suitable varieties, uses, and adaptions. Planting, training, production, practices, and propagation of the important deciduous and subtropical fruit crops including such crops as citrus, dates, grapes, and others.

#### 27 Economic Entomology (3)

2 hours lecture and 3 hours laboratory.

Symptoms, identification and method of control of the principal insects of field, truck, fruit, and nursery crops. Field practices in the operation of spray equipment and dust machines. Sprays, dusts, fumigants, poisons, cultural and sanitary control. Collection required.

#### **AGRICULTURE**

## AGRICULTURE—WELDING

#### 28 Industrial Welding Processes (2)

1 hour lecture and 3 hours laboratory.

General welding course including oxygen-acetylene welding, brazing, and cutting; arc welding and spot welding. Includes study of metallic characteristics as they affect welding. Same as Technology Welding 28. May be taken for credit only once.

#### 29 Industrial Welding Theory (3)

Overall view of the welding trade. Includes study of welding methods, welding equipment, types of welds, metals and their properties, inspection, and testing of welds. Involves safety standards, and blueprint reading. Same as Technology Welding 29. May be taken for credit only once.

#### 30 Welding Laboratory (3)

9 hours laboratory.

Practice in welding processes—oxygen-acetylene and electric. Emphasizes fundamental techniques: all positions. Must be taken concurrently with Welding 29. Same as Technology Welding 30. May be taken for credit only once.

#### 61 Welding Technical Theory (3)

Course includes study of related blueprint reading and mathematics. Involves safety procedures, metals identification, and general survey of entire welding trade. Must be taken concurrently with Welding 62. Same as Technology Welding 61. May be taken for credit only once.

## 62 Welding I (3)

9 hours laboratory.

Practice in welding processes—oxygen-acetylene and electric; burning and cutting. Must be taken concurrently with Welding 61. Same as Technology Welding 62. May be taken for credit only once.

## 63 Welding II (3)

9 hours laboratory.

Prerequisite: Welding 61.

Continuation of Welding 62. Advanced welding practices. Same as Technology Welding 63. May be taken for credit only once.

# Oxygen-Acetylene Welding and Burning (3)

1 hour lecture and 6 hours laboratory.

Course involves extensive practice in oxygen-acetylene welding techniques. Includes study of weld types and welding characteristics of metals. Same as Technology Welding 64. May be taken for credit only once.

#### 65 Brazing (2)

1 hour lecture and 3 hours laboratory.

Prerequisite: Welding 64.

Practice in use of tools and equipment for brazing. Course includes study of brazing characteristics of metal and proper rod selection. Same as Technology Welding 65. May be taken for credit only once.

## **AGRICULTURE**

- 66 Electric Arc Welding (4)

1 hour lecture and 9 hours laboratory.

Extensive practice in arc welding including various positions. Study of welding characteristics of metal, types of welds, and dial settings. Same as Technology Welding 66. May be taken for credit only once.

- Inert Gas Welding (2) 67
  - 1 hour lecture and 3 hours laboratory.

Practice in the use of gas-shielded equipment. Study of principles involved in welding such metals as aluminum, stainless steel, and copper. Same as Technology Welding 67. May be taken for credit only once.

# ART

## 1A Drawing and Composition (2)

4 hours lecture and laboratory.

A basic course in the principles, theories, and techniques of drawing and composition. Emphasis is placed upon subject matter in terms of composition and upon individual interpretation.

# 1B Life Drawing (2)

4 hours lecture and laboratory.

Emphasis is placed on the study of the human figure from the model with quick sketches and more careful studies. The study of anatomy in relation to the interpretation of the human figure will be a basic part of the course.

# 1C Drawing and Composition (2)

4 hours lecture and laboratory.

Prerequisite: 1A or consent of the instructor.

Alternates with 1B as a continuation of 1A, with emphasis placed on more advanced study in techniques with pencil, pen and ink, charcoal, and scratchboard. The student will be encouraged to use originality at all times. Composition for drawing and painting will receive particular emphasis.

## 2A History of Art (3)

A survey course in the history of Art for the ancient world. Lectures and slides will be used in the study of the early periods of Art. A consecutive survey will include the architecture, sculpture, and painting of early periods in our Art heritage such as the Prehistoric and Primitive, Egyptian, Ancient Near East, Aegean, Grecian, Etruscan, Roman, and the Early Christian. A required course for Art Majors. It will satisfy the Humanities requirement for non-majors but students should have some understanding of the Art field before taking the course.

## 2B History of Art (3)

A survey course in the history of Art of the western world. Lectures and slides will be used in the study of these periods of Art. A consecutive survey will include the architecture, sculpture, and painting of our western culture such as Medieval, Gothic, Renaissance, Baroque, Rococo, and the eighteenth century. A required course for Art Majors. It will satisfy the Humanities requirement for non-majors but students should have some understanding of the Art field before taking the course.

#### 3A Basic Design and Color (3)

6 hours lecture and laboratory.

A beginning course in the study of design principles. It provides a background for all forms of Art Expression. A study of the basic principles of design such as dot, line, space, form, value, color, and texture provides material for individual creative expression. This is a required beginning course for all Art Majors. It is recommended for future elementary teachers.

#### Three-Dimensional Design (3) 3B

6 hours lecture and laboratory.

An investigation of factors determining the designs of both the utilitarian and non-utilitarian objects formed by man. This course includes studies of mass, volume, space, and shape. Materials are studied through projects in construction, modeling, and casting.

#### Lettering (2) 4

4 hours lecture and laboratory.

The study of basic alphabets by using the lettering pen, steel brush, and lettering brush provides the basic background for the course. The consideration of spacing and the combination of letters into words and groups will be considered as an application of lettering techniques.

Evaluation of the Arts (3) 5 Development of techniques and understanding for the evaluation of music, drama, graphic and plastic arts, and dance. Exercises in shaping opinions based on historical and cultural perspective. How to "be your own critic." Same as Music 5. May be taken for credit only once.

#### Painting (Water Color) (2) 6A

4 hours lecture and laboratory.

An experimental study of water color techniques with the application to still life, landscape, and contemporary problems.

#### Painting (Oil) (2) 6B

4 hours lecture and laboratory.

A basic course in oil painting with emphasis on painting still life and landscapes. Experimental studies in color mixing and general techniques are part of the course.

#### Painting (New Media) (2) 6C

4 hours lecture and laboratory.

A basic course in painting with new media, especially the acrylics. Experimental studies in color mixing and general techniques in handling the media will be applied to still life studies, landscape painting, and abstract painting.

#### Ceramics (2) 7**A**

4 hours lecture and laboratory.

Basic fundamentals in forming and decorating pottery, including modeling, wheel throwing, glazing, and firing.

#### Ceramics (2) 7**B**

4 hours lecture and laboratory.

Prerequisite: 7A

Advanced work in pottery, including loading and firing of kilns and experimental work in testing of clays and glazes.

#### Printmaking (2) 9

4 hours lecture and laboratory.

A study of basic hand processes in the making of prints. Class work includes experiences in a variety of materials and techniques including Relief, Serigraphy, Planography, and Intaglio.

#### ART

10 Introduction to Art (3)

An introduction to some of the problems, techniques, and social forces that shape and reflect our visual world. Emphasis is placed on the gaining of insights and the development of understanding with regard to the planning, organizing, and the making of a work of art.

#### 11A Sculpture (2)

4 hours lecture and laboratory.

A basic course in sculpture. Students explore the three-dimensional form with a variety of materials and techniques, including additive, subtractive, and manipulative processes.

#### 11B Sculpture (2)

4 hours lecture and laboratory.

Prerequisite: 11A

Advanced problems in sculpture, provides experience in wax casting and welding with oxy-acetylene in addition to advanced work in selected materials.

#### 12 Survey of Modern Art (3)

A survey of the development of modern art from its beginning at the start of the nineteenth century to the present time. Illustrated lectures on painting, sculpture, and architecture will include significant movements in the development of modern art such as: Romanticism, Realism, Impressionism, Cubism, and Abstract Expressionism. Meets the humanities requirement for the general college student. Adds depth to art history for the art major.

## 14A Photography (2)

4 hours lecture and laboratory.

An introductory course in techniques of camera utilization for the student of photographic media. A laboratory-lecture course including technical problems in processing and printing. Assignments in the organization of form elements in architectural, scenic, portrait, and still life subjects.

## 15A-B-C Survey of Art History (1-1-1)

This television course presents a survey of Art History from Prehistoric times to Modern Art in the nineteenth century. Lectures, slides, maps, charts, and other illustrative material will be used in a consecutive survey of the architecture, sculpture, and painting of each period. Students will be provided with a workbook of information, outlines, and material for evaluation. Art majors may satisfy the requirements by taking all three semesters (A-B-C) of this course and Art 12, Survey of Modern Art. This course will complete a course requirement in the Humanities in General Education. Students who have an interest in the field may obtain one or two units of credit. The course is divided into three sections as follows: 15A—Prehistoric, Ancient Near East, Egypt, Aegean, and Greek; 15B—Roman, Early Christian, Byzantine, Romanesque, and Gothic; 15C—Renaissance, Baroque, Rococo, and the Eighteenth Century.

# **BUSINESS**

#### 1A Accounting (3)

3 hours lecture and 1 hour laboratory.

Basic fundamentals of the double accrual accounting system through the complete accounting cycle. Includes accounting for service and merchandising enterprises with special emphasis on receivables, payables, inventories, plant asset depreciation methods, internal controls, payroll and other subsystems.

#### 1B Accounting (3)

3 hours lecture and 1 hour laboratory.

Prerequisite: Bus 1A

Accounting concepts and principles relating to the partnership and corporate forms; departmental and branch systems; management uses of accounting data to include differential analysis; financial statement and special analyses including funds statements and cash flow; consolidated statements and an introduction to Federal Income Tax Law.

#### 3 Statistical Methods (3)

An introduction to the statistical concepts and techniques most frequently used in sociology, psychology, anthropology, economics, business, mathematics, and education. Subject matter includes tabular and graphic presentation of data, measures of central tendency, measures of dispersion, measures of correlation, sampling, time series, confidence intervals, and tests of significance. Emphasis is placed upon the use and interpretation of the preceding. Same as Sociology 3. May be taken for credit only once.

## 4 Information Processing and Computer Programming (3)

2 hours lecture and 3 hours laboratory.

Introduction to concepts of business processing and computer programming to include card codes and design; equipment functions and configurations; number systems; data representation and preparation; and programming to include problem definition, flow-charting, coding, debugging. Students must be able to write an operational program in a high-level program such as FORTRAN or COBOL by the end of the course.

#### 5 Auditing (3)

Prerequisite: 12 units of accounting or equivalent experience.

The theory and practice in auditing the major items of balance sheets and statements of profit and loss from the standpoint of the independent public accountant, legal and professional responsibilities of public accountants, and professional ethics.

#### 6L Business Applications Computer Laboratory (1)

3 hours laboratory.

Prerequisite: Concurrent enrollment in Bus 1A or 73.

Practical application of accounting and data processing principles by actual use of the available computer configurations. Students will write business programs in FORTRAN, RPG, etc. They will run and debug the programs as necessary. Accounting students will prepare data cards as required to solve the assigned practice set and other problems using the computer in lieu of manual methods.

#### **BUSINESS**

# 7 Financial Statement Analysis (3)

Prerequisites: Bus 1A and 1B.

A study in reading, analyzing, and interpreting the financial statements of a business from the standpoint of management, the investor, and the creditor. Ratios, trends, application of funds, and cash flows are developed.

- 9 Consumer Problems and Personal Finance (3)
  Study of individual and family consumer problems and management of income through planned spending for present living and future security.
  Same as Home Economics 9. May be taken for credit only once.
- Business Organization and Management (3)
  The study of the formation, structure, functions, objectives, and ethics of contemporary American business enterprises; the significance of the small business organization and the role of large business organizations; practices for the development of managerial personnel. Recommended for candidates for the Associate in Arts in Business.
- 19 Law for the Layman (3)
  Law and its relationship to the individual and family. Includes principles of family law, family property ownership, inheritance, wills, probate procedures, guardianships, and conservatorships.
- Business Law (3)
  The study of law in its relation to business with special emphasis on the social forces and the law, the law of contracts, agency and employment, personal property and bailments, sales and secured sales.
- Business Law (3)

  The study of law in its relation to business with special emphasis on the law of negotiable instruments (promissory notes, checks, bank drafts and bills of exchange); suretyship and guaranty; insurance; partnerships; corporations; real property; wills and trusts; bankruptcy; labor law; and government regulation of business.
- 21 Marketing (3)
  A study of the distribution of goods and services including retail and wholesale distribution channels, market functions and policies, industrial, agricultural, and security exchange systems.
- 22 Retailing (3)
  Study of opportunities in the retail field with special emphasis in smaller retail institutions, store locations, layout, organization policies, personnel, records, stock control, expense control, buying, and selling.
- Salesmanship (3)
  Study of the principles of salesmanship; handling prospects and customers; building good will; the development and practical application of sales techniques in selected fields. Includes lectures, discussions, demonstrations, and practice in sales presentations.
- Advertising (3)
  A study of the psychological, social, and economic aspects of advertising programs, media of advertising, and budgets.

#### 30 Business Communications (3)

Study and practice of the principles of effective communication in business matters such as purchasing, credit, collections, inquiries, adjustments, applications, human relations, and report writing. Drill on business English principles, oral communication, and building a business vocabulary.

## 50A Beginning Typewriting (2)

5 hours lecture and laboratory.

A course for students who are enrolling for their first course in typewriting or who do not qualify for 50B. Emphasis: Mastery of the keyboard, development of a typing speed of approximately 35 to 45 net words per minute, letter form and placement, limited practice in tabulation, and arrangement of columnar materials.

## 50B Intermediate Typewriting (2)

5 hours lecture and laboratory.

A course for students who have completed typing in high school and have attained a speed of 35 net words per minute on a 5 minute, straight copy test. Reinforcing of fundamental typewriting knowledge and competency, practice in the preparation of varied office forms, and speed development.

#### 51 Advanced Typewriting (2)

5 hours lecture and laboratory.

A course for students who have attained a speed of 50 net words per minute on a 10 minute straight copy test. A study of executive, professional, and legal office forms and practice in the preparation of these forms; use of duplicating and dictating machines; introduction to key punch operations.

## 52 Executive Typewriting (3)

2 hours lecture and 3 hours laboratory.

Prerequisite: Completion of Business 51 or minimum speed of 50 words per minute.

Emphasis is placed on the importance of increasing production through efficient methods and proper organization. This course is designed to enable the typing trainee to develop and integrate all the "back-up" skills, knowledge, and techniques into a complete production typewriting skill. Units of instruction: Letter composition, editing copy, creating and arranging tables, creating and developing original material.

## 53 Medical Secretarial Procedures (4)

3 hours lecture and 3 hours laboratory.

Course is designed to prepare medical office assistants for employment through an integration of skills with emphasis on medical office procedures, personality and attitude development, telephone techniques, machine transcription, medical typewriting, duplicating processes, and handling of mail.

#### 54 Duplicating Processes (2)

2 hours lecture and 1 hour laboratory.

A study of various duplicating processes with actual practice in preparation and running of the photo, fluid, and ink processes. The course is suggested for students majoring in business, education, and other areas requiring a working knowledge of modern duplicating processes.

#### **BUSINESS**

55 Retail Merchandising (3)

A course designed for men and women who wish to train for a buying and selling career in the field of retailing. The student will receive a sound background in basic merchandising practices and procedures. Also, much of the essential knowledge of management will be covered in the classroom. Course will provide some of the information and skills necessary for a successful future in retailing.

56 Merchandise Analysis (3)

Analysis and testing of merchandise representative of what is sold in stores. Study will include tracing selected merchandise from raw material to finished product; the history, manufacture, use, care, and technical terminology applied to each product.

57 Machine Transcription (2)

1 hour lecture and 3 hours laboratory.

The principles of machine transcription are presented, which will enable the student to adjust readily to various makes and models of transcribing units. The student learns to transcribe legal, medical, and business matters from voice recordings or magnetic belts. Related instruction is given in letter and report formats, spelling, punctuation, and electric typewriting techniques. The student is given an opportunity to acquire a job entry level skill.

Comminications—PBX, Teletype, and Telephone (1)

2 hours lecture and 1 hour laboratory. Class meets 9 weeks. Theory and practice in operating private branch exchange switchboard (both cord and cordless), and teletype machines; proper use of the telephone.

59A-B-C Machine Shorthand (3-3-3)

5 hours lecture and laboratory.

A three-semester course covering the basic theory of touch shorthand. Emphasis is placed on the accurate typewritten transcription of notes. These courses are designed primarily to develop sufficient speed and accuracy for secretarial work. Students interested in advancing to court reporting level may transfer to schools specializing in court reporting.

60A Beginning Stenography (3)

5 hours lecture and laboratory.

Prerequisite: Completion of 50A, or concurrent enrollment in 50A; or consent of the instructor.

Covers the basic theory of the Gregg Diamond Jubilee series. In addition to the presentation of the characters to be written, a basis for the transcription of dictated materials is made. Punctuation, spelling, and grammar are coordinated with shorthand lesson.

60B Intermediate Stenography (3)

5 hours lecture and laboratory.

Prerequisite: Completion of 60A and attainment of level of 60 words per minute in taking dictation, and a minimum typewriting speed of 40 net words per minute on straight copy, 5 minute timed writings, or consent of the instructor.

Develops the ability to increase shorthand speed from dictated material. The principles of Gregg shorthand must be applied readily and accurately, and gradually made automatic. The development to extend the knowledge of the

basic elements of transcription, including spelling, punctuation, word usage, and typing style.

## 61 Advanced Stenography (3)

5 hours lecture and laboratory.

The finishing course in secretarial training. The development of techniques and skills that are necessary to transcribe accurately from shorthand notes at an acceptable rate of speed. These techniques include the ability to read shorthand notes, type, spell, punctuate, capitalize, check for grammatical correctness, proofread, and produce a mailable copy.

## 62 Executive Stenography (3)

5 hours lecture and laboratory.

A course offering continued practice on word-building principles and automatizing of high-frequency phrases, words and high-speed shortcuts. Includes transcription of technical and complex letters and reports.

## 63 Office and Secretarial Procedures (3)

5 hours lecture and laboratory.

Prerequisite: Completion of 50B, concurrent enrollment in 50B, or demonstration of the ability to type at the rate of 40 net words per minute on a straight copy, 5 minute timed writing, or consent of the instructor.

One semester course designed to attain office proficiency by applying the knowledge and skill acquired to practical problems that arise in the work of a secretary. Analysis of job opportunities, application and interview, business personality and behavior, office dress and grooming, reception techniques, and public relations.

#### 64 Records Management (2)

Designed to acquaint the student thoroughly with rules, procedures, systems, and techniques of filing that are so important to every business worker. To develop the ability to plan, interpret, design, and supervise a filing program.

## 65 Medical Insurance and Records (3)

A course for those interested in medical office employment. Includes study of all phases of medical insurance—Workmen's Compensation, Medi-Cal, Medicare, various groups and individual policies using 1969 Relative Value Studies (updated as information is published). Students will receive instruction in reading policies to determine benefits and completing claim forms from office records.

#### 66 Accounting Records and Procedures (3)

3 hours lecture and 1 hour laboratory.

An introductory course designed to acquaint the student with basic financial records and procedures used in business. Coverage includes sales records, purchase records, cash records and bank reconciliations; insurance records, payroll records and computation of pay; sales and property tax records; and miscellaneous records involving the use of percentage computation in determining discounts, commissions, mark-ups, depreciation, simple and compound interest and financial statement ratios.

#### **BUSINESS**

67 Specialized Stenography — Legal (3)

3 hours lecture and 2 hours laboratory.

Prerequisite: Beginning and Intermediate Stenography, or two years high school shorthand, or consent of the instructor. May be taken concurrently with Business 61 and/or Business 68.

Emphasis is placed on the learning of shorthand outlines for legal vocabulary, dictation, and transcription. Orientation to principles, procedures, and duties related to legal secretarial work.

68 Specialized Stenography — Medical (3)

3 hours lecture and 2 hours laboratory.

Prerequisite: Beginning and Intermediate Stenography, or two years of high school shorthand, or consent of the instructor. May be taken concurrently with Advanced Stenography or Specialized Stenography-Legal.

Emphasis is placed on the learning of shorthand outlines for medical vocabulary, dictation, and transcription. Orientation to medical terminology, principles of anatomy and physiology, major procedures and duties relating to the medical office.

69 Principles of Bank Operation (3)

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

70 Installment Credit (3)

Prerequisites: Bus 1A and 1B.

The techniques of installment lending are presented concisely. Emphasis is placed on establishing the credit, obtaining and checking information, servicing the loan, and collecting the amounts due. Each phase of an installment credit operation will be carefully scrutinized to be certain that the most efficient methods are employed. Other topics discussed are inventory financing, special loan programs, business development and advertising, and the public relations aspect of installment lending.

71 Machine Calculation (2)

1 hour lecture and 3 hours laboratory.

Prerequisite: Completion of Mathematics 50, or possession of equivalent knowledges — understandings, or consent of instructor.

The study of the principles of machine computation and the applications of mathematics in the modern office through practice in the operation of adding-listing machines, printing calculators, key-driven and rotary calculators, and bookkeeping-posting machines; the study of machine characteristics, the comparative advantages and special methods for use with the various kinds of machines.

72 Business Mathematics (3)

Application of principles of mathematics to business usage. Includes study and practice of trade discounts, commissions, payrolls, taxes, interest, bank discounts, annuities, insurance, graphs, stocks and bonds.

73 Fundamentals of Data Processing (3)

Emphasis on business applications. The study of the characteristics, purposes and functions of data processing equipment to include all phases of the data processing cycle, with special emphasis on computer programming techniques such as flow charting and preparing computer programs in modern languages such as FORTRAN, COBOL, RPG. Students will be required to demonstrate proficiency in the use of FORTRAN by writing, debugging, and documenting several programs based upon business applicarions

#### 73B-C Keypunch Operations (1-1)

3 hours lecture and laboratory.

Prerequisite: Ability to type a minimum of 40 words per minute. Training in setting up and operating the card punch machine to include punch card coding; design and use of program cards; and methods and practice in verification of punched information.

#### 74 RPG Programming (3)

3 hours lecture and 1 hour laboratory.

Prerequisite: Business 73, or concurrent enrollment with consent of the instructor.

High level programming language for IBM family of third generation computers. Students will learn to write, test, and debug programs employing RPG and PCU (Punch Card Utility) programs.

#### 75 FORTRAN Programming (3)

2 hours lecture and 3 hours laboratory.

Prerequisite: Business 73, or concurrent enrollment with consent of the instructor.

An introduction to the use of the computer in problem solving using the high level FORTRAN language. Students will write, test, and debug programs applicable to several disciplines.

#### 76 COBOL Programming (3)

3 hours lecture and 1 hour laboratory.

Prerequisite: Business 73, or consent of the instructor.

Advanced programming techniques utilizing a high level programming language applicable to the digital computing equipment. Students will flowchart, write, test, debug, and document programs in COBOL.

#### 77 Symbolic Language Processing (3)

3 hours lecture and 1 hour laboratory.

Prerequisite: Business 73, or consent of the instructor. Programming techniques emphasizing the machine-oriented language as

opposed to problem-oriented languages such as RPG, FORTRAN, and COBOL. Students will write symbolic language programs in Basic Assem-

bler language; test, debug, and document business applications.

#### BUSINESS

#### 78 Data Processing Systems (3)

Prerequisites: Business 73 and at least 2 computer languages. Emphasizes the latest advances in the field of informational technology including third generation hardware, software, and concepts. Topics to include central processing units, program execution, I/O channels, I/O devices, data management, magnetic tape concepts, direct access storage devices, programming systems, teleprocessing, multiprocessing, and multiprogramming.

#### 79 Data Processing Project (2)

6 hours laboratory.

Prerequisites: Business 78 and 2 computer languages.

A field study designing and programming of real business problems in an actual business environment. Satisfactory completion of this course is essential before award of the A.A. degree in Business Data Processing.

## Business Systems and Procedures (3)

Prerequisites: Business 1B and 73.

Provides a basic understanding of business systems and procedures; mechanically, manually, or electronically. Systems covered include inventory control, cash control, purchases, sales, credits and collections, production control, payroll, and cost control.

#### Principles of Real Estate (3)

The study of principles of real estate as applied to the following areas: land economics, interests in the uses of land, land transfers, buying and selling of real estate, contracts, liens, and encumbrances, real estate finance; preparation of the student for the professional goal of salesman.

#### 82 Real Estate Economics (3)

Prerequisite: Business 81, or consent of the instructor.

The study of the economic foundations of real estate with particular emphasis upon the patterns of land use, urban and rural appreciation of values in the community and in the State of California.

## 83 Real Estate Practice (3)

Prerequisite: Business 81, or consent of the instructor.

The study of real estate as a career, the practical application of the real estate sale cycle, and orientation into specialized selling. The study of the role and functions of the broker and salesman in the real estate office, the application of advertising techniques, listings and their valuations, locating buyers, property management and leasing, public relations, personnel policies, and professional ethics.

#### 83B Real Estate Sales (1)

A practical course covering in detail canvassing, listing, qualifying buyers, showings, offers and counteroffers, telephone solicitation, advertising, and special sales conditions. Class will meet 3 hours a week for seven weeks.

## 84 Legal Aspects of Real Estate (3)

Prerequisite: Business 81, or consent of the instructor.

The study of the laws of California as related to real estate; property acquisition, transfer and ownership; interests in property; kinds of tenancy, state and Federal courts, land, contracts, liens, restrictions, landlord and tenant, agency, probate, and taxes; the licensing of salesmen and brokers, and laws relating to the real estate profession.

#### 85 Real Estate Finance (3)

Prerequisite: Business 81, or consent of the instructor.

The study of the sources and supply of mortgage funds; construction loans and permanent financing for residential and income properties; procedures for FHA and VA loans. Interest rates, terms, mortgages, and mechanics' liens. The significance of appraising.

#### Principles of Appraising (3)

Prerequisite: Business 81, or consent of the instructor.

The study of principles, methods and techniques for the appraisal of single and multiple dwellings, commercial-business properties, and farm properties. The determination of values for loan and insurance purposes; implications for brokers and salesmen.

#### 87 Real Estate Subdivision and Development (3)

Instruction in the location of vacant, unimproved land, and in conjunction with good business practices, outline the proper procedures for developing the raw land into its most economical value.

#### 88 Principles of Insurance (3)

Survey of general insurance principles, including history, ethics, economics, and types of insurance; state regulations; agency and brokerage contracts.

#### 89 Real Estate Exchanges and Taxation (3)

Prerequisite: Business 83 or 84, or consent of the instructor.

A basic course inaugurating real estate brokers in the fundamentals of real estate exchanges and taxation. The theory and current practices with public reaction for the building of estates. Income tax advantages and trends are planned, analyzed, and executed. Case studies, actual exchanges, and multiple escrows are discussed in a group-study workshop.

#### 90 Escrow Procedures I (3)

A basic course intended to explain the methods and techniques of escrow procedure for various types of business transactions with emphasis on real estate. Particular attention is given to legal and ethical responsibilities of persons engaged in escrow work.

#### 91 Escrow Procedures II (3)

Prerequisite: Business 90, or consent of the instructor.

An advanced escrow covering the more unusual and difficult types of escrows. Emphasis on real estate with some personal property and bulk sales also covered.

#### BUSINESS

- 92 Escrow Procedures III (3)
  - Prerequisite: Business 91, or consent of the instructor.

A further study of the more unusual and difficult types of escrows with particular attention to those escrows wherein conflict or dispute arises. Case problem approach.

93 Human Relations (2)

Study of personnel relations as affected by the application of basic psychological techniques. Emphasis on employer-employee relationships. Same as Industrial Supervision 93. May be taken for credit only once.

94 Property Management (3)

Basic course covering accepted principles of professional property management. Major areas covered include evaluation of investment properties, neighborhood survey, collection of rentals, maintenance and reports, merchandising rental space, insurance management, accounting and landlord-tenant relationship.

96 Principles of Investment (3)

Investment principles, methods, and institutions, including a consideration of the income, safety, and control features of investment securities. Sources of and demand for investment capital, determination of investment policy, and operations of security markets.

97 Cost Accounting (3)

Theory and practice of accounting for manufacturing organizations to include process, job order and standard costs; accounting for and allocation of factory burden; costs of joint products and by-products; and budgeting and reporting for manufacturing operations.

98 Intermediate Accounting (3)

Advanced study of working papers and financial statements; nature and flow of working capital through current assets and liabilities, noncurrent liabilities and assets including long-term investments and financing; changes in stockholders' equity; and analysis of financial statements.

99 Income Tax Accounting (3)

Provision of the Internal Revenue Code applicable to the preparation and filing of individual, partnership, estate, trust, and corporate returns. Procedures for reporting and accounting for refunds, deficiency assessments, and other administrative practices.

# **EDUCATION**

#### **EDUCATION**

1 Introduction to Education (2)

An orientation to public school and teaching in local schools. Designed for teacher aides, credentialed teachers new to local school districts, parents, and patrons of the local school system. Topics include school finance, school administration and policies, curriculum and instructional procedures, counseling and guidance, and school and community relations.

#### INSTRUCTIONAL AIDE

- Introduction to Instructional Aide Training (3)
  The study and practice of working with children in the school environment, including the demonstration of materials and procedures used in the classroom. Special emphasis will be given to the specific duties and responsibilities of Teachers' Aides.
- Audio-Visual and Instructional Machines and Materials (2)
  Study and practice in the use of projectors (all types), teaching machines, tape recorders, bulletin boards, language masters, listening centers, record players, picture and resource files, bulletin boards (handwriting on board), chart making.
- Playground (Supervision and Skills) (2)
  Study of some of the elements of playground supervision, including first aid, safety, games and rules, noon-hour supervision, skills and activities, legal aspects.
- 55 Language Arts for Instructional Aides (3)
  Study of language arts procedures, such as: listening, speaking, reading,
  writing, experience charts, child literature, storytelling, penmanship, board
  writing, printing, cursive writing.
- 56 Creative Arts (3)
  Study of methods and materials in art, drama, and music.
- 57 Community and School Relations (2)
  Identification of leadership roles, school organization, personnel responsibilities, case studies, agencies that cooperate, ethnic characteristics of communities, home and school relations.
- Training for Special Education Aides (2)
  Study of the specialized type of help an aide might render in the Special
  Education environment. Introduction to working with Educationally Handicapped, Physically Handicapped, Emotionally Mentally Retarded, Trainable
  Mentally Retarded, and Gifted Students.
- Methods and Materials in a Single Subject (2)
  An intensive briefing and training in textbooks, methods, and materials in a single subject field. Designed to be given generally to aides at the time of extensive textbook or curriculum changes. May be repeated for credit in another subject field.

## **EDUCATION**

60 Children's Growth and Learning in the Elementary School (3)
Designed to assist the aide in understanding children's growth patterns and their learning characteristics in the elementary school.

## **NURSERY SCHOOL**

50A-B Nursery School Education (3-3)

A two-semester course designed to attain proficiency by applying the knowledge and skill acquired to practical problems that arise in teaching in a nursery school. Present teaching or volunteer correlation of child growth and development with nursery school objectives and everyday activities.

The various curricula in this department are designed to serve the needs of students who will later transfer to a senior college or university, and also to serve those who desire a vocational preparation.

Curricula established primarily for transfer purposes include:

- 1. Architecture—first one or two years or the five-year program. Major courses include Arch 1, 4A, 4B, 5, 6; Engr 2, 4.
- 2. Engineering—first two years of the general engineering requirements. Major courses include Engr 2 (Civil Engineering only), Engr 3, 4, 11, 12; Electronics 1; any 2 of the following courses: Metals 21, 26, 27; Welding 28, 35.
- 3. Industrial Arts Education—first two years of programs preparing instructors of Industrial Arts in secondary schools. Major courses include any combination of the following amounting to not more than 20 semester units (providing prerequisites are met): Arch 3A, 3B; Engr 4; Automotive and Power 11, 12, 13; Electronics 30, 41, 42; Industrial Drafting 1, 2; Metals 21, 26, 27, 51, 52; Welding 28, 35.
- 4. Industrial Technology—first two years of the four-year technical bachelor's degree program. Major courses include:
  - a. For construction option: Arch 2, 3A, 11, 12; Engr 2, 4.
  - b. For drafting option: Electronics 30; Industrial Drafting 1, 2, 51; Engr 4; Metals 21, 26; Welding 28.
  - c. For electronics option: Electronics 41, 42, 43; Industrial Drafting
  - d. For manufacturing processes option: Electronics 30; Engr 4; Industrial Drafting 1, 2, 51, 52; Metals 51, 52.
  - e. For metals option: Electronics 30; Metals 26, 27, 51; Welding 28.
  - f. For transportation option: Automotive and Power 11, 12, 67; Welding 28.

Curricula established for vocational preparation leading to a certificate or Associate in Arts Degree include:

1. Air Conditioning and Refrigeration—major courses include: Air Conditioning 60, 61, 62A, 62B, 63, 64, 65, 66, 67, 68, 69; Engr 4; Industrial Drafting 53; Metals 27.

- Architectural Drafting—major courses include: Arch 1, 2, 3A, 3B, 5, 6, 9, 11, 12, 51; Engr 2, 4.
- 3. Automotive Technology—major courses include: Automotive and Power 11, 12, 13, 64, 65, 67, 68, 69, 70; Metals 21; Welding 28.
- 4. Electronics Technology—major courses include: Electronics 41, 42, 43, 44; Industrial Drafting 10; Metals 27; Reports 41.
- 5. Industrial Drafting—major courses include: Arch 5, 6; Electronics 30; Engr 4, Industrial Drafting 1, 2, 51, 52; Metals 21, 26, 27; Welding 28; Reports 41.
- 6. Industrial Supervision—major courses include: Industrial Supervision 81, 82, 83, 84, 91, 92, 93, 94, 95, 96, 97, 98, 99.
- 7. Industrial Technology—major courses include: Automotive and Power 11, 12; Electronics 41, 42; Engr 4; Industrial Drafting 1, 2; Metals 26, 27; Welding 28; Technology General 16; Reports 41.
- Metals Technology—major courses include: Electronics 30; Industrial Drafting 53; Metals 26, 27, 51, 52, 53, 54; Welding 28; Reports 41
- 9. Welding Technology—major courses include: Electronics 30; Industrial Drafting 53; Metals 26; Welding 29, 30, 35, 63, 64, 65, 66.

Course work is also offered in Basic Aviation, Water Treatment, and Wastewater Treatment.

#### ARCHITECTURE

- Fundamentals of Architectural Design (3)
  Introduction to the field of architecture as a profession and to the design process as a basis for architectural analysis. Emphasis given to orientation to architecture. Includes a critique of man's environment. Studies in line, area, color, and textures in two and three dimensions.
- Building Materials (3)
   2 hours lecture and 3 hours laboratory.
   Applications of building materials, structural composition of buildings.
   Includes fabrication of structural details and testing of construction materials with actual testing equipment.
- 3A Architectural Detailing I (3)
  2 hours lecture and 3 hours laboratory.
  Prerequisite: Arch 2 or consent of the instructor.
  Working drawings for wood frame and steel frame structures. Includes footing and structural details.
- 3B Architectural Detailing II (3)
  2 hours lecture and 3 hours laboratory.
  Prerequisite: Architecture 3A.
  Working drawings for masonry and concrete structures. Includes applications of specifications.

#### 3C Architectural Detailing III (3)

2 hours lecture and 3 hours laboratory.

Prerequisite: Architecture 3A or 3B.

Working drawings for masonry steel frame structures. Includes applications of specifications.

#### 4A Environment: Home (2)

Lectures and discussions concerning the nature of home environmental design. Includes designing a residence and building a model.

#### 4B Environment: Urban (2)

Lectures and discussions concerning the nature of man's urban environment as it relates to urban design. Includes historical study of urban development and actual neighborhood planning.

#### 5 Perspective, Shades, and Shadows (2)

1 hour lecture and 3 hours laboratory.

Basic techniques used in architectural graphic communication. Applications of mechanical and freehand perspectives plus shades and shadows.

#### 6 Architectural Delineation (2)

6 hours laboratory.

Prerequisite: Architecture 1.

Two- and three-dimensional representations emphasizing original expression. Includes architectural presentation in pencil, ink, and water color.

#### 9 Landscape Planning and Design (3)

2 hours lecture and 3 hours laboratory.

Prerequisite: AgPS 1, AgOH 5A-5B, or approval of instructor. This course is designed for students interested in the planning and designing of landscaped areas. Emphasis will be placed upon the location of lawns, trees, shrubs, walks, driveways, patios, planters, and other landscape structures for home and park landscaping. Same as Agricultural Ornamental Horticulture 9. May be taken for credit only once.

#### 11 Building Codes (2)

Study of building codes of Federal, state, and local governments relative to all construction and safety considerations.

#### 12 Construction Estimating (2)

Methods used in estimating costs and quantities involved in materials, equipment, and labor.

#### 51 Architectural Office Practices (2)

Projects in professional practices, job development, office administration, contracts, legalities, and product information.

#### **ENGINEERING**

#### 2 Surveying (2)

1 hour lecture and 3 hours laboratory.

Prerequisite: Math 5 or equivalent.

Care and use of tapes, levels, and transits. Involves the maintenance of field notes; land measurement by tape; differential and profile leveling; profile plotting. Includes elementary transit work and traverses.

#### 3 Engineering Graphics (2)

1 hour lecture and 3 hours laboratory.

Prerequisite: Math 51 and either high school mechanical drawing or

Engr 4

Pictorial sketching, orthogonal principles, precision dimensions, tolerancing. Emphasis placed upon graphical algebra, calculus and data presentation. Computations through the construction of functional scales, nomography.

#### 4 Descriptive Geometry (2)

1 hour lecture and 3 hours laboratory.

Solution of drafting room problems by graphical methods, space relationships of points, lines, and planes. Includes developments, intersections, and warped surfaces.

# 11 Engineering Statics (3)

Prerequisite: Physics 4A.

Two- and three-dimensional force systems. Includes equilibrium conditions, frames, dry friction. Graphical methods and the diagram as an aid to problem solutions.

#### 12 Properties of Materials (3)

Prerequisite: Chemistry 1A, Physics 4A.

Atomic and molecular structures and microstructures of engineering materials. Mechanical, thermal, electrical, corrosive, and radiation properties. Includes materials testing and sample preparation.

## TECHNOLOGY—AERONAUTICS

81 Basic Aviation (3)

Civil Air Regulations, meteorology, navigation, theory of flight, general service of aircraft, air traffic control. Meets ground school requirements of CAA private pilot certificate.

# TECHNOLOGY—AIR CONDITIONING AND REFRIGERATION

60 Introduction to Air Conditioning and Refrigeration (3)

2 hours lecture and 3 hours laboratory.

Course emphasizes standard air conditioning practices. Includes basic theory and practice in the operation of the complete mechanical refrigeration cycle.

# 61 Fundamentals of Air Conditioning and Refrigeration (3)

2 hours lecture and 3 hours laboratory.

Prerequisite: Air Conditioning 60.

Theory and practice in heating, cooling, ventilation, basic air distribution, elementary psychometrics, temperature applications, heat loads, defrosting methods, controls, and equipment fundamentals. Basic trouble-shooting of electrical components and the mechanical cycle.

#### 62A Advanced Air Conditioning (3)

2 hours lecture and 3 hours laboratory.

Prerequisite: Air Conditioning 61.

In-depth study and practice of air conditioning principles and operations in residential and commercial applications.

#### 62B Advanced Refrigeration (3)

2 hours lecture and 3 hours laboratory.

Prerequisite: Air Conditioning 61.

In-depth study and practice of refrigeration principles and operations in residential and commercial applications.

#### 63 Air Conditioning and Refrigeration Equipment (2)

6 hours laboratory.

Prerequisite: Air Conditioning 61.

Includes selection, installation, repair, layout, general operation, and troubleshooting of air conditioning and refrigeration equipment.

# 64 Advanced Air Conditioning and Refrigeration

Equipment Theory (2)

Prerequisite: Air Conditioning 63 or may be taken concurrently. Study of absorption, thermocouples, centrifugals, steam jet equipment, cryogenics, and theory of operation.

#### 65 Air Distribution (2)

1 hour lecture and 3 hours laboratory.

Prerequisite: Air Conditioning 61.

Includes theory of heat gain and practice in duct systems design and installation.

#### 66 Psychometrics and Hydronics (2)

1 hour lecture and 3 hours laboratory.

Prerequisite: Air Conditioning 61.

Advanced study in properties of air and gases. Fluid flow and piping.

#### 67 System Control Devices (2)

Prerequisite: Air Conditioning 62B.

Refrigeration safety and flow control devices, electrical control systems, air and water control applications.

#### 68 Systems Design (2)

1 hour lecture and 3 hours laboratory.

Prerequisite: Air Conditioning 67 and mechanical drafting ability. Mechanics and engineering involved in air conditioning and refrigeration systems layout.

69 Cost Estimation for Air Conditioning (1)

Prerequisite: Air Conditioning 68.

Employs manufacturers' specifications to acquaint students with pricing and cost estimation.

# TECHNOLOGY—AUTOMOTIVE AND POWER

#### 11 Automotive Principles I (3)

1 hour lecture and 6 hours laboratory.

Automotive engine operation principles. Practical work in the operation and maintenance of engines. Course includes bench work, engine inspection, repair.

## 12 Automotive Principles II (3)

1 hour lecture and 6 hours laboratory.

Prerequisite: Automotive and Power 11.

Study of drive train principles, steering mechanisms, brake systems, and suspensions. Practical work in operation and maintenance of hydraulic systems.

#### 13 Automotive Electricity (3)

1 hour lecture and 6 hours laboratory.

Study of electrical systems, starters, generators, alternators, voltage regulators, lighting systems, control devices. Trouble diagnosis and testing; operation and maintenance.

#### 43 Tractor Operations (3)

2 hours lecture and 3 hours laboratory.

The selection, operation, service, maintenance, adjustment, handling, and minor repair of wheel and track type tractors. Same as Agriculture-Engineering 43. May be taken for credit only once.

#### 44 Agricultural Equipment (3)

2 hours lecture and 3 hours laboratory.

Operation, selection, adjustment, servicing, and care of seedbed preparation equipment, fertilizer distributor, cultivators, and other equipment used in the area. Actual repair, maintenance, and operation of equipment will be done during the laboratory periods. Same as Agriculture Engineering 44. May be taken for credit only once.

# 64 Automatic Transmissions I (3)

1 hour lecture and 6 hours laboratory.

Prerequisite: Automotive and Power 12.

Study of hydraulics as applied to automatic transmissions. Theory, inspection, care, and maintenance of automatic transmissions.

#### 65 Automatic Transmissions II (3)

1 hour lecture and 6 hours laboratory.

Prerequisite: Automotive and Power 64.

Continuation of Automotive and Power 64. Advanced shop practice in automatic transmissions.

# 67 Engine Diagnosis and Tune-Up (3)

1 hour lecture and 6 hours laboratory.

Prerequisite: Automotive and Power 11.

Practice in the use of various types of diagnostic equipment in the checking of engine performance.

#### 68 Engine Rebuilding (3)

9 hours laboratory.

Prerequisite: Automotive and Power 11.

Instruction is given in proper engine reconditioning methods and procedures, which includes practice in cylinder boring, wrist pin fitting, rod aligning, valve seat grinding, disassembly and assembly. Course is normally offered on individual practicum basis.

#### 69 Small Engines (2)

1 hour lecture and 3 hours laboratory.

The theory and operating principles of small two-cycle and four-cycle engines. Practical work in testing, repairing, and operating small engines such as power lawn mowers, motorcycles, and outboard motors.

# 70 Fundamentals of Auto Air Conditioning (2)

11/2 hours lecture and 11/2 hours laboratory.

Prerequisite: Automotive and Power 13.

Includes physics involved in automotive air conditioning. The refrigerated air conditioning and heating system—installation, troubleshooting, and servicing.

# 90 Heavy Equipment Operation and Maintenance (3)

1 hour lecture and 6 hours laboratory.

Selection, operation, service, adjustment of heavy equipment (dozers, carryalls, trucks, cranes, backhoes, etc.). Same as Agricultural Engineering 90. May be taken for credit only once.

#### 91 Basic Hydraulics (2)

1 hour lecture and 3 hours laboratory.

Familiarization with theory, application, and coponent parts of hydraulic systems. Same as Agricultural Engineering 91. May be taken for credit only once.

# 92 Hydraulic Systems Maintenance and Repair (3)

2 hours lecture and 3 hours laboratory.

A continuance of Basic Hydraulics including advanced practices in maintenance and repair of hydraulic systems. Same as Agricultural Engineering 92. May be taken for credit only once.

#### TECHNOLOGY—DIESEL MECHANICS

# 20 Truck Operation and Maintenance (4)

2 hours lecture and 6 hours laboratory.

Prerequisites: Automotive and Power 43 or consent of the instructor. A study of the regulatory codes applicable to the truck operation, types and application of trucking equipment, load characteristics and loading. Experience in servicing, maintaining and operating trucks, truck-tractors, trailers and semi-trailers. Same as Agriculture Diesel Mechanics 20. May be taken for credit only once.

#### 25 Truck Chassis (4)

2 hours lecture and 6 hours laboratory.

Prerequisite: Consent of the instructor.

This course covers the function, design, specifications of truck chassis components and gives live shop experience in inspection, service, adjustments, repair, rebuilding and installation of components for various classes of truck chassis, including axles, brakes, clutches, differentials, drive lines, frames, power dividers, steering, suspension, tires, transfer cases, transmissions and wheels. Trailers and semi-trailers as an integral part of the complete unit are also studied. Same as Agriculture Diesel Mechanics 25. May be taken for credit only once.

#### 61 Diesel Mechanics I (4)

2 hours lecture and 6 hours laboratory.

Prerequisites: Two years high school automotive mechanics or Automotive and Power 11.

Diesel engine theory, operation and maintenance. Includes horsepower determinations, micro-measuring, maintenance, preventative maintenance, storage, trouble-shooting, and tune-up. Same as Agriculture-Diesel Mechanics 61. May be taken for credit only once.

#### 62 Diesel Mechanics II (4)

2 hours lecture and 6 hours laboratory.

Prerequisite: Diesel Mechanics I or consent of the instructor. Two-cycle diesel engine overhaul. Includes cleaning, inspecting, measuring, servicing, rebuilding, and replacing engine components. Same as Agriculture-Diesel Mechanics 62. May be taken for credit only once.

#### 63 Diesel Mechanics III (4)

2 hours lecture and 6 hours laboratory.

Prerequisite: Diesel Mechanics I or consent of the instructor. Four-cycle diesel engine overhaul. Includes cleaning, inspecting, measuring, servicing, rebuilding, and replacing engine components. Same as Agriculture-Diesel Mechanics 63. May be taken for credit only once.

#### 64 Diesel Mechanics IV (4)

2 hours lecture and 6 hours laboratory.

Prerequisite: Diesel Mechanics 61 or consent of the instructor. Diesel Air, Fuel, and Governors. The course includes the servicing and overhaul of injection pumps, injectors, blowers, turbochargers, governors; and advanced tune-up and trouble-shooting. Same as Agriculture-Diesel Mechanics 64. May be taken for credit only once.

#### Diesel Engine Accessories (4)

2 hours lecture and 6 hours laboratory.

Prerequisite: Diesel Mechanics 61 or consent of the instructor. Includes the servicing of diesel engine accessories such as hydraulics, engine brakes, pumps, air compressors, tractor air conditioners, and electrical systems. Same as Agriculture-Diesel Mechanics 65. May be taken for credit only once.

#### TECHNOLOGY—ELECTRONICS

#### 1 Electric Circuits I (3)

3 hours lecture and 1 hour laboratory.

Prerequisites: Math 1B, Physics 4B.

Circuit analysis techniques, Kirchoff's Laws, network theorems, modal analysis, electric and magnetic circuits, instruments, transformers, rotating machines, and resonance. Selected theoretical concepts are reinforced through laboratory procedures. Course designed for engineering majors.

#### 30 Introduction to Electronics (3)

2 hours lecture and 3 hours laboratory.

Stresses principles of electric circuit behavior rather than analysis. Covers sources of electricity, power, magnetism, inductance, capacitance, tuned circuits, motors, generators, vacuum tubes, transistors, and basic radio principles. A first course in electricity and electronics designed for the non-electrical student.

#### 41 Electronic Circuit Analysis I (D.C. Circuits) (4)

3 hours lecture and 3 hours laboratory.

Prerequisites: High school algebra or Math 50 or Math 55. High school electricity or equivalent recommended.

A study of fundamentals of electricity and direct current circuits in series, parallel, and complex circuit configurations. Covers electrical energy sources, atomic and sub-atomic structures, power, work, Ohm's and Kirchoff's Laws, and D.C. Network Theorems. Includes magnetic circuits, electromagnet induction, electric fields, capacitance, and electrical measuring instruments. Theoretical concepts are reinforced through laboratory procedures

#### 42 Electronic Circuit Analysis II (A.C. Circuits) (4)

3 hours lecture and 3 hours laboratory.

Prerequisite: Electronics 41 or consent of the instructor. Trigonometry recommended.

A detailed study of alternating current theory and application. Stresses the topics of electrical power systems, reactance, impedance, susceptance, conductance, coupled circuits, non-sinsoidal waves, transformers, filters, attenuations.

ators, pads, and alternating current network theorems. Solutions to alternating current circuits emphasize the use of complex algebra and trigonometry in conjunction with the slide rule. Laboratory procedures introduce the concepts of basic circuit design.

# 43 Electrical Circuit Analysis III (Fundamentals of Electronic Devices) (4)

3 hours lecture and 3 hours laboratory.

Prerequisites: Electronics 42 or consent of the instructor.

A behavioral and analytical study of various semiconductor and vacuum tube devices. Course designed to present a background in device structure and applications in basic circuitry. The operation of each device is illustrated in a typical application circuit. Calculations concerning the devices feature both graphical and numerical concepts. Includes vacuum tube diodes, triodes, tetrodes, pentodes, beam power tubes, gas-filled tubes, and special purpose tubes. Investigates the behavior of such semiconductor devices as SCR's, FFT's tunnel diodes, zener diodes, and four-layer devices. Photo-conductors and light-emitting diodes are included.

# 44 Electronic Circuit Analysis IV (Applied

Electronics; Devices and Circuits) (4)

3 hours lecture and 3 hours laboratory.

Prerequisite: Electronics 43.

The study of semiconductors and vacuum tubes in useful circuit amplifiers, feedback oscillators, multivibrators, power supplies, and integrated circuits. Included also are control and logic circuits, and special purpose amplifying circuits. Emphasis on the design of new circuits as well as trouble-shooting analyzed mathematically by algebraic processes. Each circuit design includes visual evaluation techniques and procedures through the use of voltmeter and oscilloscope. Practical application of circuitry as related to radio, television, communications, medical, and industrial electronics and digital computer systems.

#### 54 Electronics Communications (4)

3 hours lecture and 3 hours laboratory.

Prerequisite: Electronics 43 or consent of the instructor.

A study of communications electronic circuits. Concerns the transmission and reception of electromagnetic energy. Includes amplitude, frequency, phase, and pulse modulation and demodulation. Transmission lines, antennas, wave propagation, multiplex, and other forms of transmission are included. Emphasizes typical communication transmitters and receivers; their basic principles of operation, typical currents, and circuit analysis. Pertinent data relating to FCC licensing is included.

# 55 Special Electronic Circuits (4)

3 hours lecture and 3 hours laboratory.

Prerequisite: Electronics 54 or consent of the instructor.

This course examines principles and circuits employed in broadcasting and closed-circuit television systems. The circuits investigated feature solid state equipment. Treats basic principles of monochrome and color cameras and receivers. Includes basic television systems, scanning systems, synchronizing generators, encoders, switching systems, and video tape recording principles.

Electronics for Nurses (2) 60

Includes explanations of physiological monitoring systems in use in medical practice. Instruction is offered in basic electrical theory along with electric current processing by monitoring oscilloscopes and test equipment. Emphasis is placed on patient and operator safety. Same as Nursing 65. May be taken for credit only once.

# TECHNOLOGY—GENERAL

10 Concepts of Modern Technology (2)

Course designed to acquaint students with the place of technology in the present economy. An introduction to the fundamental operations and processes involved in the automotive, construction, metals, electronic communications, and related industries. Emphasizes the function of technology in contemporary ecology.

16 Basic Mechanical Skills (2)

1 hour lecture and 3 hours laboratory.

Study of principles, practices, and materials used in mechanics and application of same under actual shop conditions. Same as Agricultural Engineering 16. May be taken for credit only once.

# TECHNOLOGY—INDUSTRIAL DRAFTING

1 Technical Drafting I (3)

1 hour lecture and 6 hours laboratory.

Introductory course including orthogonal and pictorial drawing principles, machine drafting procedures, drafting standards, sections, conventions, auxiliary views. Course designed for Industrial Arts Education majors and technology students.

2 Technical Drafting II (3)

1 hour lecture and 6 hours laboratory.

Prerequisite: Industrial Drafting 1.

Continuation of Technical Drafting I, involving advanced auxiliary views, detail and assembly drawing, standard, precision, and true-position dimensioning, parts usage, and drafting for numerical control.

Electronic Drafting (1) 10

½ hour lecture and 1½ hours laboratory.

Prerequisite: Electronics 42.

Construction of component outlines, block diagrams, schematic diagrams, and printed circuit boards.

51 Mechanisms (3)

1 hour lecture and 6 hours laboratory.

Prerequisite: Industrial Drafting 2 or Engineering 4, Math 50, or at

least a B grade in Math 55.

Advanced study of mechanical motion involving cams, gears, racks, and linkages; oblique triangle trigonometry solutions pertaining to above.

52 Elements of Machine Design (3)

1 hour lecture and 6 hours laboratory.

Prerequisite: Industrial Drafting 51.

Techniques of design of machine members—lubrication, stress and strain. Includes study of sub-assemblies and assemblies. Emphasizes industrial manufacturing processes.

53 Machine Blueprint Reading (2)

1 hour lecture and 3 hours laboratory.

Reading and interpretation of working prints. Includes view representations, meaning of dimensions, tolerancing, symbology, and surface quality.

# TECHNOLOGY—INDUSTRIAL SUPERVISION

81 Quality Control (2)

Meaning of quality control. Techniques involved in the application of quality control to the various departments in modern industrial organizations.

82 Industrial Purchasing (2)

Methods and techniques used in procurement of materials, products, and supplies in industry.

83 Developing Employees through Training (2)

Methods involved in the introduction of employees to training and in evaluating their progress in it. Techniques of on-the-job instruction. Apprenticeship, technical training, management development, and the use of consultants and advisory committees.

Job Analysis for Wage Administration (2)

Analysis of job descriptions, specifications, evaluation, and classifications. Local, state, and Federal regulations concerning industrial wages.

91 Elements of Supervision (2)

Basic course covering the responsibilities of the industrial supervisor. Major topics include organization, public relations, human relations, training, management-employee relations, production control, and promotion practices.

92 Psychology for Supervisors (2)

Studies the role of the supervisor in understanding the people with whom he works; emphasizes psychological processes — perceptions, learning, emotions, attitudes, personalities.

93 Human Relations (2)

Study of personnel relations as affected by the application of basic psychological techniques. Emphasis on employer-employee relationship. Same as Business 93. May be taken for credit only once.

94 Communications I for Supervisors (2)

Oral and written communications designed for supervisors and administrative personnel in industry. Emphasis placed upon individual experiences in speaking and in conference leading.

- 95 Communications II for Supervisors (2)
  Prerequisite: Industrial Supervision 94.
  Continuation of Industrial Supervision 94.
- 96 Labor-Management Relations (2) Extensive work in such areas as union contracts, grievances, and bargaining procedures. Includes a history of the labor movement. Emphasis placed on Federal and state labor enactments.
- 97 Industrial Organization Patterns and Management (2)
  Study of the establishment of lines of authority, departmental functions, local policies, general procedures and regulations.
- Work Simplification (2)
  Time and motion study techniques. Discussions of methods of improving job procedures and techniques.
- 99 Cost Control for Supervisors (2)
  Factors involved in cost control. Emphasis on materials, salvage, waste, time, and quality requirements. Includes a study of the supervisor's role in controlling costs.

#### TECHNOLOGY—METALS

- 21 Industrial Machine Shop Processes (2)
  1 hour lecture and 3 hours laboratory.
  Study of basic machine shop concepts, tools, and processes. Includes bench work, precision measurement, drill press, lathe, shaper, milling machine, and grinder operations. Not open to metals technology majors.
- Hot Metals Fabrication Processes (2)
   1 hour lecture and 3 hours laboratory.
   Forging, patternmaking, foundry, heat treating, and metals testing. Study of metals and alloys and their properties.
- 27 Industrial Sheet Metal Processes (2)
  1 hour lecture and 3 hours laboratory.
  Light gauge metal fabrication. Study of materials, tools, equipment, and standard layout, cutting, forming, and joining methods. Includes various methods of sheet metal pattern development.
- Technical Machine Shop I (3)

  1 hour lecture and 6 hours laboratory.
  Introduction to machine shop. Includes basic concepts, tools, equipment, and operations. Emphasizes bench work, precision measurement, drill press work, tool bit grinding, and lathe work.
- Technical Machine Shop II (3)

  1 hour lecture and 6 hours laboratory.

  Prerequisite: Metals 51.

  Emphasizes additional lathe work, including taper turning, threading, and internal operations. Includes shaper work and elementary milling machine set-ups and operations. Introduction to carbide cutting tools.

#### Technical Machine Shop III (3) 53

1 hour lecture and 6 hours laboratory.

Prerequisite: Metals 52.

Continuation of milling machine and shaper work. Includes indexing, gear cutting, and cams. Introduction to precision grinding.

#### Technical Machine Shop IV (3) 54

1 hour lecture and 6 hours laboratory.

Prerequisite: Metals 53.

Advanced precision grinding: surface, cylindrical, and tool and cutter. Study of abrasives, properties of metals, heat treating and hardness testing. Consideration of newer machining processes.

#### TECHNOLOGY—REPORTS

#### 41 Technical and Scientific Report Writing (3)

Prerequisite: High school English.

The written report as used in industrial, technical, and scientific professions. Emphasis placed on collecting, organizing, presenting, and evaluating materials. Same as English 41. May be taken for credit only once.

#### TECHNOLOGY—WASTEWATER TREATMENT

#### 50 Mathematics for Wastewater Treatment (3)

Includes basic operational mathematics expressed in terms used in wastewater treatment plant operations and attendant laboratory procedures. Involves elementary slide rule instruction.

#### 51 Wastewater Treatment I (3)

Prerequisites: WWT 50 Mathematics for Wastewater Treatment or

consent of the instructor.

A second course in the wastewater treatment plant operations curriculum. Covers basic hydraulics, microbiology, general and sanitary chemistry and general physics of wastewater treatment. Also includes study of basic electrical theory, wastewater characteristics, principles of purification, collection systems, and pumps and pumping systems.

#### 52 Wastewater Treatment II (3)

Prerequisite: WWT 51 Wastewater Treatment I

A continuation of Wastewater Treatment I. Covers preliminary wastewater treatment, primary and secondary sedimentation principles, sludge treatment, anerobic digestion, stabilization ponds, disinfection, and water reclamation techniques. Course emphasizes activated sludge processes and offers an introduction to trickling filters.

# TECHNOLOGY—WATER TREATMENT

#### 70 Mathematics for Water Treatment (3)

Course includes the standard arithmetic, algebraic, geometric, and trigonometric processes involved in mathematical calculations of water treatment. Includes elementary slide rule instruction, basic surveying theory, and map reading.

#### 71 Water Supply and Treatment (3)

Basic course covering historical development of water quality control practices, water sources, public health aspects of water supply, water chemistry, filtration, corrosion, tastes and odors in water, water bacteriology, pump operation.

#### 72 Water Supply Hydraulics (3)

Course in practical water supply hydraulics with emphasis on type, location, construction, operation, testing and maintenance of wells, pumping stations, and hydro-pneumatic systems; location, operation, and maintenance of water storage facilities and distribution systems; water flow meters and recorders; automatic equipment-activating devices and controls; detection of water losses; fire flow requirements.

#### 73 Chemistry for Water Treatment (3)

Includes study of various chemical treatments of water for purification purposes. Involves analysis of different types of chemical purification problems.

#### TECHNOLOGY—WELDING

#### 28 Industrial Welding Processes (2)

1 hour lecture and 3 hours laboratory.

General welding course including oxygen-acetylene welding, brazing and cutting; arc welding. Includes study of welding machines, joints positions, and metallic properties as they relate to welding. Same as Agriculture-Welding 28. May be taken for credit only once.

#### 29 Industrial Welding Theory (3)

Overall view of the welding trade. Includes study of welding methods, welding equipment, types of welds, metals and their properties, inspection, and testing of welds. Involves safety, standards, and blueprint reading. Same as Agriculture-Welding 29. May be taken for credit only once.

#### 30 Welding Laboratory (3)

9 hours laboratory.

Practice in welding processes—oxygen-acetylene and electric. Emphasizes fundamental techniques: all positions. Must be taken concurrently with Welding 29. Same as Agriculture-Welding 30. May be taken for credit only once.

# 35 Gas-Shielded Welding (2)

1 hour lecture and 3 hours laboratory.

Study of Tungsten Inert Gas (TIG) and Gas Metal Arc (MIG) welding processes, equipment, and techniques. Involves practice in welding mild steel, stainless steel, and aluminum. Same as Agriculture-Welding 35. May be taken for credit only once.

#### 63 Welding II (2)

6 hours laboratory.

Continuation of Welding 30. Includes additional mild steel welding, welding cast iron, hard surfacing, introduction of pipe welding, and specimen testing. Same as Agriculture-Welding 63. May be taken for credit only once.

- Oxygen-Acetylene Welding (3) 64 1 hour lecture and 6 hours laboratory.
  - Course involves extensive practice in oxy-acetylene welding and cutting techniques. Involves common weld joints-all positions. Same as Agri-

culture-Welding 64. May be taken for credit only once.

- Brazing (2) 65

1 hour lecture and 3 hours laboratory. Study of, and practice in, brazing and braze-welding. Emphasizes filler metal and flux selection, flame adjustments, and procedures for various metals. Same as Agriculture-Welding 65. May be taken for credit only once.

- 66 Electric Arc Welding (4)
  - 1 hour lecture and 9 hours laboratory.

Prerequisite: Welding 63.

Additional practice in advanced arc welding techniques. Emphasizes real or "live" job where applicable. Includes pipe welding and design and use of welding fixtures. Same as Agriculture-Welding 66. May be taken for credit only once.

#### **ENGLISH-SPEECH**

#### 1A Composition and Reading (4)

3 hours lecture and 2 hours laboratory.

Prerequisite: Satisfactory achievement on College Entrance Test. Speaking and writing based upon the reading of selected essays on vital issues. Training in the development and expression of thought in speaking and writing. Practice in the basic principles of public speaking and written composition.

#### 1B Literature and Composition (4)

3 hours lecture and 2 hours laboratory.

Prerequisite: English-Speech 1A.

Introduction to the study of literature; critical analysis of selected literary forms and types; oral reading; further training in speaking and writing.

#### A Subject A (3)

A remedial course in English designed for students who have not achieved college English standards. (No credit may be applied toward the A.A. Degree.) Successful completion of this course is determined by a final English 1A placement examination with a grade of C or better.

#### **ENGLISH**

# 3A Freshman Composition I (3)

Prerequisite: Passing of the English Placement Examination. A first course in composition for freshman college students who have passed the English Placement Examination. Emphasis is on selection of materials, organization, communication, and evaluation of expository writing. Eight thousand words of writing required. This course is offered only off campus.

# 3B Freshman Composition II (3)

Prerequisite: English 3A.

A second course in college composition. Emphasis is on critical analysis of selected literary masterpieces, the writing of critical essays, and library research papers. Eight thousand words of writing required. This course is offered only off campus.

#### 5 Creative Writing (3)

Prerequisite: Consent of instructor.

Emphasis on fiction and poetry, but freedom to pursue whatever writing forms may most interest the student.

# 10A-B American Literature (3-3)

Prerequisite: Sophomore standing, English 1A-B or equivalent. Study of representative American writers from first settlements to 1830 (first semester) and from 1830-present (second semester). Each semester course may be taken independently of the other.

#### 11A-B Survey of English Literature (3-3)

Prerequisite: Sophomore standing, English 1A-B or consent of instructor

Study of the development of English literature from Beowulf through eighteenth century (first semester) and from 1800 to present (second semester). Each semester course may be taken independently of the other.

#### World Literature (3)

Prerequisite: English 1A-B or equivalent, or consent of instructor. A study of selected works from Western and Oriental literature. Classics in the literature of different countries are studied for their artistic merit and their contribution to modern thought.

#### 14 Shakespeare (3)

Reading of Shakespeare's plays with emphasis on the characterization and the philosophy; preparation of critical papers based on reading and investigation.

# 16 Literature of the Desert (3)

A study of non-fiction and fiction written about the desert, inspired by the desert, and by authors living in the desert, with emphasis on the desert literature of the southwestern United States. The course includes an introduction to the desert environment and to man's relation to the desert. Field trips required.

#### 18 Introduction to Poetry (3)

Prerequisites: English 1A and 1B, or consent of the instructor. A course introducing the student to the techniques and directions of English and American poetry by the examination of poetry in its historical context, and by discussion and criticism of poetry. Students will also be encouraged to display their creativity in the composition of their own poems.

#### The Bible as Literature (3)

A survey of the Bible from a literary and philosophical point of view. Also introducing the great personalities, events, and developmental character of this unique literature.

#### 41 Technical and Scientific Report Writing (3)

Prerequisite: High school English.

The written report as used in industrial, technical, and scientific professions. Emphasis placed on collecting, organizing, presenting, and evaluating materials. Same as Technology-Reports 41.

#### 51 Language Arts (3)

An English course designed to satisfy the language needs of junior college students who do not wish to transfer to a 4-year institution. The course emphasizes communication skill, vocabulary improvement, and critical evaluation of the contemporary mass media. The course offers credit for graduation but not for transfer.

#### DRAMA

#### 1A-B Acting (3-3)

2 hours lecture and 3 hours laboratory.

First semester: Development of individual insights, skills, and disciplines in the presentation of dramatic material to an audience. Second semester: Intensive application of acting techniques through study and performance of selected scenes involving problems of style in a wide range of dramatic materials.

#### 2A-B-C-D Play Production Workshop (1-2)

A course permitting progressive participation and instruction in play production and acting. One or two units of credit may be earned in a semester. This course may be repeated to accumulate not more than 4 units. Class is organized as a producing unit to present plays and one-act programs.

#### 3A-B Stagecraft (2-2)

1 hour lecture and 3 hours laboratory.

Theory and practice of the procedures employed in the principal areas of play production including the building, painting, and manipulation of stage scenery; scene design, lighting, costume and make-up developed in a production book. Demonstrations and laboratory experience. May be repeated once for credit.

#### 4 Directing (3)

2 hours lecture and 3 hours laboratory.

The theory and practice of play directing: script analysis; casting procedures; style and production considerations; rehearsal techniques; directional methods of composition, movement, business, and rhythm in staging drama.

#### 5 Introduction to Theater (3)

A general survey of the theory and practice of theater art from the beginning to the present time. The elements of drama; historic structures of the theater; characteristic types of plays; the contribution of the director, actors, designers; contemporary production techniques.

#### 7 The Motion Picture: History and Criticism (3)

2 hours lecture and 3 hours laboratory.

The development of the motion picture, with study of its form as feature film and documentary. Consideration of theory, technique, aesthetics, experimentation, and social implications, illustrated by screen examples.

#### 10A-B Dramatic Literature (3-3)

A study of the masterworks of theater from the Greek Classic period to the present. First semester: Aeschylus to Ibsen. Second semester: Ibsen to the present.

#### 12A-B History of the Theater (3-3)

A study of the theater from primitive times to the present together with an analysis of representative plays. Special attention will be given to the theater as a mirror of social and cultural background of various countries and periods in which it is studied. First semester: Primitive times through Shakespeare. Second semester: Eighteenth century to the present. Second semester may be taken without taking first semester.

#### 39 Playwriting (3)

Prerequisites: English 1A and 1B, or consent of the instructor. Practice in writing the one-act play. The scenario, dialogue, aspects of characterization, development of scenes. Study of exemplary plays and criticism of the original scripts. Production procedures.

# **JOURNALISM**

#### 1 Introduction to Mass Communications (3)

An introduction to the influence and contribution of the Press in American Society. Major emphasis is placed on the role of mass communications; history and growth of print and electronic journalism, and an analysis of the current problems and criticisms of the American mass media.

#### 3A News Reporting (3)

2 hours lecture and 3 hours laboratory.

Prerequisites: Eligibility for English 1A or consent of the instructor. Ability to type is recommended.

A beginning newswriting course to provide instruction and practice in the fundamentals of news reporting. Concentration is on the lead and simple story types, organization and structure of news stories; and the language and style of journalism. Includes some work on campus newspaper "Chaparral."

# 3B Advanced Reporting (3)

2 hours lecture and 3 hours laboratory.

Prerequisite: C or better in Journalism 3A.

Interpretative newswriting with emphasis on specialized reporting. Students are given intensive practice to refine reporting techniques; given an exposure to a variety of news reporting assignments; and introduced to the techniques of feature and editorial writing. Work includes some reporting for the campus newspaper "Chaparral."

#### 4A-B Newspaper Production (1-3)

3 to 9 laboratory hours per week.

Prerequisites: Journalism 3A and 3B or consent of the instructor. An activity class which provides practical experience working in the various editorial positions on the school newspaper. Students are required to complete three hours of work per week for each unit of credit.

#### **RADIO-TELEVISION**

## 1 Introduction to Broadcasting (3)

This course will acquaint the student with the basic phases of radio and television broadcasting through a survey of its history, philosophy, legal aspects, networks, government regulations, programming, production, sales, and engineering operations. Open to all students seeking a background in the radio-television industry.

#### 3 Radio Production (3)

2 hours lecture and 3 hours laboratory.

An introduction to the techniques, procedures, equipment and devices required to produce radio programs. Actual program production experience will be gained through student operation of the campus radio studio.

#### 4 Television Production (3)

2 hours lecture and 3 hours laboratory.

An introduction to the techniques, procedures, equipment and devises required to produce television programs. Actual program production experience will be gained through student operation of the campus television studio.

#### 50 Radio and Television Writing (3)

Prerequisite: English 5.

Training is given in analysis and preparation of commercials, dramas, program formats, public service announcements, news, musical introductions, discussion programs, special events, talks, and interviews. Scripts will be performed by production classes.

#### 54 Radio and Television Announcing (2)

1 hour lecture and 3 hours production laboratory.

This course offers microphone and on-camera announcing, techniques and style for news casts, commercials, public service announcements, sports, classical and popular musical introductions, interviews, and dramatic productions.

#### 57 Advanced Television Production (3)

2 hours lecture and 3 hours laboratory.

Prerequisite: R-TV 4 or consent of the instructor.

An advanced course in the techniques, procedures, equipment, and devices required to produce television programs. Actual program production experience will be gained through student operation of the campus television studio

#### 80A-B-C-D Television Production Workshop (2-4)

3 hours laboratory for each unit of credit.

Prerequisite: Consent of the instructor.

A course utilizing student participation in all facets of television production; such as: acting, directing, writing, camera, and technical operations. Some programs produced by students may be seen on local outlets.

#### **SPEECH**

1 Fundamentals of Speech (3)

An introductory course in oral communication designed to develop the speaking and listening skills in a democratic society. A basic transfer course in speech fundamentals for students who have not had previous experience in high school or have not taken English 1A.

#### 2 Oral Interpretation of Literature (3)

Introduction to the oral reading of prose and poetry, practice in speaking and reading with training in the principles of effective delivery.

3 Voice and Diction (3)

An introduction to the fundamentals of voice production. Emphasis is placed on articulation, pronunciation, and related speech and vocal skills.

4A Public Speaking (3)

Prerequisite: English 1A, Speech 1, or consent of the instructor. Study and practice of the essentials of public speaking and the forms of public address. Emphasis is placed on invention, organization, and oral style.

- 4B Group Discussion and Leadership (3)
  An examination of principles, practices, and procedures in formal and informal deliberation. Emphasis on leadership functions and techniques of cooperative problem solving. Principles of parliamentary procedure.
- 6 Forensic Workshop (1-2)
  A lecture-laboratory course training students for inter-collegiate speech tournaments and other speech activities. Designed to equip the student for proficiency in debate, extemporaneous speaking, persuasive speaking, interpretation, and impromptu speech activities.
- 7 Argumentation (3)

Prerequisite: English 1A, Speech 1, Speech 4, or consent of the instructor.

A study of the principles of argumentation through reading, discussions, and practical application. Designed to equip the student for proficiency in analysis, persuasion, logical argument, and rhetorical thinking.

# FIRE SCIENCES

- Introduction to Fire Protection (3)
  Philosophy and history of fire protection, history of loss of life and property
  by fire. Organization and function of local, county, state, Federal, and
  private fire protection agencies; survey of professional career opportunities.
  Field trips may be required.
- Introduction to Fire Suppression (3)
  Characterstics and behavior of fire; fire hazard properties of ordinary materials; extinguishing agents; fire suppression organization and equipment; basic fire fighting tactics; public relations as affected by fire suppression. Field trips may be required.
- Fundamentals of Fire Prevention (3)
  Organization and function of the fire prevention organization; inspection; surveying mapping procedures; recognition of fire hazards; engineering a solution of the hazard; enforcement of the solution; public relations as affected by fire prevention. Field trips may be required.
- Fire Fighting Tactics and Stragegy (3)
  Review of fire chemistry, equipment, and manpower; basic fire fighting tactics and strategy; methods of attack; preplanning fire problems. Field trips may be required.
- Hazardous Materials (3)
  Review of basic chemistry; storage, handling, laws, standards, and fire fighting practices pertaining to hazardous solids, liquids, and gases. Field trips may be required.
- Fire Protection Equipment and Systems (3)
  Portable fire extinguishing equipment; sprinkler systems; protection systems for special hazards; fire alarm and detection systems.
- Related Codes and Ordinances (3)
  Familiarization with national, state, and local laws and ordinances which influence the field of fire prevention. Field trips may be required.
- Fire Hydraulics (3)
  Review of basic mathematics; hydraulic laws and formulas as applied to the fire service; application of formulas and mental calculation to hydraulic problems; water supply problem; underwriters requirements for pumps. Field trips may be required.
- 59 Building Construction for Fire Protection (3)
  Fundamental building construction and design; fire protection features;
  special considerations. Field trips may be required.
- Fire Company Organization and Procedure (3)
  Review of fire department organization; fire company organization; the company officer; personnel administration; communications; fire equipment; maintenance; training; fire prevention; fire fighting, company fire fighting capability; records and reports. Field trips may be required.

#### FIRE SCIENCES

- Fire Apparatus and Equipment(3)
  Driving laws, driving techniques, construction and operations of pumping, engines, ladder trucks, aerial platforms, specialized equipment, and apparatus maintenance.
- Rescue Practices (3)
  Emergency rescue methods and techniques. Rescue practices, the human body, emergency care of victims, childbirth, artifical respiration, toxic gases, chemicals, and diseases, radioactive hazards, rescue problems.
- 63A Fire Service Principles and Procedures I (1)
  An 18-hour course designed to develop an appreciation for the public service aspects of fire department work and of the necessity for discipline, esprit de corps, and training; and the ability to use and care for fire service tools, hose, nozzles, and fittings, ladder rescue equipment, and salvage equipment.
- Fire Service Principles and Procedures II (1)
  An 18-hour course designed to develop a fundamental knowledge of fire ground operations, an appreciation for comprehensive training, and the ability to lay hose with apparatus; to perform above-ground evolutions, and salvage operations.
- 63C Fire Service Principles and Procedures III (1)
  An 18-hour course designed to develop a knowledge of fireman's responsibilities in fire prevention, fire investigation, and public relations; the ability to use fire apparatus and equipment to deal with various types of fire and rescue problems.
- 63D Fire Service Principles and Procedures IV (1)
  An 18-hour course designed to fulfill a department's specific training need.
  The course may involve Ladder Truck or Elevated Platform Operations,
  Salvage Operations, Rescue Operations, Riot Control Operations, Long Pipe
  Operations, Fire Department Operations in Protected Properties, or any
  other type of operations in which a fire department may require training
  based upon local conditions.
- 63D-1 Fire Service Principles and Procedures IV-Driver Training (1)
  An 18-hour course designed to properly train fire department personnel who drive emergency appartus to meet their responsibilities: By lecture on emergency driver responsibility and qualifications, vehicle operational practices, standard driving practices, collision and accident prevention, maintenance schedules, and field training laboratory operations.
- 64A Fire Control I (1)
  An 18-hour course designed to develop a knowledge of basic chemistry and the behavior of fire; a basic knowledge of building design and fire proteciton equipment and systems; a basic understanding of fire strategy.
- 64B Fire Control II (1)
  Continuation of Fire Control I. An 18-hour course designed to develop a knowledge of fire strategy.
- 65A Pump Operation I (1)
  An 18-hour course designed to develop a knowledge of pumps and pumping principles and practical hydraulics; the ability to drive apparatus safely and to operate pumps.

# FIRE SCIENCES

- Arson Investigation (3)
  Introduction to arson and incendiarism, arson laws, and types of incendiary fires. Methods of determining fire cause, recognizing and preserving evidence, interviewing and detaining witnesses. Procedures in handling juveniles; court procedures and giving court testimony.
- 85 Emergency Medical Technician I (3)
  Covers all techniques of emergency medical care presently considered within the responsibilities of the emergency medical technician as well as all operational aspects of the job which he will be expected to perform. The course emphasizes the development of student skill in recognition of symptoms of illness and injuries and proper procedures of emergency care.

Students enrolled in Language 1, 2, or 3 which might duplicate courses completed in high school or at another institution of collegiate level will not be allowed unit credit. The first two years of work in a foreign language in high school is considered to be equivalent to one semester in college (4 units); each successive year in a foreign language in high school is equal to one additional semester in college (4 units).

Any student who feels qualified to take a more advanced course than indicated in his prior work will be encouraged to do so upon examination or by recommendation of the instructor.

#### **FRENCH**

- 1 Elementary French (4)
  - 4 hours lecture and 2 hours laboratory.

Fundamental essentials of French grammar and pronunciation; exercises in composition, conversation, and reading. Audio-lingualvisual approach stressed with heavy emphasis on oral proficiency and structural correctness in both speaking and writing skills throughout every aspect of the course.

- 2 Elementary French (4)
  - 4 hours lecture and 2 hours laboratory.

Prerequisite: French 1, two years high school French, or its equivalent.

Continuation of French 1.

- 3 Intermediate French (4)
  - 4 hours lecture and 1 hour laboratory.

Prerequisite: French 2, or three years high school French, or its equivalent.

A thorough audio-lingual review of grammatical structure. Advanced composition and some translations introduced with continued reading in literature and culture. The course is designed to reinforce the student's progress in developing writing skills and oral fluency and accuracy in idiomatic usage.

- 4 Intermediate French (4)
  - 4 hours lecture and 1 hour laboratory.

Prerequisite: French 3, four years high school French, or its equivalent.

Continuation of French 3.

8A-B French Conversation (2)

Prerequisites: French 2, or three years of high school French. Recommended to be taken simultaneously with French 3. Courses need not be taken in sequence.

Daily contact vocabulary building and practical conversation on everyday

topics, current events, student life, social life, and cultural materials. Langauge Laboratory attendance will be required at the discretion of the instructor.

#### **GERMAN**

1 Elementary German (4)

4 hours lecture and 2 hours laboratory.

Fundamental essentials of German grammar and pronunciation; exercises in composition, conversation, and reading. Audio-lingualvisual approach stressed with heavy emphasis on oral proficiency and structural correctness in both speaking and writing skills throughout every aspect of the course.

2 Elementary German (4)

4 hours lecture and 2 hours laboratory.

Prerequisite: German 1, two years high school German, or its equivalent.

Continuation of German 1.

3 Intermediate German (4)

4 hours lecture and 1 hour laboratory.

Prerequisite: German 2, three years high school German, or its

equivalent.

A thorough audio-lingual review of grammatical structure. Advanced composition and translations introduced with continued readings in literature and culture. The course is designed to reinforce the student's progress in developing writing skills and oral fluency and accuracy in idiomatic usage.

4 Intermediate German (4)

4 hours lecture and 1 hour laboratory.

Prerequisite: German 3, four years high school German, or its

equivalent.

Continuation of German 3.

## **ITALIAN**

1 Elementary Italian (4)

4 hours lecture and 2 hours laboratory.

Essentials of Italian speech, grammatical structure and pronunciation, oral practice, exercises in composition, readings on Italian culture and civilization.

2 Elementary Italian (4)

4 hours lecture and 2 hours laboratory.

Prerequisite: Italian 1, two years high school Italian, or its equiva-

lent.

Essentials of Italian speech, grammatical structure and pronunciation, oral practice, exercises in composition, readings on Italian culture and civilization.

3 Intermediate Italian (4)

4 hours lecture and 1 hour laboratory.

Prerequisite: Italian 2, three years high school Italian, or its equiva-

A thorough review of the fundamental principles of grammar with a practical application of written and oral exercises to develop fluency in idiomatic usage. Reading in Italian of cultrual material, short stories, novels or plays; oral or written reports on outside reading.

4 Intermediate Italian (4)

4 hours lecture and 1 laboratory.

Prerequisite: Italian 3, four years high school Italian, or its equiva-

Continuation of Italian 3 with greater emphasis on reading selections from Italian literature.

40A-B Survey of Italian Civilization (3)

An introduction to the Italian people, culture, and civilization through an historical survey of thought, literature, customs, arts and sciences, music, and institutions of Italy. Particular emphasis on acknowledging the universality of the Italian culture and the contribution that the Italian heritage has made to the humanities. 40A covers the period from the Thirteenth Century to the Sixteenth Century; 40B covers the period from the Seventeenth Century to the present. Courses need not be taken in sequence. Conducted in English.

#### LATIN

1 Elementary Latin (4)

4 hours lecture and 2 hours laboratory.

Fundamental essentials of Latin grammar, forms, and vocabulary; exercises in reading, composition, and speaking. Reading approach with aural-lingual practice in language laboratory; emphasis on the Latin element in English.

2 Elementary Latin (4)

4 hours lecture and 2 hours laboratory.

Prerequisite: Latin 1 or one year of high school Latin.

Continuation of Latin 1: concludes study of basic grammar, forms, and vocabulary.

3 Intermediate Latin (4)

Prerequisite: Latin 1 and 2, or two years of high school Latin. Review of basic grammar, forms, and vocabulary; advanced reading in selections from writers of Latin prose and a few selections of poetry.

4 Intermediate Latin (4)

Prerequisite: Latin 1, 2, and 3, or three years of high school Latin. Advanced reading in Latin poetry, especially Virgil.

#### **RUSSIAN**

1 Elementary Russian (4)

4 hours lecture and 2 hours laboratory.

Fundamental essentials of Russian grammar and pronunciation; exercises in composition, conversation, and reading. Audio-lingual approach stressed

with heavy emphasis on oral proficiency and structural correctness in both speaking and writing skills throughout every aspect of the course.

#### 2 Elementary Russian (4)

4 hours lecture and 2 hours laboratory.

Prerequisite: Russian 1, two years high school Russian, or its equiva-

Continuation of Russian I.

#### 3 Intermediate Russian (4)

4 hours lecture and 1 hour laboratory.

Prerequisite: Russian 2, three years high school Russian, or its equivalent.

A thorough audio-lingual review of grammatical structure. Advanced composition and translations introduced with continued readings in literature and culture. The course is designed to reinforce the student's progress in developing writing skills and oral fluency and accuracy in idiomatic usage.

#### 4 Intermediate Russian (4)

4 hours lecture and 1 hour laboratory.

Prerequisite: Russian 3, four years high school Russian, or its equivalent. Continuation of Russian 3.

#### **SPANISH**

# 1 Elementary Spanish (4)

4 hours lecture and 2 hours laboratory.

Fundamental essentials of Spanish grammar and pronunciation; exercises in composition, conversation, and reading. Audio-lingualvisual approach stressed with heavy emphasis on oral proficiency and structural correctness in both speaking and writing skill throughout every aspect of the course.

#### 2 Elementary Spanish (4)

4 hours lecture and 2 hours laboratory.

Prerequisite: Spanish 1, two years high school Spanish, or its equiva-

Continuation of Spanish I.

# 3 Intermediate Spanish (4)

4 hours lecture and 1 hour laboratory.

Prerequisite: Spanish 2, three years high school Spanish, or its

equivalent.

A thorough audio-lingual review of grammatical structure. Advanced composition and some translations introduced with continued readings in literature and culture. The course is designed to reinforce the student's progress in developing writing skills and oral fluency and accuracy in idiomatic usage.

# 4 Intermediate Spanish (4)

4 hours lecture and 1 hour laboratory.

Prerequisite: Spanish 3, or four years high school Spanish, or its equivalent.

Continuation of Spanish 3.

#### 5 Advanced Spanish (3)

Prerequisites: Spanish 4 or equivalent, Sophomore standing. This course is primarily designed for students of advanced Spanish proficiency and pre-Spanish majors as a transition toward upper division college work. Extensive readings in Spanish literature and culture are stressed with emphasis placed on composition and conversation, requiring intensive use of the Spanish language for enrichment of oral and writing abilities. Course accepted by University of California as equivalent to Spanish 25.

#### 6 Advanced Spanish (3)

Prerequisites: Spanish 5 or equivalent. Sophomore standing. Program essentially the same as Spanish 5 with emphasis on Spanish-American literature and culture. Course accepted by University of California as equivalent to Spanish 25.

#### 8A-B Spanish Conversation (2-2)

Prerequisites: Spanish 2 or three years of high school Spanish. Recommended to be taken simultaneously with Spanish 3.

Course need not be taken in sequence.

Daily contact vocabulary building and practical conversation on everyday topics, current events, and cultural materials. Language Laboratory attendance will be required at the discretion of the instructor.

CLASSROOM

#### HEALTH EDUCATION

Personal and Community Health (2)
Application of facts and attitudes to the maintenance of optimum health for the individual and society; effects of exercise, fatigue, and diet; emotional and mental well-being; drugs, alcohol, and tobacco; disease etiology and disease prevention; human reproduction and family; safety in the modern world.

#### PHYSICAL EDUCATION

- 1 First Aid and Safety (2)
  Theory and practice in immediate and temporary care given in case of accident or sudden illness until service of a physician can be procured.
  Complies with American Red Cross requirements. Upon successful completion of this course, each student is awarded a Standard and Advanced Red Cross Certificate.
- 2A Sports Officiating for Men (2)
  Instruction and practice in officiating skills including rules, duties, conduct, and related skills for football, basketball, and wrestling.
- 2B Sports Officiating for Men (2)
  Instruction and practice in officiating skills including rules, duties, conduct, and related skills for baseball, track, and swimming.
- 3A-B Sports Officiating for Women (2-2)
  A course in officiating techniques and rules of in-season women's sports.
  A student may earn her officials rating upon completion of this course. Fall semester: Volleyball, basketball, tennis, badminton. Spring semester: Softball, swimming, track.
- 4 Professional Skill Analysis (2)
  2 hours lecture and 2 hours laboratory.
  Prerequisite: Physical Education or Recreation major or minor.
  Evaluation, through testing, of the skills commonly needed by physical educators and recreation leaders. The results of this testing will form the basis for counselling students into classes they should take to improve their competencies. Required of Physical Education majors and minors.
- Introduction to Health and Physical Education (2)
  Introduces the student to the professional field of physical education. Aids the student in seeing the relationship of the physical education porfession to past and present day problems in the United States, its present status, professional organizations, literature, requirements; and makes an appraisal of individual competency in the above areas.

#### RECREATION EDUCATION

#### 1 Recreation Leadership (2)

A theory and activity course teaching: (1) leadership of recreation activities, with emphasis on the social development and integration of individuals into group programs, and (2) mechanics of planning, techniques of presentation, and a repertoire of social activities as tools for social recreation.

#### 2 Recreation Field Work (1-2)

This course gives practical experience to students who are training for recreation leadership, by providing actual supervised work at various recreation facilities within the Coachella Valley area (senior citizen and adult recreation facilities, teen centers, swimming pools, gymnasiums, school areas, boys' clubs, youth centers, etc.)

#### ACTIVITIES

#### PHYSICAL EDUCATION

# 20 Archery (½)

2 hours laboratory.

Beginning and intermediate archery. Students placed according to ability.

#### Badminton (1/2)

2 hours laboratory.

Instruction and practice in skills, strategies, and officiating of the sport.

#### Basketball (W) (1/2)

2 hours laboratory.

Instruction and practice in skills, strategies, and officiating of the sport.

#### Body Fundamentals (M) (1/2)

2 hours laboratory.

Emphasis upon increasing physical fitness through use of weights and vigorous activities.

#### Body Fundamentals (W) (1/2)

2 hours laboratory.

Emphasis upon increasing physical fitness through vigorous activities.

#### Folk and Square Dance A (1/2)

2 hours laboratory.

Instruction and practice in the basic figures of square dance, including some instruction in folk dance.

# Folk and Square Dance B (1/2)

2 hours laboratory.

Instruction and practice in intermediate figures of square dance and folk

#### Modern Dance (1/2)

2 hours laboratory.

Beginning and intermediate modern dance. Fundamental dance movements and dance composition.

#### 20 Social Dance (1/2)

2 hours laboratory.

Basic dance steps of several popular contemporary social dances.

#### Fencing (½)

Instruction and performance in fencing skills and bodily development pertinent thereto. The use of the foil, the sabre, and the epee.

# Field Sports (M) (1/2)

2 hours laboratory.

Instruction and practice in the skills and strategies of various team sports in season.

#### Field Sports (W) (1/2)

2 hours laboratory.

Instruction and practice in the skills and strategies of various team sports in season.

#### Golf (1/2)

2 hours laboratory.

Beginning, intermediate, and advanced golf. Students placed in section according to ability.

#### Jogging and Fitness (1/2)

2 hours laboratory.

The organization, instruction, and participation in a progressive program of jogging, running, and exercises as applied to health and fitness.

#### Rehabilitation Activities (1/2)

2 hours laboratory.

For those who must take a restricted activity program on written recommendation of student's physician. Doctor's order to be filed with College nurse before entering this class.

#### Rugby-Touch Football (1/2)

2 hours laboratory.

Instruction and practice in the skills of these two sports.

#### Soccer-Touch Football (1/2)

2 hours laboratory.

Instruction and practice in the skills and strategies of these two sports.

#### Senior Lifesaving (1/2)

2 hours laboratory.

Practice in performing various swimming strokes and water rescue skills. Upon successful completion of this course the student is awarded a Red Cross Senior Life Saving Certificate.

# Springboard Diving (1/2)

2 hours laboratory.

Instruction and practice in the various groups of dives, body mechanics, and judging.

#### 20 Swimming and Diving (1/2)

2 hours laboratory.

Beginning, intermediate, and advanced swimming and diving. One semester each-students placed according to ability.

# Synchronized Swimming ABCD (Coed) (1/2-1/2-1/2)

2 hours laboratory.

Beginning and advanced synchronized swimming. Fundamental aquatic art skills, composition, and choreography.

#### Tennis (½)

2 hours laboratory.

Beginning, intermediate, and advanced tennis. Students placed according to ability.

#### Track and Field (M) (1/2)

2 hours laboratory.

Instruction and practice in the track and field events.

#### Track and Field (W) (1/2)

2 hours laboratory.

Instruction and practice in the track and field events.

#### Tumbling and Gymnastics (W) A-B-C-D (1/2-1/2-1/2)

2 hours laboratory.

Women's tumbling and gymnastics include fundamental through advanced methods in the use of the trampoline, uneven parallel bars, and balance beam, with instruction in tumbling and free exercise. The degree of difficulty coincides with the consecutive lettering of the courses. (Courses must be raken in sequence.)

#### Volleyball (1/2)

2 hours laboratory.

Instruction and practice in skills, strategies, and officiating of the sport.

#### Water Safety Instruction (1/2)

2 hours laboratory.

Practice in performing and teaching the various swimming strokes and water skills. Upon successful completion of this course, the student is awarded a Red Cross Water Safety Instructor's Certificate.

#### Wrestling (M) (1/2)

2 hours laboratory.

Instruction and practice in the skills and strategies of the activity.

#### 21A-B Professional Activities (1-1)

Prerequisite: Major in Health, Physical Education, and Recreation. Laboratory and testing program in the four areas of individual activities, team sports, aquatics, and dance. Instruction in activities according to the needs of professional students.

#### 22A-B Professional Activities (1-1)

Prerequisite: Major in Health, Physical Education, and Recreation. Continuation of 21A-B.

#### VARSITY SPORTS—MEN

30 Baseball (1)

10 hours plus games. Prerequisite: Tryouts.

Basketball (1/2)

10 hours plus games. Prerequisite: Tryouts.

Cross Country (1)

10 hours plus games. Prerequisite: Tryouts.

Football (1)

10 hours plus games. Prerequisites: Tryouts.

Golf (1)

10 hours plus games. Prerequisite: Tryouts.

Swimming (1)

10 hours plus games. Prerequisite: Tryouts.

Tennis (1)

10 hours plus games. Prerequisite: Tryouts.

Track (1)

10 hours plus games. Prerequisite: Tryouts.

Wrestling (1/2)

10 hours plus games. Prerequisite: Tryouts.

# VARSITY SPORTS—WOMEN

31 Basketball (1) (Spring Semester)

10 hours plus games. Prerequisite: Tryouts.

Synchronized Swimming (1)

10 hours plus shows.

Open to all students who have the skill, knowledge, and interest in performing in synchronized swimming shows.

Tennis (1)

10 hours plus matches. Prerequisite: Tryouts.

Volleyball (1) (Fall Semester)

10 hours plus games. Prerequisite: Tryouts.

# **HOME ECONOMICS**

#### 1A-B Foods and Nutrition (3-3)

6 hours lecture and laboratory.

Principles of human nutrition. Methods of selecting, storing, preparing, and serving foods.

#### 2A-B-C Clothing and Textiles (3-3-3)

Beginning, Intermediate, and Advanced. Commercial patterns and their adaptation; fitting and construction. Selection and care of textiles. Wardrobe planning, grooming, and buying practices.

#### 4 Home Management (2)

4 hours lecture and laboratory.

Study of the abilities, skills, and attitudes needed in the modern home as the center of family living, in relationship to meals, clothing, and management of time, energy, and money.

#### 5 Home Planning (2)

4 hours lecture and laboratory.

Study of housing trends, sites and home planning, building. Fundamentals of reading and drawing plans.

#### 6 Home Furnishings (2)

4 hours lecture and laboratory.

Prerequisite: Home Ec 5 or consent of the instructor.

Study of housing trends and home planning, furniture and furniture selection, and interior and exterior decoration.

#### 7 General Nutrition (2)

1 hour lecture and 3 hours laboratory.

Study of the chemical compositions of food and their utilization by the body. Emphasis on practical problems of nutrition and relationship of adequate diet to physical and mental health. Open to both men and women.

#### 8 Textiles (3)

10

Study of the sources and characteristics of man-made and natural fibers and the processes used in the manufacture and finish of textile materials. Recommended for home economics and merchandising majors and others interested in the interior decorating and clothing industries.

#### 9 Consumer Problems and Personal Finance (3)

Study of individual and family consumer problems and management of income through planned spending for present living and future security. Same as Business 9. May be taken for credit only once.

#### Marriage and Family (2)

A study of the modern family with emphasis on personal adjustment, courtship, marriage, parenthood, and family administration. Open to both men and women. Same as Sociology 10. May be taken for credit only once.

# Food Preparation (2)

4 hours lecture and laboratory.

Study of planning and preparing meals with emphasis on food short cuts, quick and easily prepared meals, with the principles of nutrition and meal service included. Enrollment for this introductory course is limited to men interested in hotel and restaurant management, or those interested in learning how to cook.

#### The Child and His Family (3)

Study of the infant and the child in relation to the family group, and the interaction between family and community agencies. Same as Psychology 14 Child Development. May be taken for credit only once.

# 62 Clothing Pattern Drafting (2)

1 hour lecture and 3 hours laboratory.

Flat pattern techniques used to develop skills in creating or copying dress design and modifying commercial patterns.

# 63 Clothing Selection (1)

3 hours laboratory.

A study of factors which influence one's personal appearance; grooming; color and design in wardrobe selection and building; buying practices; modeling.

#### SCHOOL LUNCH MANAGEMENT

The courses offered in the School Lunch Management Program are designed to meet the challenges that school lunchroom managers and prospective managers must meet in the face of demands for maintaining high standards in the lunchroom in terms of nutrition, food preparation and service, sanitation, and business procedures.

In recognition of the importance of effective school lunchroom procedures and better trained school lunch personnel, this program of study was established in joint cooperation with the California State Department of Education, Office of School Lunch.

# 79 Nutrition (1)

Prerequisite: Employment in school lunchroom, or consent of the instructor.

A study of dietary needs of children and youth; the role of proteins, fats, carbohydrates, minerals, and vitamins in nutrition; factors to be considered in developing good food habits.

# 80 Beginning Menu Planning (1)

Prerequisite: Employment in school lunchroom, or consent of the instructor.

Emphasis is directed to the basic factors included in planning menus based on the Type A Lunch pattern; planning to make the Type A Lunch attractive; use of menu planning worksheets.

# HOME ECONOMICS

#### Sanitation and Safety (1) 81

Prerequisite: Nutrition (Home Ec. 79), Beginning Menu Planning (Home Ec. 80), or consent of the instructor.

A survey of personal cleanliness; sanitary practices in food preparation; cause, control, and investigation of illnesses caused by food contamination; dishwashing, storage and refrigeration; sanitation of kitchen and equipment; cleansing materials; garbage and refuse disposal; safety precautions and training for accident prevention.

#### Work Simplification (1) 82

Prerequisite: Nutrition (Home Ec. 79), Beginning Menu Planning (Home Ec. 80), or consent of the instructor.

Principles of motion economy as related to the use of the human body and work place. Application of work simplification procedures to school lunchroom problems.

#### Advanced Menu Planning (1) 83

Prerequisite: Nutrition (Home Ec. 79), Beginning Menu Planning

(Home Ec. 80), or consent of the instructor.

Advanced work in menu planning based on the Type A Lunch pattern, including adaptation to different age levels; development of variety in menu planning; evaluation of nutritional standards; budgetary controls.

#### Food Purchasing (1) 84

Prerequisite: Nutrition (Home Ec. 79), Beginning Menu Planning

(Home Ec. 80), or consent of the instructor.

A study of the methods involving food purchasing by the school district, and the factors responsible for influencing quantity selection, standards and grades, and prices.

#### Ouantity Food Preparation (1-2) 85

Prerequisite: Nutrition (Home Ec. 79), Beginning Menu Planning

(Home Ec. 80), or consent of the instructor.

This course will provide experience in the methods of quantity food preparation which retain nutritive value; use of standard recipe files; use of weights and measures; use of equipment; timing, selection, preparation, display, and service of foods for the school lunch program.

#### Personnel Management for School Lunch (1) 86

20 hours lecture.

Selection of employees; personnel relations, training techniques; work schedules. Federal, state, and local laws affecting school food service person-

#### Management Techniques for School Lunch (1) 87

To teach production efficiency, organization and policies, purchasing techniques, record keeping, personnel procedures, cost and portion control, inventory control, food handling procedures and other pertinent related subjects. A capsule course designed to benefit school lunch workers who have recently become managers or desire to train for management. Also an excellent refresher course for incumbent managers.

# 88

Type A—Menu Planning (1)
Will acquaint school lunch workers with the requirements of the Type "A" program. Instruction will be given in lunch planning, state requirements in reporting protein factors and authorized substitutions. Class participants will learn the factor value of various foods and their importance in the nutrition pattern of the Type "A" lunch. Included will be instruction in the use of state report forms.

# HOTEL AND MOTEL MANAGEMENT

- Introduction to Hotel and Motel Operation (1)
  An orientation to the hospitality industry, its size and scope, career opportunities, the nature of the market served, kinds of establishments and how these are organized and managed.
- Front Office Procedure and Night Audit (2)
  Essential routines of the front office to all other departments of the house.
  Registration, sales, credit, and emergency procedures are covered. Handling of correspondence relating to reservations and inquiries, rules and regulations. Duties and standards of front office personnel. Ethics and general problems encountered in serving the public. Duties and responsibilities of the night auditor or accounting clerk. Instruction is given in the audit of the guests' accounts and preparation of the transcripts and reports. Continuation of practice in the use of the front office machines.
- Supervisory Housekeeping (2)
  An introductory course in the fundamentals of housekeeping management, stressing employee training, record keeping and executive responsibilities. The organization of the department is covered, work methods, equipment, cleaning materials and procedures, room design and safety.
- Hotel and Motel Advertising Sales and Promotion (3)
  The organization of the Hotel Sales Department and its functions. Areas to be covered include: (1) Sales and Promotion, (2) Sales Communications, (3) Advertising and Public Relations, and (4) Marketing.
- Hotel-Motel Operations (3)
  A study of responsibility of the motel-hotel or motor inn supervisory and management staff. Emphasis on "front-of-the-house" aspects in the areas of promotion, advertising, insurance, labor-management relations, ethics, and legal aspects of hotel operations.

51 Introduction to Law Enforcement (3)

Field trips, interviews and reports required.

An overview of the administration of criminal justice in the United States; the impact of crime upon society; the development and function of law enforcement in the United States and California; the relationships between Federal, state, county, and city administration of criminal justice; law enforcement career opportunities and career information.

52 Criminal Law (3)

Field trips required.

Prerequisite: Law Enforcement 51, or current employment in a law enforcement agency.

History and sources of criminal law; examination and discussion of the California Penal Code, Welfare and Institutions Code, and related codes containing criminal statutes; review and discussion of "elements of crimes" as applied to specific offenses against person, property, or peace; the place of municipal and county ordinances in law enforcement.

53 Criminal Evidence (3)

Field trips may be required.

Prerequisite: Law Enforcement 51, or current employment in a law enforcement agency.

Rules defining evidence and its admissibility in court actions; discussion of the relevancy, materiality, and competency of evidence; examination of the "Hearsay" Rule and the exceptions thereto; opinion evidence; problems arising in the use of physical evidence in court; comprehensive review of prosecution and defense practices in criminal trials.

54 Administration of Justice (3)

Prerequisite: Law Enforcement 51, or current employment in a law enforcement agency.

A composite course for the working peace officer, dealing with the basic essentials of knowledge and job performance; includes laws and ordinances; practical and legal aspects of law enforcement; field techniques; reports and record procedures, community problems in crime prevention and control, inter-relationships of law enforcement agencies, juvenile laws, and procedures.

55 Criminal Investigation (3)

Field trips may be required.

Prerequisite: Law Enforcement 51, or current employment in a law enforcement agency.

Problems involved in the investigation of specific offenses with emphasis upon felonies; sources of information, occupation with related agencies; review of investigative procedures as applicable to the specific crime.

56 Patrol Procedures (3)

Field trips may be required.

Prerequisite: Law Enforcement 51, or current employment in a law enforcement agency.

The purpose and methods of beat patrol; the identification of police hazards and effective techniques to cope with them; observation of persons, places and incidents; the operation of emergency vehicles; field note taking; the preparation of adequate reports; the proceeding of routine complaints; beat, sector, zone, and post duties.

# 57 Traffic Control (3)

Field trips may be required.

Prerequisite: Law Enforcement 51, or current employment in a law

enforcement agency.

Basic accident investigation; the use of the State Accident Report Form; the principles of "selective" enforcement; parking and intersection control; the basic provisions of the California Vehicle Code governing the operation of motor vehicles; the responsibilities of the community in traffic control.

# 58 Juvenile Procedures (3)

Field trips may be required.

Prerequisite: Law Enforcement 51, or current employment in a law

enforcement agency.

The place of the juvenile in the community; legislation prescribing the special treatment of juveniles; related agencies interested in children; a study of crimes committed upon or by minors; investigation of such crimes and the relationship of the officer to the juvenile and the parents; survey of various codes relating to juveniles.

#### 59 Firearms (1)

3 hours laboratory.

Prerequisite: Law Enforcement 51, or current employment in a law

enforcement agency.

Elementary use of all types of firearms including safety, range techniques, and etiquette; basic fundamentals of firing with actual use of firearms; lectures on firearm topics; safety, nomenclature, use, and laws relating to firearms.

# 60 Defensive Tactics (1)

Fundamental methods of protection against persons armed with dangerous and deadly weapons, handcuffing and restraint of prisoners and the mentally ill

#### 62 Mob and Riot Control (1)

Prevention and control of mobs and riots. Behavioral patterns of crowds. Physical and psychological characteristics of riotous groups and individuals within the group. Study of the peace officer's role in mob or riot control. Planning and organization of police operations in riot suppression and control. Motivational forces at work when riots occur.

# 63 Police Community Relations (3)

A course covering the role of modern police in metropolitan communities and urban cities. Intended for police science students and the general public, especially teachers, city employees, ministers, and others who are interested in the relationship between community welfare and law enforcement.

65 Traffic Accident Investigation (3)

Prerequisite: Employment as a Law Enforcement Officer or consent of LE Coordinator.

The purposes of Traffic Accident Investigation, control of the accident scene, practical methods of investigation, determining the cause, determing speed from skid marks, accident report writing, investigative authority, laws requiring reporting accidents, prosecution of violators, testifying in court.

66 Constitutional Law for Police (3)

Lecture and Seminar three hours per week.

Prerequisite: LE 52 Criminal Law, and current employment in a law enforcement agency, or consent of COD Law Enforcement Department Chairman.

Analysis of Constitutional provisions and court decisions. Specific topics include History of the United States Constitution, Freedoms of Speech, Press and Assembly, Authority to Detain and Arrest, Search and Seizure, Wiretapping, Eavesdropping and Visual Surveillance, Interrogations and Confessions, Self-incriminations, Assistance of Counsel, Multiple Prosecutions, Right to Fair Trial and Civil Rights.

67 Collection and Preservation of Evidence and

Crime Scene Recording (3)

Prerequisite: Employment in a Law Enforcement Agency, or Law Enforcement 55.

Techniques in the collection, preservation, analysis, and interpretation of physical evidence: footprints, tool marks, hair, blood, fibers, stains, handwriting, explosives, and ballistics. Includes crime scene searches, recording, and photography.

68 Narcotics Control (3)

Prerequisite: Employment in a Law Enforcement Agency or consent of Department Chairman.

Laws relating to narcotics and dangerous drugs. Procedures and problems in investigations and control of violations. Identification and effects of narcotics and dangerous drugs. Proceudres in case preparation and presentation in court.

69ABCD Advanced Officer's Course (2-2-2-2)

Prerequisites: Employment in a Law Enforcement Agency and completion of the Basic Course as required by the California Commission on Peace Officer Standards and Training.

Field application of recent legislation and Court Decisions. Techniques of case investigation and reporting, evidence handling and processing. Interpersonal relationships and communications.

70 Introduction to Corrections (3)

Prerequisites: Employment in a Law Enforcement Agency or LE 51. Field trips may be required. An introductory study of the entire field of corrections. The development of corrections. The correctional process in probation, institutions, and parole. A survey of corrections careers. Corrections theories.

Wildlife Law Enforcement (3)
The development and functions of wildlife law enforcement in the United States and California; the relationship between Federal, State, County and City law enforcement; an overview of Federal and State wildlife laws and regulations; importance of law enforcement as a management tool in protecting, conserving and perpetuating the wildlife resources of California; duties and responsibilities, educational, physical, and professional qualifications of wildlife law enforcement officers; law enforcement procedures; court systems; fines and forfeitures; Hunter Safety Program; public responsiblity for wildlife law enforcement, preservation of environment and the conserving of wildlife. Same as Agriculture-Natural Resources 71. May be taken for credit only once.

# LIBRARY SCIENCE

# LIBRARY SCIENCE

Use of Books and Libraries (2)
Introduction to use of the library. Includes classification, card catalog, periodical indexes, selected reference books, and preparation of bibliographies.

# LIBRARY TECHNOLOGY

- Introduction to Library Service (2)
  Introduction to the field of library work, with emphasis on the use of library resources and opportunities in the field. History of libraries, books and printing; basic library tools; filing systems; arrangement and uses of the card catalog; survey of types of libraries and services.
- 52 Library Circulation Procedures (2)
  3 hours lecture and laboratory.
  Prerequisite: Library Technology 51.
  A study of the basic circulation procedures for library clerks, shelving library materials, shelf reading, record keeping, inventory procedures, reserve books, borrower registration, overdues, and circulation desk problems.
- Reference Services and Materials (2)
  3 hours lecture and laboratory.
  Prerequisite: Library Technology 51.
  An introduction to major reference materials and acquaintance with the varied facilities available in library reference departments. Presentation of the goals and philosophy of reference work and practice in assisting as a reference clerk under the supervision of reference librarians.
- 54 Library Order Work (2)
  3 hours lecture and laboratory.
  Prerequisite: Library Technology 51.
  A study of library clerical techniques involved in the ordering and receiving of books, pamphlets, and periodicals. Bibliographical problems, verification, out-of-print sources, and relationships with vendors and publishers.
- Library Clerical Techniques (2)
   3 hours lecture and laboratory.
   Prerequisite: Library Technology 51.
   A study of library clerical techniques used in the physical processing of all types of library materials: typing catalog cards, card filing, bindery preparation, and mending.

# LIBRARY SCIENCE

Audio-Visual Clerical Techniques (2) 56

3 hours lecture and laboratory.

Prerequisite: Library Technology 51.

A study of clerical techniques and procedures involved in ordering and servicing requests for audio-visual materials and equipment. Development of skills in the production of instructional materials and the operation of AV equipment used for instructional purposes.

# **MATHEMATICS**

1A Calculus with Analytic Geometry (4)

Prerequisite: Four years of high school mathematics, including trigonometry, with a minimum grade of B in the fourth year, or Math 12 with a minimum grade of C.

Limits, derivatives, and differentials of algebraic and sine and cosine functions; mean value theorem, indefinite integrals, areas, volumes, moments, and applications to physics.

1B Calculus with Analytic Geometry (4)

Prerequisite: Math 1A with a minimum grade of C.

Transcendental functions, methods of integration, improper integrals, conic sections, hyperbolic functions, polar coordinates, vectors, and parametric equations.

2A Calculus with Analytic Geometry (4)

Prerequisite: Math 1B with a minimum grade of C.

Solid analytic geometry, vector algebra, partial derivatives, line integrals, multiple integrals, vector field theory, functions defined by integrals and infinite series.

2C Ordinary Differential Equations (3)

Prerequisite: Math 2A with minimum grade of C.

Differential equations of first, second and higher order; simultaneous, linear, homogeneous equations; solutions by powers series; La Place Transform; applications.

3 Introduction to Mathematics (3)

Prerequisite: Two years of high school mathematics or equivalent. Designed for liberal arts students. Introduction to history of mathematics, famous mathematicians, other number systems, logic, and the relationship of mathematics to the fields of music, art, astronomy, philosophy, etc. Students work problems and are exposed to ideas in mathematics they have not previously encountered.

4 Statistical Methods (3)

An introduction to the statistical concepts and techniques most frequently used in sociology, psychology, anthropology, economics, business, mathematics, and education. Subject matter includes tabular and graphic presentation of data, measures of central tendency, measures of dispersion, measures of correlation, sampling, time series, confidence intervals, and tests of significance. Emphasis is placed upon the use and interpretation of the preceding. Same as Sociology 3. May be taken for credit only once.

5 Trigonometry (3)

Prerequisites: Plane geometry and 1½ years of high school algebra or Math 51.

Course covers plane trigonometry, circular functions, trigonometric functions, identities, complex numbers. Emphasis on trigonometric analysis. Students with one year of high school algebra may enroll in this course concurrently with Math 10.

#### **MATHEMATICS**

#### 10 College Algebra (3)

Prerequisite: One and one-half years of high school algebra. Course includes exponents, determinants, inequalities, complex numbers, theory of equations, permutations, combinations, and probability.

# 12 Advanced College Algebra and Trigonometry (4)

Prerequisites: Math 10 with a minimum grade of C, or 4 years of high school mathematics including trigonometry with a minimum average of C in the fourth year.

A rigorous pre-calculus course including the analysis of polynomial, logarithmic, expotential, and trigonometric functions and their graphs.

# 20 Mathematics for Business Analysis (3)

Prerequisite: Mathematics 3 or consent of the instructor. Course includes compound statements, probability theory, vectors, and matrices with applications to Markov chains; linear programming, theory of games, and finite differences.

# 30A-B Mathematics for Elementary Teachers (3-3)

Prerequisites: High school algebra and geometry. Math 30A, or consent of the instructor, is prerequisite to Math 30B. Designed for the elementary education major. Includes set theory, elementary number theory, congruences, whole numbers, rational numbers, irrational

Designed for the elementary education major. Includes set theory, elementary number theory, congruences, whole numbers, rational numbers, irrational numbers, introduction to logic, algorithms, four fundamental operations of arithmetic. Also involves the real number system, measurement of geometric figures, and probability.

#### 50 Elementary Algebra (3)

Includes the basic properties of integers, rational numbers, and real numbers; polynomial arithmetic, simple functions and graphing; solves linear and second degree equations. Gives an introduction to inequalities.

# 51 Intermediate Algebra (3)

Prerequisite: At least one year of high school algebra or Math 50. An expansion of the topics in Mathematics 50. Emphasizes exponents, functions, radicals, logarithms, and systems of equations. Provides an introduction to determinants.

## 52 Plane Geometry (3)

Prerequisite: High school algebra or Math 50. Fundamentals of plane geometry developed by both inductive and deductive processes.

#### 53 Fundamentals of Mathematics (3)

3 hours lecture and 1 hour laboratory.

A review of the fundamentals of mathematics as applied to everyday problems. Required for students who have not achieved a satisfactory score on the entrance examination. Same as Special Education 53. May be taken for credit only once.

# **MATHEMATICS**

# 55 Technical Mathematics (3)

3 hours lecture and 1 hour laboratory.

Basic mathematics with technical emphasis. Course includes fractions, decimals, ratios, proportion, logarithms, algebraic operations, fundamentals of geometry, and applied trigonometric principles. Also includes an introduction to the use of the slide rule.

# **MUSIC**

# THEORY and LITERATURE

# 1A-B-C-D Musicianship (2-2-2-2)

3 hours attendance.

Prerequisite: Concurrent enrollment in 2A-B-C-D.

Ear training, sight singing, dictation, and keyboard harmony correlated with corresponding course 2A-B-C-D. Attendance at 12 on-campus concerts required.

#### 2A-B-C-D Harmony (2-2-2-2)

Prerequisite: Concurrent enrollment in 1A-B-C-D.

The harmonization of figured bass and of given and original melodies; includes triads, passing and auxiliary tones, seventh chords, modulations. Attendance at 12 on-campus concerts required.

# 3A-B Survey of Music History (3-3)

Designed for the music major. A chronological study of music from the earliest times to the contemporary scene. Selected readings will be intensively studied. Attendance at 12 on-campus concerts required.

# 4 Counterpoint (2)

3 hours attendance.

Prerequisite: Music 2A-B.

The writing of tonal counterpoint is the goal of this course. The student will complete original examples of two- and three-part counterpoint. Analytical work includes the study of contrapuntal music of various stylistic periods.

## 5 Evaluation of the Arts (3)

Development of techniques and understanding for the evaluation of music, drama, graphic and plastic arts, and dance. Exercises in shaping opinions based on historical and cultural perspective. How to "be your own critic." Same as Art 5. May be taken for credit only once.

# 10 Introduction to Music (3)

Designed for the general college student and non-major in music. A general survey of the development of music with emphasis on the aesthetic, formal and historical factors, correlated with parallel movements in other arts.

#### 11A-B Survey of Music Literature (3-3)

Designed for the music major. The study of representative musical masterworks and their background. Attendance at on-campus concerts required.

#### Fundamentals of Music (3)

May not be applied toward a major in music. Designed for the general student and prospective elementary teacher. Includes ear training, singing, music reading, elementary harmony, transposition, and conducting.

## 21A-B-C-D Class Piano (1-1-1-1)

2 hours lecture and laboratory.

Fundamentals of piano technique, tone production, rhythm, sight reading, interpretation, and keyboard facility. Open to beginner or advanced student, place in appropriate course according to ability.

# 22A-B-C-D Class Voice (1-1-1-1)

2 hours lecture and laboratory.

Fundamental techniques of solo and ensemble singing. Problems of tone production, breathing, diction, repertoire, and song interpretation.

#### 23A-B Stringed Instruments (1-1)

2 hours lecture and laboratory.

Class and laboratory study of orchestral stringed instruments. Class designed for those who expect to teach in the public schools. Basic technique on violin, viola, cello, and bass.

# 24A-B-C-D Brass and Woodwind Instruments (1-1-1-1)

2 hours lecture and laboratory.

Class and laboratory study of orchestral wind instruments. Class designed for those who expect to teach in the public schools. Basic technique on trumpet. French horn, tuba, clarinet, oboe, bassoon, flute, and saxophone.

#### 29 Collegium Musicum

4 hours laboratory.

Advanced training in selection, preparation and performance of vocal and instrumental ensemble music of different style periods, with emphasis on historically correct performance practices. A maximum of 4 units may be applied toward A.A. Degree.

# 30A-B-C-D Male Chorus (1-1-1-1)

4 hours rehearsal each week.

The study and performance of music literature for male chorus, ensemble, and quartet. Occasional extra rehearsals and public performances required.

# 31A-B-C-D College Orchestra (1-1-1-1)

4 hours rehearsal each week.

The study and performance of concert orchestra literature. Participation in public performances required.

# 32A-B-C-D College Chorus (1-1-1-1)

4 hours rehearsal each week.

Study and performance of either one large-scale work or a program of representative choral works; public performance required.

#### 33A-B-C-D Symphonic Band (1-1-1-1)

4 hours rehearsal each week.

Study and performance of standard literature for concert band; participation in public concerts and festivals required.

#### **MUSIC**

## 34A-B-C-D Vocal Ensemble (1-1-1-1)

4 hours rehearsal each week.

Prerequisite: Vocal and reading ability and consent of the instructor. Study and performance of music literature for small vocal ensembles; rehearsals and public performances required.

# 35A-B-C-D Chamber Ensemble (1-1-1-1)

Brass Ensemble (1-1-1-1)

Woodwind Ensemble (1-1-1-1)

Studio Group (1-1-1-1)

4 hours rehearsal each week.

Prerequisites: Ability to perform on one or more instruments and consent of the instructor.

The development of musicianship through the performance of music in the popular and jazz medium. Public performance required.

# 36A-B-C-D Opera Workshop (1-1-1-1)

3 hours rehearsal each week.

The study of musical, dramatic, and language techniques in opera through the performance of representative scenes and acts or participation in collegiate performances. Extra rehearsals and public performances required.

# 37A-B-C-D Chamber Music (1-1-1-1)

4 hours rehearsal each week.

Prerequisite: Ability to perform on one or more instruments and consent of the instructor.

The development of musicianship through the performance of music of various periods and styles. Public performance required.

# 40-48 Music Performance (2 units each course)

One hour performance—discussion each week.

Designed to provide training for vocalists or instrumentalists; consideration upon technical proficiency. Public performance in student recital each semester. Repertoire to include literature from all periods. The following conditions are required:

# a. Concurrent enrollment in one of the music performance series:

- 40 Harpsichord
- 41 Piano
- 42 Strings
- 43 Woodwinds
- 44 Brasses
- 45 Percussion
- 46 Organ
- 47 Voice
- 48 Guitar

- b. Approval of the instructor prior to registration.
- c. Minimum of one-half hour laboratory each week predicated upon a minimum of 5 hours practice.
- d. Jury examination at the end of the semester involving the student and the music staff of College of the Desert.
- e. Attendance at on-campus concerts.

# 51A-B-C-D Arranging (2-2-2-2)

Prerequisite: Consent of the instructor.

Scoring for vocal and instrumental groups of all types.

# 52A-B Church Music (2-2)

Prerequisite: Consent of the instructor.

Study of the music of the church, its history and meaning, and practical application of this material in present-day church services.

# 53 Folk Music (2)

A study of elementary guitar as applied to western and popular music. Basic right-hand fingering and elementary chord formations, as well as an introduction to the reading of music, will be studied.

# 61A Accompanying (Piano) (2)

2 hours lecture and 2 hours laboratory.

Prerequisite: Audition or consent of the instructor.

The study and performance of piano accompaniments for instrumentalists, vocalists, and ensembles. Participation in rehearsals, recitals, juries, and concerts required.

The department of nursing offers two programs in nursing education. These programs are conducted in local hospitals, community agencies, and on the College of the Desert campus. The Associate in Arts degree Nursing Program is designed for completion within two calendar years and will qualify the student for the Associate in Arts degree and for admission to the examination for licensure as a registered nurse in the State of California. The Vocational Nursing Program, requiring one calendar year for completion, will qualify the student for admission to the examination for licensure as a vocational nurse in the State of California.

Students who wish to prepare for four-year colleges will find counseling assistance in planning pre-nursing courses for the college of their choice.

#### ASSOCIATE IN ARTS NURSING PROGRAM

#### **ADMISSION**

*Procedure:* Classes are admitted in the fall semester each year. Inquiries concerning registration procedures should be addressed to the Registrar, College of the Desert.

General Requirements: Eligibility to enroll at College of the Desert and completion of the college admission requirements.

# Specific Requirements:

- Completion of high school or equivalent as established by the G.E.D. Test.
- 2. Completion of high school chemistry or its equivalent in college with a grade of C or better.

# **NURSING**

- 4 Nursing Fundamentals I (8)
  - 3 hours lecture and 15 hours laboratory.

Prerequisites: High school chemistry and acceptance into the nursing program.

An introduction to nursing and health principles, including individual health, community health and basic needs of patients. Laboratory experiences will include instruction in basic nursing procedures and the opportunity to develop a beginning skill in caring for patients in local hospitals.

# 6 Nursing Fundamentals II (6)

3 hours lecture and 9 hours laboratory.

Prerequisites: Nursing Fundamentals I and Biology 22A.

Progression of understanding of health and illness as related to the family and each of its members. Curriculum to include the preventative, remedial, supportive and rehabilitative aspects of nursing, including the physical, emotional, and social components: Introduction to Maternal and Child Health including Growth and Development.

# 9 Nursing Trends and Background (2)

1 hour lecture and 3 hours laboratory.

Covers modern history of nursing as a background for understanding of our present beliefs and practices in nursing; social aspects and their effects upon levels of nursing practice, nursing organizations, and the law as it relates to nursing.

#### Nursing Fundamentals III (9)

4 hours lecture and 15 hours laboratory.

Prerequisites: Nursing Fundamentals II, Biology 22A, B, and 15. Building on prior nursing courses, the student is presented material of increasing complexity in all of the six major problem-solving areas of oxygenation, mobility, regulatory, mental health, elimination and nutrition. Laboratory experience includes caring for people of all ages, maternal and infant problems and problems of physical and mental health. All appropriate community resources are used for laboratory experience.

# 12 Nursing Fundamentals IV (9)

3 hours lecture and 18 hours laboratory.

Prerequisite: Nursing Fundamentals III.

Refinement of previously learned theory and skill in providing nursing care to people of all ages including the six major problem-solving areas. Curriculum includes concept of the transition from student to graduate and of community involvement. Laboratory experience will include involvement in specialty areas, such as emergency room, coronary care units, and facilities for emotional problems and community acting groups.

# A.A. DEGREE NURSING CURRICULUM

#### 1st year Fall Semester-18 weeks units Spring Semester-18 weeks units ES 1A Comp & Reading or 4 ES 1B Literature & Comp or Eng 51 Language Arts 3 Sp 1 Fund. Speech Soc 1 Intro Sociology Bi 22B Anatomy/Physiology Bi 22A Anatomy/Physiology Bi 15 Gen Microbiology 4 N 4 Nursing Fund. I N 6 Nursing Fund. II 1/2 PE 1/5 2nd year Fall Semester-18 weeks Spring Semester-18 weeks Psy 1 Psychology N 12 Nursing Fund. IV N 11 Nursing Fund. III N 9 Nurs Trends & Background HEc 7 Gen Nutrition

Additional courses required for graduation to be taken concurrently with the above or during the summer: American History and Institutions Requirement, see page 27.

# **VOCATIONAL NURSING PROGRAM**

# **ADMISSION**

Classes are admitted in the fall semester. Requests for admission should be addressed to the Registrar, College of the Desert.

General Requirements: Eligibility to enroll at College of the Desert and completion of college admission requirements.

#### Specific Requirements:

- Completion of 10th grade or equivalent as established by the G.E.D.
  Test
- Physical and dental examinations, chest x-ray and specified immunizations.

# General Information

The Vocational Nursing Course is divided into three semesters of 16 weeks each making a total of 48 weeks. Each week is planned to provide 10 hours of lecture or discussion and 23 hours of clinical instruction in community hospitals totaling 33 hours per week. Lecture and laboratory instruction are closely correlated, and involve medical-surgical nursing, and care of mothers and babies.

Courses must be taken in consecutive order as listed:

		Units
VN 75	Medical-Surgical Nursing	11
VN 76	Maternal Infant Care	4
VN 77	Medical-Surgical Nursing	15
VN 78	Medical-Surgical Nursing	15

Satisfactory completion of the course qualifies the student to take the State Board Examination for licensure as a Vocational Nurse.

#### MEDICAL ASSISTING

Medical Assisting combines the function of a doctor's aide, receptionist, secretary, bookkeeper, and administrative assistant in the modern medical office. By performing her duties in a competent manner she enables the physician to devote himself to the care of the patient.

# General Information

To qualify for a certificate in Medical Assisting, the student must complete a total of 26 units.

To qualify for an Associate in Arts degree, the student must complete 62 units including Anatomy and Physiology and specific requirements for graduation.

# MEDICAL ASSISTING

# 60 Office Nursing Practices (3)

1 hour lecture and 6 hours laboratory.

Designed to familiarize the student with office nursing procedures, such as assisting the doctor with physical examinations, giving parenteral medications, and preparation and ordering of supplies.

# 61 Medical Terminology (2)

2 hours lecture.

Introduction to medical terminology as used by all health service personnel including medical doctors, dentists, nurses, physical therapists, medical secretaries, and doctor's office assistants. Taught as a language course.

#### MEDICAL ASSISTING CURRICULUM

For a One-Year Certificate	units		units
Bus 50A or B Typing	2	N 60 Office Nursing Practice	3
Bus 64 Records Management	2	N 61 Medical Terminology	2
Bus 53 Medical Secretarial Procedures	4	HE 1 Community & Personal Hygiene	2
		Psy 1 Psychology	3

#### RESPIRATORY THERAPY PROGRAM

Respiratory Therapy is a paramedical specialty which involves treatment of cardio-pulmonary disorders, accomplished by the administration of medical gases and drugs, to meet the therapeutic needs of the patient, under the direction of a practicing physician. The object of this training program at College of the Desert is to provide students with specialized training and general education so that they can function effectively and competently as Respiratory Therapists.

#### **ADMISSION**

*Procedure:* Classes are admitted in the fall semester each year. Requests for admission should be addressed to the registrar.

General Requirements: Eligibility to enroll at College of the Desert and completion of the College admission requirements.

Specific Requirements: High school graduation or equivalent. Satisfactory personal interview with a member of the Department of Nursing.

# RESPIRATORY THERAPY

51 Respiratory Therapy I (3)

2 hours lecture and 3 hours laboratory.

Prerequisite: High school graduation or equivalent and registration

in Respiratory Therapy Program.

The history and development of respiratory therapy as a paramedical specialty; basic principles of the anatomy and physiology of the respiratory system; basis principles of physics and the mechanical principles of respiratory equipment; and the use of medical gases.

52 Respiratory Therapy II (3)

2 hours lecture and 3 hours laboratory.

Prerequisites: Completion of Respiratory Therapy I and Elements of

Anatomy (3 units).

Includes the study of the cardio-pulmonary function of the human, normal and abnormal; methods of treatment of abnormal conditions of the respiratory system.

Nursing Arts for Respiratory Therapist (2)

1 hour lecture and 3 hours laboratory.

Prerequisite: Enrollment in Respiratory Therapy Program.

The study of nursing principles and procedures used in working with patients undergoing therapy for treatment of cardio-pulmonary disorders.

54 Respiratory Therapy III (15)

6 hours lecture and 27 hours laboratory.

Prerequisites: Completion of Respiratory Therapy II and all general

education requirements for the program.

Includes the theory and clinical application of respiratory therapy in the general hospital to a wide variety of respiratory disorders, and to all age groups. Includes the basic pathological processes, and the use of aerosols and other drugs.

55 Respiratory Therapy IV (15)

6 hours lecture and 27 hours laboratory.

Prerequisite: Completion of Respiratory Therapy III.

Pulmonary management of the totally dependent patient is presented; and operating room and recovery room experience, as well as intensive care area. Includes pulmonary function testing and advanced respiratory therapy techniques.

GENERAL EDUCATION courses to be completed before second year of program: Psychology, Language Arts, Speech, American Institutions, Anatomy and Physiology, Introductory Chemistry, Microbiology.

# NURSING — GENERAL

Nursing and Health Services I (3)

4 hours lecture-demonstration.

Prerequisite: Eleventh grade in high school.

Designed to introduce the student to the occupational fields in health

services. Career guidance will be offered in professional nursing, vocational nursing, medical assisting, respiratory therapy, medicine, dentistry, physical therapy, and others. Course will include opportunity to investigate chosen occupational field, instruction in principles of personal health, community health, and the care of patients in health institutions. Open to men and women.

- 62 Pharmacology for Nurses (2)
  - Prerequisite: R.N., L.V.N., or consent of the instructor. An overview of pharmacology for registered nurses desiring a refresher course and for licensed vocational nurses who have need of this information—includes the scope of pharmacology, definitions, drug standards, and drug legislation, and the administration of medications.
- Electronics for Nurses (2)
  Includes explanations of Psysiological monitoring systems in use in medical practice. Instruction is offered in basic electrical theory along with electric current processing by monitoring oscilloscopes and test equipment. Emphasis is placed on patient and operator safety. Same as Electronics 60.
- Nursing Assistant (4)
  - 2 hours lecture and 6 hours laboratory.

Prerequisite: Consent of the instructor.

The Nursing Assistant works either in a general hospital or in a convalescent hospital providing hygienic care to patients and giving a variety of treatments. She may also provide this same care to patients in their own homes either as an independent contractor or through the Visiting Nurse Association as a Home Health Aide.

# **BIOLOGICAL SCIENCES**

Biological Sciences. Students majoring in biological sciences or aiming toward careers in medicine, dentistry, pharmacy, veterinary medicine, or other pre-professional programs should take Biology 2A and 2B. Non-major university transfer students electing biology to meet science requirement should take Biology 1A and 1B. Both semesters should be completed to assure full transferability. Others should elect according to their needs. Biology 4 is recommended as the initial course for majors and pre-professionals.

#### **BIOLOGY**

# 1A-B General Biology (4-4)

3 hours lecture and 3 hours laboratory.

Credit may not be received by students who have received credit in Biology 2A-B or equivalents. A basic course emphasizing principles and philosophy of the biological sciences for the beginning college student and built around development and phylogeny as the cohesive theme. Environmental aspects are emphasized. Not recommended for pre-professional students or majors. 1A emphasizes plant kingdom; 1B, animal kingdom.

# 2A-B Introductory Biology (4-4)

3 hours lecture and 3 hours laboratory.

Prerequisites: Chemistry 1A, background in biology, and consent of the instructor. Biology 4 or an equivalency test, is suitable prepara-

An integrated biology course designed primarily for the needs of majors, minors, and pre-professional students. Thorough intensive study of the processes of biology in their contact in the natural world along with their physical and chemical background. Study of the experimental organisms used in biology, biological vocabulary, and ecological relationships are emphasized. Study of the phyla of bacteria, plants, and animals, with detailed laboratory study of representative specimens, serve as the cohesive concept around which the study of the biological principle proceeds.

#### 4 Elements of Biology (3)

Lecture and demonstration.

A course without prerequisite to acquaint the student with the fundamental principles of biology and their background in basic physics and chemistry. This is a beginning course for those with no biological background or a refresher for those who wish to excel in subsequent biology courses. A full laboratory, 4L is optional.

# 4L Elements of Biology Laboratory (1)

3 hours attendance.

Prerequisite: Assumes previous or concurrent enrollment in Biology

4 or Biology 10.

This provides supplementary laboratory experience for those having taken Biology 4 or Biology 10, and emphasizes practical experiments and techniques in the principles of biology.

#### 8 Animal Biology (4)

3 hours lecture and 3 hours laboratory.

A study of biology as exemplified in the members of the animal kingdom with their development, genetics, and evolution. The phyla are studied along with the anatomy and natural history of the individual groups. Emphasis also placed on the environment and the influence of the explosive presence of man on total animal ecology.

# 10 Civilization Biology (4)

Lecture and instructor-directed laboratory.

The course is to acquaint the student with the biological problems associated with a mushrooming civilization of any biological species. The course begins with a study of the elemental and energy cycles and of cybernetics. Various animal civilizations (social insects) are followed with a study of the development of human civilization with emphasis on the effect on the biological environment. Problems such as overpopulation, waste disposal, overuse of resources form the remainder of the course. For full laboratory see 4L.

# 13 Plant Biology (4)

3 hours lecture and 3 hours laboratory.

Not open to students with credit in Biology 1A or 2A. The study of the cell and its metabolism, photosynthes, reproduction, genetics, etc., followed by a study of the lower and higher plants.

# 15 General Microbiology (3)

2 hours lecture and 3 hours laboratory.

Prerequisite: Chemistry 4, or one year of high school chemistry with a minimum grade of C, preferably within the last 5 years.

An introduction to the study of microorganisms emphasizing an appreciation and understanding of microbial life. Pathology, physiology and medical implications are stressed. The course is designed to develop a practical knowledge of the principles of microbiology. Laboratory emphasis is directed toward the development of techniques and skills used to culture, propagate, and identify microorganisms. Recommended for those students interested in the health sciences.

# 16 General Microbiology Supplemental Lab (1)

3 hours laboratory.

May be taken concurrently with, or after completion of Microbiology 15 in order to further develop depth of understanding and laboratory skills established in General Microbiology.

# 22A-B Anatomy and Physiology (4-4)

3 hours lecture and 3 hours laboratory.

Prerequisite: One year of high school chemistry with a minimum grade of C, preferably within the last 5 years; or completion of Chemistry 4.

The courses consist of a coordinated study of human anatomy and physiology; general properties and concepts of living systems are emphasized including nutrition and nutritional chemistry. In addition, an intensive dissection of the cat and/or other mammalian forms is included. The courses are designed for students pursuing the health sciences, but is not recommended for pre-medical or pre-dental students.

# 35 Anatomy and Physiology Refresher (3)

Prerequisite: A previous course in Anatomy/Physiology, or consent of the instructor.

A refresher course in the principles of anatomy and physiology designed for those currently employed in the health professions preparatory to upgrading of their technical knowledge and skills.

## PHYSICAL SCIENCES

# **ASTRONOMY**

#### 2 Descriptive Astronomy (3)

An introductory survey of planetary, stellar, and galactic astronomy designed primarily for students not majoring in one of the sciences. This non-mathematical course reviews research techniques, current knowledge and theory about the planets, stars, galaxies, and the age and origin of the universe.

# **CHEMISTRY**

# 1A-B General Chemistry (5-5)

3 hours lecture and 6 hours laboratory.

Prerequisites: Good scholarship in high school chemistry, mathematics, or physics, and a satisfactory score on college placement test. All students who intend to take this course must take and pass a standardized chemistry placement examination prior to registration. Results of this examination will be used for advisory purposes only. General principles of chemistry with emphasis on inorganic materials. Qualitative analysis is included in the second semester with a brief introduction to organic chemistry.

# 3 Introductory General Chemistry (3)

2 hours lecture and 3 hours laboratory.

Includes the principles of inorganic chemistry. It is primarily designed for those who have not received credit in high school chemistry as a preparation for chemistry 1A-B, but of value and acceptable for meeting the general education requirements in the physical sciences.

#### 4 Biorganic Chemistry (3)

2 hours lecture and 3 hours laboratory.

Includes the principles of organic and biochemistry on a level for the general student. It is specifically recommended for the entrance requirement for nursing and other health services. Prior registration in Ch 3 is helpful and will improve transferability, but is not required.

#### 5 Quantitative Analysis (5)

3 hours lecture and 6 hours laboratory.

Prerequisite: Chemistry 1A-B.

An introduction to the methods of gravimetric and volumetric analysis: oxidation-reduction methods; introduction to physiochemical methods of analysis. The course is generally required of all students continuing in chemistry, medicine, dentistry, and some phases of agriculture.

#### 12 Organic Chemistry (5)

3 hours lecture and 6 hours laboratory.

Prerequisite: Chemistry 1A-B.

The study of the compounds of carbon, including both aliphatic and aromatic hydrocarbons and their derivatives.

# **GEOLOGY**

#### 1 Physical Geology (4)

3 hours lecture and 3 hours laboratory.

The study of the composition of origin of rocks and minerals, landscape development, earthquakes, the earth's interior, the nature of mountains and their development, and the drift of continental and oceanic crustal plates. Suggested for physical science general education requirement.

# 2 Historical Geology (4)

3 hours lecture and 3 hours laboratory.

Prerequisites: Geology 1 or 10, with at least a grade of B, or consent of the instructor.

The study of the formation and evolution of the earth including oceans and atmosphere, and its life, as traced largely through the rock and fossile records. Included is the study of the history of the science of geology. Offered in fall semester.

#### 3 Elementary Mineralogy (4)

2 hours lecture and 6 hours laboratory.

Prerequisites: Geology 1 or 10, with at least a grade of B, or consent of the instructor, and a course in chemistry (may be taken concurrently). High school chemistry may also be accepted at the discretion of the instructor.

A study of structure (crystallography), properties, identification, associations, and origins of minerals. Blowpipe analyses and related chemical tests are used in addition to physical means for determinations. Offered in spring semester.

#### 10 Earth Science (3)

(May be taken with or without laboratory).

À survey and integration of the earth sciences of Geology, Geophysics, Meteorology, and Oceanography, with aspects of Lunar and Planetary Science and Biology to bring into perspective the uniqueness of our planet, the interrelationships of its systems, and the impact of man upon these systems. Suggested for physical science general education requirement.

#### 10L Earth Science Laboratory (1)

3 hours laboratory.

Prerequisite: Previous or concurrent enrollment in Geology 10. Practical application in the laboratory and on field trips of aspects of the Earth Science subject areas listed above to reinforce and illuminate lecture material.

# **METEOROLOGY**

# 1 Descriptive Meteorology (3)

(May be taken with or without laboratory.)

Elementary survey of the causes and distribution of weather and climate. An understanding of weather phenomena. The reading of weather maps. Modern techniques of studying weather phenomena.

#### 1L Descriptive Meteorology Laboratory (1)

3 hours attendance.

(Assumes previous or concurrent enrollment in Meteorology 1.) Practical study of instruments and methods for the study and recording of weather and the reading and plotting of weather maps.

#### **PHYSICS**

# 1A-B-C General Physics (4-4-4)

3 hours lecture and 3 hours laboratory.

Prerequisites: C grade or better in Mathematics 1A, and a departmental mathematics proficiency examination administered during the first laboratory period.

This 3-semester sequence is required of students planning to major in physics, chemistry, or engineering. Physics 1A, mechanics and sound; Physics 1B, electricity and magnetism; Physics 1C, heat, light, and atomic physics.

# 2A-B General Physics (4-4)

3 hours lecture and 3 hours laboratory.

Prerequisites: Proficiency in mathematics. A departmental mathematics proficiency examination will be administered during the first laboratory period.

Satisfies requirements for pre-medical courses and other technical courses except science and engineering. Physics 2A: Mechanics, heat, and sound; Physics 2B: Light, magnetism, electricity, and atomic physics.

4A-B Engineering Physics (5-5)

4 hours lecture and 3 hours laboratory.

Prerequisites: C grade or better in Math 1A or concurrent enrollment in Math 1A.

This two-semester sequence is required of students planning to major in engineering. Physics 4A covers mechanics and heat; 4B, electricity, magnetism, and optics.

5 Computer Programming I (3)

2 hours lecture and 3 hours laboratory.

Prerequisite: C grade or better in Mathematics 1A or equivalent. An Introductory course in the programming of analog and digital computers for scientific and engineering problems.

6 Computer Programming II (3)

2 hours lecture and 3 hours laboratory.

Prerequisite: Physics 5.

An extension of Physics 5 with greater complexity of problems. Involves

an introduction to the analog computer.

# SOCIAL SCIENCE

# **ANTHROPOLOGY**

1 Physical Anthropology (3)

An introduction to origin of man and his place in the living world. Emphasizes the evidence for man's physical evolution, and examines the basis for his present racial diversity. Applies the principles of heredity to problems of current interests.

2 Cultural Anthropology (3)

A systematic study of the cultures of mankind. Examines the origin and development of culture in prehistoric times. Compares and contrasts cultures of the world today from the most modern to the most primitive peoples.

#### **ECONOMICS**

1A Principles of Economics (3)

Introduction to economic theory and analysis with emphasis upon basic concepts; national income determination and fluctuations; business income and organization; labor and industrial relations; role of government in economics; business cycles and forecasting monetary theory and prices; and the banking system.

1B Principles of Economics (3)

Introduction to economic theory and analysis with emphasis on fiscal policy and full employment; composition and pricing of national output; pricing of the factors of production and distribution of income; international finance; and current problems in the field of economics.

# **GEOGRAPHY**

1 Physical Geography (3)

An introductory study of earth's physical environments: The atmosphere, hydrosphere, lithosphere and biosphere. Examines the nature, causes, and distribution of the elements which comprize man's physical habitat. Recommended for those working toward a teaching credential.

2 Cultural Geography (3)

Prerequisite: Geography 1 or consent of the instructor. A study of the relationship between man's physical and cultural environments. Describes and attempts to account for the diverse ways of life throughout the world.

5A-B Economic Geography (3-3)

Prerequisite: Geography 1 and 2 or consent of the instructor. 5A is

not a prerequisite to 5B.

A study of the geographic principles related to the nature and distribution of man's economic activities. 5A examines the problems of agriculture, fishing, forestry, and mining in the setting of a growing world need. 5B focuses on the nature of manufacturing and exchange activities; the problems of cities as trade centers are studied.

# **HISTORY**

4A-B History of Western Civilization (3-3)

A broad study of the major elements in the Western heritage. Designed to develop the student's understanding and attitude toward institutions basic to Western civilization.

17A United States History (3)

Prerequisite: Political Science 1 or consent of the instructor. A survey of the political and social development of the United States from the discovery of America to the Reconstruction period.

17B United States History (3)

Prerequisite: Political Science 1 or consent of the instructor. A survey of the political and social development of the United States from the Reconstruction period to the present.

20 History of California (3)

A general survey of the history of the Pacific coast with major emphasis on cultural, economics, and social development of California.

21A Imperial Russia (3)

The course provides an overview of early Russian development, considering the major social, political and economic aspects of the Czarist period and concentrating on the important developments from the sixteenth century to the Bolshevik revolution.

Four half-hour television presentations per week.

21B Soviet Russia (3)

The course considers Russian development from the Bolshevik revolution to the present time with emphasis on the contemporary Soviet state and its position in world affairs.

Four half-hour television presentations per week.

22A Black History (3)

A survey of the origins of Black Americans, African culture, the migration of Africans to America, life under slavery, and the struggle for freedom. The course includes abolitionist literature, emancipation of the slaves and life during the reconstruction period.

22B Black History (3)

A survey of the history of Black Americans after the reconstruction period. Black literati, musicians, artists, and scientists are studied. Included in the course are the recent struggles against discrimination and for civil rights. The course concludes with a study of the changing nature of present Black American culture.

23 Latin American Civilization (3)

Origins and main currents of Latin American Civilization. Geography, history, customs, and economic and political development of the Latin American nations. Special emphasis is given to the cultural similarities and differences between the Anglo-American and Spanish American peoples.

#### SOCIAL SCIENCE

27 History of Mexico (2)

A survey of the history of Mexico from pre-Columbian times to the present, with emphasis on bettering the student's understanding of our important neighbor to the south.

#### PHILOSOPHY

6A Introduction to Philosophy (3)

A critical approach to the problems of philosophy involving the student in intellectual situations that provoke reflection and expression, and stimulate a concern for the critical techniques essential to developing a sound personal philosophy.

6B Introduction to Philosophy (3)

An introduction to the general types of philosophy and to the search for meaning as seen in the work of the great philosophers, with an attempt to relate their contribution to the contemporary situation.

7A History of Ancient and Medieval Philosophy (3)

A study of the historical and logical development of the principal assumptions upon which contemporary thought and activity are based with specific reference to the major proponents of these ideas in ancient and medieval times. Among the philosophers whose contributions will be examined are Anaximander, Pythagores, Heraclitus, Socrates, Democritus, Plato, Aristotle, Epicurus, Cicero, Origen, Plotinus, Philo, St. Augustine, Scotus Eriugena, St. Anselm, Abelard, Averroes, St. Stomas Aquinas, Duns Scotus, Occam, Eckhart, and Cusanus.

7B History of Modern and Contemporary Philosophy (3)

A study of the historical and logical development of the principal assumptions upon which contemporary thought and activity are based, including major proponents of these ideas. This course encompasses philosophy from the Renaissance to the present. Among the philosophers whose contributions will be examined are Bacon, Hobbes, Descartes, Spinoza, Locke, Berkeley, Hume, Kant, Hegel, Marx, Nietsche, Pierce, James, Dewey, Whitehead, Russell, Carnap, Wittgenstein, Kierkegaard, and Sartre.

8 Traditional Logic (3)

For students majoring in literature, creative writing, journalism, the arts, public speaking, history, political science, and similar subjects. The focus will be on clear thinking and analysis of argument as found in contemporary literature, art, public address, and the media of mass communication. Stress will be placed on the principles of good definition, use of words with greater accuracy and clarity, and on recognition and avoidance of fallacious reasoning.

9 Symbolic Logic (3)

Study of methods characteristic of modern logic, symbolic representation of arguments, including use of truth tables, indirect and conditional proofs within the theory of truth functions and qualification. For math and science majors.

Religions of the World (3)

An historical introduction to the world's religious philosophies—Hinduism, Jainism, Buddhism, Sikhism, Taoism, Confucianism, Shinto, Zoroastrianism, Judaism, Christianity, and Islam—from an examination of their original writings and subsequent commentaries.

14 Introduction to Ethics (3)

A systematic examination of the concepts of right and wrong as traditionally conceived and the application of moral values and principles to problems of daily life. The philosophy of conduct as related to contemporary moral issues.

# POLITICAL SCIENCE

1 Introduction to Government (3)

An introduction to the principles and problems of government with particular emphasis on national government in the United States. This course meets the American institutions requirement in Constitution and state and local government.

2 Introduction to Comparative Government (3)

Prerequisite: Political Science 1.

A comparative study of constitutional principles, governmental institutions and political problems of selected governments abroad, with particular attention to contemporary problems.

4 Introduction to International Relations (3)

Prerequisite: Political Science 1.

An introduction to the nature of political relations among nations, the basic factors which influence international politics, and the institutions for the conduct of international relations.

5 Current International Developments (1)

Half-hour TV lecture.

The most important current events in international relations will be analyzed in this course on a weekly basis. Special emphasis is given to the political, economic and social background of the events.

5L Current International Developments Lab (1)

Two-hour classroom discussion. Instructor meets and confers with students periodically.

30 American Institutions (3)

A survey of America's heritage in history and government. Includes a study of the Federal Constitution, California history and government, and U.S. History. Satisfies the College of the Desert requirement in accordance with the California Education Code.

# **PSYCHOLOGY**

1 General Psychology (3)

Introduction to facts and principles governing human behavior. Topics include methods of observation and experimentation, human development, learning, intelligence, psychological foundations, perception, motivation, emotion, personality, adjustment and social behavior.

#### SOCIAL SCIENCE

# 2 Experimental Psychology (3)

Prerequisite: Psychology 1

This is a methodology course designed to introduce the beginning student to the fundamentals of research with behavior. Selected experiments requiring minimal apparatus will be taken from the areas of statistics, learning, developmental, physiological, abnormal, and clinical psychology.

### Orientation to College (1)

Required of all full-time beginning freshmen.

A group guidance program designed to assist the student in undertaking collegiate work and to aid him in preparing an educational program leading to his choice of vocation or profession. Administration and evaluation of vocational and personality tests to be followed by individual counseling interviews.

#### 14 Child Development (3)

Study of the physical, social, psychological and intellectual growth and development of children and the significance of environmental influences such as the family, school, and community. Same as Home Economics 52. May be taken for credit only once.

#### 33 Personal and Social Adjustment (3)

Prerequisite: Psychology 1.

The development of the normal personality, with particular emphasis on problems of adjustments in such areas as school, family, vocation, and community. Focus will be on understanding the causes of frustration and the process of learning adequate methods of coping with situations.

#### SOCIOLOGY

## 1 Introductory Sociology (3)

Survey of the characteristics of social life, the processes of social interaction, and the tools of sociological investigation.

# 2 Sociological Analysis - Social Problems (3)

Prerequisite: Sociology 1 or consent of the instructor.

An application of sociological principles and concepts in an analysis of the family, religion, education, minorities, crime, and delinquency, urban society, industry, and politics. Special attention will be given to the interpretation of relevant quantitative data.

# 3 Statistical Methods (3)

An introduction to the statistical concepts and techniques most frequently used in sociology, psychology, anthropology, economics, business, mathematics, and education. Subject matter includes tabular and graphic presentation of data, measures of central tendency, measures of dispersion, measures of correlation, sampling, confidence intervals, and tests of significance. Emphasis is placed upon the use and interpretation of the preceding. Same as Business 3. May be taken for credit only once.

# 10 Marriage and Family (2)

A study of the modern family with emphasis on personal adjustment, courtship, marriage, parenthood, and family administration. Open to both men and women. Same as Home Economics 10. May be taken for credit only once.

# 12

Mexican-American Culture (3)
A survey of the cultural, economic, sociological, intellectual, and political history of the Mexican-American from his origins up to and including his present life in the United States. Special emphasis is given to the contributions and problems of the Mexican-American in California and the Southwest.

# SPECIAL EDUCATION

1 Reading Improvement (2)

2 hours lecture and 3 hours laboratory.

Prerequisite: Achievement of college equivalent on a standardized reading test

An accelerated course designed for those students who have achieved college level but who wish to improve both rate and reading and flexibility of reading. Admission based on diagnostic test data and approval of the instructor.

2 Critical Reading (2)

Prerequisite: Successful completion of SE 1 Reading Improvement and/or approval of the instructor

A programmed course designed for those students who have achieved college level reading in Reading Improvement but who wish to improve critical reading of difficult material.

50 Reading Techniques (3)

3 hours lecture and training plus 3 or more hours laboratory. A course designed for those students who need improvement in reading competence. Admission on the basis of diagnostic test. Required for students enrolled in the Probationary Entrance Program.

53 Fundamentals of Mathematics (3)

3 hours lecture and 1 hour laboratory.

A review of the fundamentals of mathematics as applied to everyday problems. Required for students who have not achieved a satisfactory score on the entrance examination. Same as Mathematics 53. May be taken for credit only once.

B Study Skills Laboratory (0)

A laboratory designed to give students an opportunity to improve in the fundamentals and various college subjects, i.e., mathematics, science, social science, study habits, spelling, and grammar. Teaching machines and programmed texts used exclusively.

# WORK EXPERIENCE EDUCATION

Work Experience Education encompasses a systematic program whereby college students, while enrolled in an occupational education program, gain realistic employment experience through part-time work performed under all of the following conditions:

- The program operates as a cooperative activity between the school, the student and the employer.
- 2. The college insures that work done by students is of a useful, worthwhile nature, that specific learning experiences are beneficial to the student and that the work-activity performed is consistent with the occupational on-campus courses in which the student is enrolled. Students may enroll in one, but not both, of the work experience programs described below, in any given semester.
- 3. The student, in conference with the college and the employer, will identify specific learning objectives to be accomplished during his work experience. Successive semesters of work experience will be given credit only when new job skills and learning activities can be identified and accomplished.
- 4. The college, with the help of the employer, evaluates work done by students, assigns credit work successfully accomplished and records pertinent facts concerning the student's work. The college provides for the recording of credits on the student's college transcript for the work experience activity and related class work.

### WORK EXPERIENCE EDUCATION

## Work Experience, Vocational

Credit for vocational work experience may be earned at the maximum rate of four units per semester, with a maximum total of sixteen credit units. One semester unit of credit for one lecture-discussion period and an average of five hours of supervised employment per week (75 hours of work per semester unit of credit). Students accepted into the vocational work experience education program may receive both pay from the employer and college credit for their work. Vocational work experience is classified according to the occupation or occupations within which employment is secured. These classifications include, but are not necessarily limited to, the following:

Agricultural Occupations
Distributive Occupations
Office Occupations
Trade Industrial Occupations
Technical Occupations
Apprenticeships
Public Service Occupations

## Work Experience, General

Credit for general work experience may be accrued at the rate of three credit units per semester, with a maximum total of six credit units. One semester unit of credit for one lecture-discussion period and an average of five hours supervised employment per week (75 hours of work per semester unit of credit). Students accepted into the general work experience education program may receive both pay from the employer and college credit for their work. This form of work experience is generally limited to those students who lack experience in the world of work.

## **FACULTY 1972-1973**

DONALD D. AKKERMAN (1969)

Associate Professor of Education; Extension Campus Coordinator

B.A., 1957 State College of Iowa; M.A., 1963, Colorado State College

FRANKLIN YTRO ATTOUN (1967)

Assistant Professor of French

B.S., 1966, M.A., 1967, University of Missouri

JOSEPH AUERBACH, M.D. (1970)

College Physician

M.D., 1934, University of Michigan

Assistant Professor of Nursing

ANNA M. BECKER (1969) B.S.N., 1955, Washington State University

ARTHUR W. BENDER (1969)

Associate Professor of Microbiology, Anatomy and

B.S., 1956, Bowling Green State University; M.S. Ed., 1961, University of Toledo; M.S., 1967, Virginia State College

MARION NESBITT BLONDIS (1965)

Associate Professor of Nursing

R.N., 1947, Bishop Johnson College of Nursing; A.B., 1958, San Francisco State College; M.A., 1970, United States International University

Assistant Professor of Sociology

BARBARA ANNE BOLANOS (1971) B.A., 1969, San Bernardino State College; M.A., 1970, University of California, Riverside

PAUL D. BOWIE (1970) B.S., 1966, University of Redlands; M.S., 1970, University of Arizona

Assistant Professor of Biology

Assistant Professor; Chairman, Home Economics WINIFRED D. BRUNNING (1965)

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Associate Professor of Special Education

B.A., 1961, Arizona State University; M.A., 1964, Arizona State College

Assistant Professor of Biology BRYAN R. BURRAGE (1973) A.B., 1956, University of Kansas; M.Sc., 1966, San Diego State University; Ph.D., 1972,

University of Stellenbosch, Stellenbosch, RSA

Instructor in Engineering

SAM JOHNSTON CALDWELL (1972) B.S., 1939, U. S. Naval Academy, Annapolis, Maryland

Instructor in Nursing

FAYE R. CASTILLEJA (1972) CONNIE B. CHAVEZ (1972)

A.A., 1969, College of the Desert

Instructor in Nursing; Director, Project "ACTION"

R.N., 1952, St. Joseph's School of Nursing, Phoenix, Arizona

Professor of English; Chairman, English Department LYNDELL D. CHEEVES (1968) B.A., 1953, Pepperdine University; M.A., 1967, La Verne College; Ed.D., 1971, University of

California, Los Angeles

Professor of Health and Physical Education; Chairman, Health

and Physical Education; Director of Athletics B.S., 1952, Slippery Rock State College of Pennsylvania; M.S., 1955, Ed.D., 1964, University of

Oregon

JOHN D. CRAIG (1972)

JOHN COEFIELD (1963)

Assistant Professor of Engineering

HAROLD CROW (1962)

Associate Professor of Industrial Technology

B.S., 1954, M.A., 1961, New Mexico Western College

- EDGAR L. De FOREST (1962) Professor of English and Speech Theatre Arts Diploma, 1937, Leland Powers School of the Theatre, Boston; B.S., 1940, Boston University; M.A., 1941, University of Southern California; Ed.D., 1955, Columbia University
- Associate Professor of French and Spanish; Chairman, Foreign Language B.A., 1945, University of Wyoming; M.A., 1951, Middlebury College, Vermont; Diploma, 1954, Ecole Superieure des Professeurs de Français a l'Etranger, University of Paris
- MARCELINO DIAZ, JR. (1972) Instructor in Guidance B.A., 1966, M.A., 1969, New Mexico Highlands University
- PAUL HERMAN DILGER (1971) Assistant Professor of Agricultural Mechanics B.S., 1968, University of California, Davis
- WALLACE F. DOHMAN (1969) Associate Professor of English B.S., 1953, Winona State College; M.A., 1956, University of Minnesota
- M. W. ELLERBROEK (1961) Professor of Education; Dean of Business Services A.B., 1947, University of Redlands; M.A., 1953, Claremont Graduate School; Ed.D., 1957, University of Southern California
- HENRY K. ENG (1965) Associate Professor; Assistant Librarian B.S., 1950, University of Colorado
- Instructor in Art B.A., 1968, San Diego State L. CAROLYN FISHER (1963) Associate Professor; Dean of Women

B.A., 1951, University of Redlands; M.A., 1963, Syracuse University

RONNIE R. EVANS (1972)

G. S. FLOREZ (1972)

- CHARLES B. FLATT (1964) Associate Professor of Sociology, Philosophy B.A., 1958, Pasadena College; M.A., 1959, University of Idaho
- Instructor in Agriculture WENDELL C. FORD (1965) Associate Professor; Coordinator, Audiovisual and Broadcast Service Center B.A., 1956, San Jose State College; M.A., 1957, San Francisco State College
- LAWRENCE FREDERICK (1962) Professor of Industrial Technology; Chairman, Engineering and Technology B.S., 1942, Pennsylvania State University; M.S., 1948, Iowa State University; Ed.D, 1955, University of Missouri
- LEANORA R. FURR (1962) Professor Emeritus English A.B., 1926, A.M., 1928, Washington University; Ph.D., 1930, Cornell University
- JOSEPHINE GUERENA GALLEGOS (1967) Associate Professor of Business B.S., 1961, Arizona State College; M.A., 1966, Northern Arizona University
- FRANK J. GARCIA (1968) Associate Professor of Health and Physical Education B.A., 1959, M.A., 1965, Sacramento State College
- WAYNE G. GOGGANS (1969) Assistant Professor of Music B.M., 1963, Georgia State College; M.M. 1968, Northeast Louisiana State College
- GEORGE GOODWIN (1962) Professor of Philosophy and Religion A.B., 1939, D.D., 1956, West Virginia Wesleyan; S.T.B., 1942, S.T.M., 1952, Ph.D., 1965, Boston University
- CHARLES RONALD GREEN (1966) Associate Professor of Guidance B.S., 1958, Brigham Young University; M.A., 1960, Arizona State University

- ROBERT M. GRIFFIN (1966)

  Professor of Special Education; Coordinator, Special Education; Director, Reading Laboratory

  A.B., 1935, University of the Pacific; M.A., 1939, Ph.D., 1943, University of California, Berkeley
- BETTY JEAN HAARSTICK (1967)

  B.S.N., 1964, M.S., 1967, Loyola University, Chicago

  Assistant Professor of Nursing
- JAMES W. HAMILTON (1972) Assistant Professor of Engineering
- EUGENE KENNETH HANSON (1969)

  B.A., 1953, Westmar College; M.Div., 1957, Luther Seminary; M.A., 1970, Claremont Graduate School
- DONALD J. HARRISON (1971) Assistant Professor of Business B.A., 1956, M.S., 1960, University of Southern California
- FRANCIS JENE HEDQUIST (1970)

  B.A., 1959, M.A., 1961, University of Utah; Ph.D., 1967, Brigham Young University
- JILL KATHLEEN HERMANSON (1969) Assistant Professor of Mathematics B.S., 1963, M.S., 1968, North Dakota State University
- JAMES H. HOPKINS (1970)

  Assistant Professor English
  B.S., 1960, New Mexico Western College; M.A., 1964, Western New Mexico University
- ROY HUDSON (1962) Professor of Rhetoric and Public Address B.A., 1948, Fresno State College; M.A., 1949, University of Oregon; Ph.D., 1953, Cornell University
- LOUIS HUNT (1968)

  Associate Professor of Ornamental Horticulture
  B.S., 1959, Oklahoma State University; M.A., 1970, California State Polytechnical College, San
  Luis Obispo
- RICHARD L. IMMENHAUSEN (1966)

  Associate Professor; Director of Placement,
  Financial Aids, and Follow-up Studies
  B.S., 1955, Carthage College; M.A., 1962, Sacramento State College; Ed.S., 1970, University of the Pacific
- EDWIN T. INGLES (1960) Professor of Education; Dean of Instruction A.B., 1929, Pacific University; M.A., 1935, Ed.D., 1947, University of Oregon
- WILLIAM L. JESSE (1967)

  B.S., 1947, U.S. Naval Academy; M.A., 1960, University of Virginia; Ph.D., 1972, University of California, Riverside
- ROBBIE C. JOHNSON (1972)

  B.S., 1963, California State College, Los Angeles

  Instructor in Nursing
- ROBERT B. JORDAN (1966)

  Associate Professor of Psychology; Counselor and Dean of Men
  B.S., 1962, M.A., 1964, New Mexico State University
- MARIAN M. KATZ (1967)

  B.S.N., 1956, M.A., 1960, Walla Walla College

  Associate Professor of Nursing
- AUSTIN F. KILIAN (1970)

  B.A., 1942, Augustana College; M.F.A., 1949, University of Iowa

  Associate Professor of Art
- JAMES C. KNEEBONE (1969)

  B.M., 1961, M.S., 1962, Kansas State College of Pittsburg

  Assistant Professor of Music
- WILLIAM R. KROONEN (1969)

  Associate Professor; Coordinator, English as a Second Language
  B.A., 1960, University of California, Riverside; M.A., 1965, University of New Mexico

- JAN B. LAWSON (1970)

  Assistant Professor of English
  B.A., 1954, University of Rhode Island; M.A., 1970, University of Tennessee
- NORMAN L. LOFLAND (1970)

  A.B., 1957, Wichita State University; M.A., 1960, University of Southern California; Ph.D., 1967, Carnegie Institute of Technology
- KATHLEEN LUX (1971)

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- ROY MALLERY (1962)
  Associate Professor of Fine Arts; Chairman, Art B.S., 1938, George Peabody College for Teachers; M.S., 1943, University of Oregon
- THOMAS E. MANCINI (1964)

  Assistant Professor of Music Credentialed under "Outstanding Eminence" 1964; Fellowship granted at Juilliard Graduate School of Music, New York City; Music Director, Staff Orchestra, National Broadcasting Company, Hollywood, California, 12 years
- JOHN L. MARMAN (1969) Associate Professor of Physical Education B.S., 1963, Midland College; M.Ed., 1964, University of Arizona
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  R.N., 1946, St. Luke's Hospital School of Nursing, Cedar Rapids, Iowa
- JOHN W. MARZICOLA (1972)

  B.S.M.E., 1967, University of California, Los Angeles

  Instructor in Mathematics
- J. R. MASTERS, Jr. (1964) Professor of Speech; Director of Forensics B.A., 1951, Humboldt State College; J.D., 1954, Williamette University; M.A., 1964, San Francisco State College
- ROY C. McCALL (1959)

  A.B., 1930, University of Redlands; M.A., 1931, Ph.D., 1936, University of Iowa
- ASHLEY T. McDERMOTT (1964)

  Assistant Professor of Astronomy and History

  A.B., 1961, San Diego State College; M.A., 1964, San Francisco State College
- BARBARA D. McFADYEN (1965) Professor of Political Science A.B., 1944, M.A., 1945, 1957, University of Denver; Ph.D., 1965, University of Colorado
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  B.A., 1959, University of California, Berkeley; M.A., 1963, George Washington University
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- JOHN ROLLAND McMILLAN (1967) Professor of Education; Registrar B.S., 1950, Grove City College; M.A., 1964; Ph.D., 1970, Arizona State University
- STEVEN R. McWILLIAMS (1967)

  B.A., 1961, University of Colorado; M.A., 1966, University of Oregon
- HOMER A. MENDEZ (1971)

  A.B., 1942, Subiaco College, Arkansas; A.B., 1959, University of San Francisco
- MERLE E. MERRITT (1970)

  B.A., 1956, Westmar College, Iowa; M.A., 1964, University of South Dakota

  Assistant Professor of History
  B.A., 1956, Westmar College, Iowa; M.A., 1964, University of South Dakota
- GEORGE L. MEYER (1969)

  Assistant Professor of Geology
  B.A., 1961, M.A., 1967, University of California, Santa Barbara
- ALFRED D. MILLER (1971)

  Assistant Professor of Psychology; Counselor B.A., 1958, M.A., 1960, University of Northern low2

- EVERETT L. MOORE (1962)

  B.A., 1949, Wheaton College; B.D., Life Bible College; M.A., 1954, Pasadena College; M.A. (L.S.), 1960, George Peabody College for Teachers
- DOROTHY M. MOTTWEILER (1965)

  Associate Professor of Nursing; Chairman,
  Nursing and Paramedical
  R.N., 1936, Methodist Hospital of Indianapolis; B.S., 1957, Indiana University; M.S., 1965, Loma
  Linda University
- KATHLEEN MUCHNIK (1972)

  B.S., 1971, Faitleigh Dickinson University, New Jersey

  Instructor in Nursing
- DONNA LEE MULVEY (1971)

  B.A., 1969, University of California, Irvine; M.A., 1970, University of California, Riverside
- HOVAK NAJARIAN (1966)

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  B.S., 1952, Bob Jones University; M.A., 1957, Teachers College, Columbia University
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- SEAMUS NUNAN (1962) Professor of History; Chairman, Social Science B.S., 1941, New York University; M.A., 1947, Columbia University; Ed.D., 1958, University of Southern California
- NICHOLAS NYARADI (1970) Professor of Political Science B.A., 1923, Lyceum of Pious Fathers, Budapest, Hungary; Ph.D., 1928, J.D., Royal Hungarian University; L.L.D., Grove City College, Pennsylvania
- JAMES C. ONEY (1970)

  Assistant Professor of Industrial Technology
  B.S., 1962, New Mexico Western University; M.A., 1970, California State College at Long Beach
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  A.B., 1971, San Diego State College

  Instructor in English as a Second Language
- CHARLES R. PALMER (1969)

  B.S., 1957, California State College, California, Pennsylvania; M.A., 1959, West Virginia University
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Instructor in Respiratory Therapy

RHODA G. PATTERSON (1973) B.A., M.A., 1971, Sacramento State College Assistant Professor of Nursing

WILLIAM H. PIVAR (1971) B.S., 1953, J.D., 1956, University of Wisconsin Assistant Professor of Business

- JAMES T. PULLIAM (1970)

  B.A., 1963, University of Redlands; M.A., 1966, Chico State College; M.A., 1971, Chapman College
- JOE A. QUINTERO (1972)

Instructor in Agriculture

- LANCE READ (1964)

  Associate Professor of Education; Counselor

  A.B., 1951, M.Ed., 1958, University of California, Los Angeles
- WILLIAM M. REESKE (1969)

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  B.S., 1947, M.S., 1949, Oklahoma State University

  Associate Professor of Business

- BRETT ROMER (1964) B.S., 1963, M.S., 1964, New Mexico Highlands University
  - as oneversity
- BARBARA P. ROTH (1971) B.S., 1956, Boston College; M.S., 1959, Boston University
- Assistant Professor of Nursing

Assistant Professor of Physics

LESTER RUMBLE, M.D. (1972) M.D., 1945, Emory Medical School

- Director, Respiratory Therapy
- ANTHONY ALBERT SAITTA (1967)

  M.B.A., 1958, Air Force Institute of Technology; M.A.O.M., 1966, M.S., 1967, University of Southern California
- LOUISE E. SCHULZ (1970)

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  B.S., 1959, State University of New York; M.A., 1960, University of Maryland at Cortland
- AUBRY SEALE (1972)

Instructor in Agriculture

- BEVERLY A. SHELTON (1968) B.S., 1960, University of Washington
- Assistant Professor of Nursing
- PERRY J. SHENEMAN (1970)

  Associate Professor of Industrial Technology
  B.S.E.E., 1949, The American Institute of Engineering and Technology; M.S.Ed., 1967, Colorado
  State University
- VICTOR SLADKOWSKY (1962)

  B.A., 1935, Belgrade University; M.A., 1961, Indiana University
- GWENDOLYN SMITH (1971)

  R.N., 1952, Highland School of Nursing, Oakland, California; B.S., 1959, University of California, Berkeley
- DOMENICO SOTTILE (1969)

  Assistant Professor of Italian and Spanish
  B.A., 1963, University of California at Los Angeles; M.A., 1969, San Diego State University
- ILAH G. SPAULDING (1965)
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  R.N., 1924, Decatur and Macon County School of Nursing; B.S., 1964, California State College
  at Los Angeles
- F. D. STOUT (1964) Professor of Education; Dean of Students B.S., 1947, New Mexico State University; M.A., 1957, Eastern New Mexico University; Ed.D., 1962, University of New Mexico
- JERRY D. SUMRALL (1970) Associate Professor of Business Education; Coordinator, Data
  Processing
  B.S., 1959, Panhandle State College, Oklahoma
- TED SYPOLT (1962)

  Associate Professor of Agriculture; Coordinator, Occupational

  B.S., 1952, M.Ed., 1957, University of California, Davis
- JOHN C. TAMULONIS (1971)

  A.A., 1971, Mt. San Jacinto Junior College

  Instructor in Automotive Technology
- DONALD D. THOMPSON (1965)

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- FREDERICK THON (1962) Professor of Drama; Director, Drama A.B., 1931, Harvard University; M.F.A., 1940, Yale University School of Drama
- JAMES EDWARD THORNESS (1969) Associate Professor of Psychology and Philosophy B.A., 1955, Chadron State College; Th.M., 1959, Iliff School of Theology; M.A., 1962, Ed.D., 1966, Syracuse University
- FRANCIS WILLIAM TROMBLAY (1971) Instructor in Air Conditioning and Refrigeration Technology

- DANIEL WACHTER (1962)
  - Associate Professor of Mathematics A.B., 1947, M.A., 1948, Montclair State Teachers College
- JOYCE WADE-MALTAIS (1966) Associate Professor of English and Speech B.A., 1954, Wilmington College; M.A., 1956, Ohio State University; Diploma in Audio-Visual Aids, 1964, University of London
- DOUGLAS J. WALKER (1971) Assistant Professor of Agriculture and Natural Resources B.S., 1966, M.S., 1969, University of California, Davis
- THOMAS J. WALL (1970)
- Assistant Professor of Law Enforcement; Chairman, Law
- B.A., 1955, Oklahoma Baptist University; M.A., 1971, Azusa Pacific College
- DAVID L. WALLACE (1969) Assistant Professor of Economics B.A., 1935, University of California, Berkeley; M.A., 1937, New York University
- HARRY WALTHALL (1962) Associate Professor; Acting Librarian B.A., 1953, Ottawa University; M.S., 1956, Kansas State Teachers College
- KENNETH A. WATERS (1968) Associate Professor of Agriculture and Mechanics; Chairman, Agriculture B.S., 1959, M.A., 1970, California State Polytechnic College, San Luis Obispo
- DON A. WELTY (1965) Associate Professor of Education; Coordinator, Community Services
  - B.A., 1954, M.A., 1956, Arizona State University
- JOHN E. WHITE (1973) Assistant Professor of Mathematics B.S., 1961, Roosevelt University, Chicago; M.S., 1966, Illinois Wesley University
- FRANCES de LONG WILSON (1969) Instructor in Adult Basic Education A.B., 1946, University of California, Berkeley
- STAN LeROY WILSON (1967) Associate Professor of Journalism A.B., 1958, Fresno State College; M.A., 1966, Stanislaus State College
- LINDSAY R. WINKLER (1962) Professor of Biology; Chairman, Science B.S., 1942, Madison College; B.A., 1947, M.A., 1953, Walla Walla College; Ph.D., 1957, University of Southern California

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## APPLICATION AND REGISTRATION CHECK LIST

- Application to be filed as far in advance of the opening of the semester as possible in order to allow for counseling services and completion of application procedure prior to the beginning of classes.
   Request that transcripts from high school and all previously attended institutions of higher education be sent directly to the office of the Registrar at College of the Desert.
   Take placement examinations as directed by the Office of the Registrar in the Notice of Admission.
- Report for advising and registration at time shown by the Notice of Admission.