

GENERAL

welcomes you and wishes to take this opportunity to congratulate you on your decision to accept the challenge of further education. This catalog is your guide to and through this college and the many eaucational programs which it offers. In it you will find the information which which govern not only the college, but you, the student, as well. It is your obligation to become thoroughly familiar with its contents. It has been prepared with your success in mind!

## ANNOUNCEMENT OF COURSES

IMPERIAL JUNIOR COLLEGE DISTRICT
Highway 111 and Ira Aten Road IMPERIAL, CALIFORNIA-92251
Phones: 355-1193, 352-8320 or 356-2286 IMPERIAL COUNTY, CALIFORNIA

## IMPERIAL VALLEY COLLEGE

## ACCREDITED

by
The Western College Association The State Department of Education

A
MEMBER
of
California Junior College Association and the
Califormia Junior College Association - Southern Region

## APPROVED

by
The Veterans Administration

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## CALENDAR <br> FALL SEMESTER, 1966-67

August 15-September 9
Counseling by appointment and registration of $\begin{array}{ccccccc}7 & 8 & 9 & 10 & 11 & 12 & 13 \\ 14 & 15) & 16(17) & 18 & 19 & 20\end{array}$ $\begin{array}{llll}14 & 15 & 16 & 17 \\ 21 & 18 & 19 & 20 \\ 24 & 24 & 25 & 26 \\ 20\end{array}$ 28293031

August 17 who have met admission requirements.
August 17 and August 27
Placement Tests 9:00-11:00 c.m
September
Placement Tests 9:00-11:00 a.m
September 9
Orientation for new day students, 9:00 a.m. 3:00 p.m.
All new day students are required to attend.
September 12
Class instruction begins.
September 16
Last day to add classes.
September 19 or 20
Orientation for new extended day students p.m.

OCT. 2 (3) $4 \times 15$| 1 |
| :--- | :--- | :--- | :--- | :--- | 9101112131415 1617181920 (21) 22 $\begin{array}{llll}23 & 24 & 25 & 26 \\ 27 & 29 \\ 20\end{array}$ 3031

NOV. $\quad$| 6 |  | 7 | 2 | 2 | 3 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | $\begin{array}{llllllll}6 & 7 & 8 & 9 & 10 & 11 & 12 \\ 13 & 14 & 15 & 16 & 17 & 18 & 19\end{array}$ $\begin{array}{lllllll}13 & 14 & 15 & 16 & 17 & 18 & 19 \\ 20 & 21 & 22 & 23 & 24 & 25 & 26\end{array}$ $\begin{array}{llll}20 & 21 & 22 & 23(24 \\ 27 & 28 & 29 & 30\end{array}$ attend.

October 3-7
First census week
October 21 (End of Sixth Week)
Last day to drop classes without penalty of F grade.
Last day for students completing requirements
in fall term' to file petition for graduation,
Last day to make up Spring semester, 1966, incomplete grades.

November 1-4
Midterm examinations,
November 24-25
Thanksgiving recess.
DEC.
$\begin{array}{llllllll}4 & 5 & 6 & 7 & 1 & 2 & 3 \\ 11 & 9 & 10 \\ 11 & 12 & 13 & 14 & 15 & 16 & 17 \\ 18 & 19 & 20 & 21 & 22 & 23 & 24 \\ 25 & 26 & 27 & 28 & 29 & 30 & 31\end{array}$
December 5-9
Second census week.
December $19-30$
Christmas recess.
January 2-4
Advance registration of currently enrolled sophomore students for spring semester.
JAN. : (2) $3{ }_{3} 4$ (5) $6 \quad 7$
$\begin{array}{r}8 \\ 9 \\ 15 \\ 10 \\ 10 \\ 11 \\ 121314 \\ \hline\end{array}$ 15161718192021 $\begin{array}{ll}22(23) 24 & 25 \\ 25 & 27 \\ 29 & 28 \\ 29\end{array}$ 293031

Open registration for spring semester.
January 23-27
Fall semester final examinations.
January 27

End of Jall semester

## CALENDAR SPRING SEMESTER, 1967

JAN. $\begin{array}{llllllll}1 & 2 & 3 & 4 & 5 & 6 & 7 \\ 8 & 9 & 10 & 11 & 12 & 13 & 14\end{array}$
 $\begin{array}{llllll}15 & 16 & 17 & 18 & 19 & 20 \\ 22 & 23 & 24 & 25 & 25 & 27\end{array}$ $22 \quad 232425 \quad 262722$ $2930(31)$

January 5-27
New student counseling by appointment and registration for the spring semester.
January 21
Placement Test 9:00-11:00 a.m
January 31
Orientation for new day students $10: 00 \mathrm{a} . \mathrm{m}$
All new day students required to attend.

FEB.
(1) $2 \cdot 34$ $\begin{array}{llllllll}5 & 6 & 7 & 8 & 9 & 10 & 11\end{array}$ $\begin{array}{lllllll}12 & 13 & 14 & 15 & 16 & 17 & 18 \\ 9 & 20 & 21 & 22 & 23 & 24 & 25\end{array}$ 262728

February 1
Class instruction begins.
February 8
Orientation for new extended day students 8:00-8:30 p.m.
All new extended day students required to attend.
February $20-24$
Third census week.
MAR.
$\begin{array}{lllllll}5 & 6 & 7 & 2 & 3 & 4 \\ 12 & 18 & 10\end{array}$
51011 March 14 (End of Sixth Week)
19 (20) Last day to drop classes without penalty of $F$


Last day to file petition for June graduation. Last day to make up Fall semester, 1966, incomplete grades.
March 20-24
Spring recess.
$\begin{array}{llllll}2 & 3 \\ 4 & 5 & 6 & 7 & 8 \\ 9 & 10\end{array}$
9 (10) 1112121315 April 3-7
16171819202122 Midterm examinations.
$2324252627 \quad 2829$
April 10-14
Fourth census week.
May 13
MAY 123455 Placement lest 9:00-1:00 $\alpha \mathrm{m}$.

## 7 8. 9101112 (13) May 15-16

$\begin{array}{llllll}14 & 15 & 16 & 167 & 18 & 19 \\ 20\end{array}$
Advance registration of currently enrolled 23293031 sophomore students for fall semester.
May 17-26
New student counseling by appointment. Open registration for fall semester.

JUNE

| (5) 7 10 | June 5-9 |
| :---: | :---: |
| 4 (5) 67788 | Spring semester final examinations |
| 11121314151617 | June 10 |
| 18192021222324 |  |
| 252627282930 | Commencement. |

## STUDENT NOTES

## THE BOARD OF TRUSTEES IMPERIAL JUNIOR COLLEGE DISTRICT

MR. MILTON W. CARR
Trustee from area which includes Calipatria Unified School District MR. WILLIAM BRANDENBERG

Trustee from ared which includes Calexico Union High School District MR. DON LYDICK

Trustee from area which includes Imperial Unified School District MR. T. E. (Ted) PAXSON

Trustee from area which includes Brawley Union High School District MR. WILLIAM J. THORNBURG

Trustee from area which includes Holtville Union High School District MRS. DOROTHY TORRENCE

Trustee from area which includes Central Union High School District MRS. CAROLYN F. WALLACE

Trustee from area which includes San Pasqual Valley Unified School District
$\vec{~} \vec{~} \overrightarrow{~ ふ}$

## ADMINISTRATION

DR. TERREL SPENCER
Superintendent - President
MR. CHESTER H. PALMER
Deputy Superintendent and Dean of Instruction
MR. JOHN J. LIST
Associate Superintendent - Business
MRS. RUTH V. NOVAK
Dean of Counseling
MR. JOHN DePAOLI, JR. Dean of Admissions and Registrar

MR. DEAN A. LEPTICH
Dean of Student Activities

## THE FACULTY

## ANDERSON, JERROLD G

$\qquad$ Speech
B.S., Northern State Teachers College
M.A. Colorado State College

ANGFLONI. ELVIO $\qquad$ Anthropology, Sociology A.A., El Camino College

AUILER A., M.A. University of Calitornia at Los Angeles
B.S., San Diego State College Director of Nursing, Nursing

BANKS, STANLEY C.
 Sociology, Psychology
B.A., Macalester College
M.A., Califiornio Western University

BLANCHARD, ROBERT $\qquad$
Chairman of Division of English
B.M., B.A., Northwestern College

CLEVENGER, DARNELL H. $\qquad$ Spanish, English
B.S., M.A., University of Califiornia at Los.Angeles

DePAOLI, JOHN JR. ........ Dean of Admissions and Registrar B.A., M.A.. University of Calilornia at Los Angeles

FINLEY, LUTHER E.
..........................................
Chairman of Division of Agriculture, Engineering.
BS Technical and Vocational Education
B.S. M.A.A Arizona State University
1.Ed.D., Bradley University

FUESLER, JACK B. $\qquad$
A.A. Noriodk Junior College
B.M.E., M.M., Northwestern University

GALAMGAM, ADELAIDA $\qquad$ Librarian
E.T.C., Ilocos Norte Normal School
B.S.E.E Central Philippine College
M.S.E., University of Southern California

GARTIN, HERBERT $\qquad$
*GRAY, DONALD C.
ersity of Arizona
$\qquad$ . Social Sciences B.A., M.A., University of Californica at Berkeley

GRIFFIN, WILLIAM A. $\qquad$ Business B.S., University of North Dakota
M.A., Colorado State College

HABERGER, PATRICIA S. $\qquad$ Nursing
R.N.. Presbyterian Hospital

HARTSHORN, ROBERT, JR. $\qquad$ Librarian
B.S., Brigham Young University
M.S., University of Southern California

HILLHOUSE, ROSANNE R.
English
B.A. M.A., Oxtord University

HINSHAW, A. I. $\qquad$ Counseling, Mathematics B.S., M.S., University of Southern Calilornia

HOLLEY, JACK D.
B.S., Northwestern State College of Louisiana Physical Education
B.S., Northwestern State College of Louisiana
M.A., Stephen F Austin State College
M.A., Stephen F Austin State College

## THE FACULTY

KERO, REYNOLD J. $\qquad$ Chemistry, Biology B.A., Northland College M.S., University of Utah

LARSSON, HARCLD J. $\qquad$ Astronomy, Mathematics B.S., M.A., Columbia University Ed.M., Harvard University
LEONARD, THOMAS B. $\qquad$ Counseling, Biology B.S., M.S., William and Mary College

LEPTICH, DEAN A. $\qquad$ ... Dean of Student Activities B.A., M.A., San Diego State College

LINCOLN, ROBERT L. . $\qquad$ Physical Education Chairman of Division of Health,

Physical Education and Recreation
B.A., Chico State College
M.A., San Francisco State College

LIST, JOHN J. $\qquad$ .. Associate Superintendent-Business B.S., M.S., M.Ed., University of Southern California

LOWE, JUANITA $\qquad$ B.S., M.A., Western Carolina College

LUCERO, KAY $\qquad$ Mathematics B.A., Texas Woman's University M.S., University of Utah

MELLINGER, ELWOOD J. ............................................ Agriculture B.S., M.A., Michigan State University

MILLER, WILLIAM D. $\qquad$
B.A., St. Bernard's College B.S., Tulsa University

MONROE, RUTH $\qquad$ Nursing R.N., San Joaquin General Hospital

NOVAK, RUTH V, $\qquad$ Dean of Counseling A.A.. Los Angeles Junior College
A.B., M.A., University of California at Los Angeles

OVERMAN, RUTH $\qquad$ Business
B.A., M.A., Arizona State University

PALMER, CHESTER H. ...... Deputy Supt.; Dean of Instruction B.A., M.A., University of Arizona

PAULSON, CLARENCE A. ................................................ Business B.S., M.A., George Peabody College

PERSKE, GERALD K. $\qquad$ Biological Science B.S., M.A., University of Nevada

QUIMBY, EDGAR A. $\qquad$ Political Science, Social Science Chairman of Division of Social Sciences
B.A., University of Mississippi
M.A., University of Montana

RICE, PAULINE BENOIT $\qquad$ French, English Chairman of Division of Humanities and Fine Arts
B.A., Rice University
M.A., Baylor University

## THE FACULTY

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$\qquad$

Chairman of Division of Natural Science B.S.. Shippenburg State College
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RIVERO, JUDITH E. H. $\qquad$ English, Spanish B.A. Maryville College of the Sacred Heart M.A., Washington University

ROGERS, DONALD...... Physical Education, Health Education B.S., Eastern Illinois State Teachers College
M.A., University of California al Berkeley

RUDOLPH, WILLIAM D. $\qquad$ Business Chairman of Division of Business B.S., M.B.A., Indiand University

SAMSON, WALTER L.. JR.
College
B.S., Wisconsin State College
M.A., University of Wyoming

SCHLUCHTER, LEW ...... MDTA Agriculture Projects Instructor B.S., California State Polytechnic College

SEIDEN, ROBERT M. $\qquad$ Psychology B. A., Los Angeles State College M.A., Washington State University

SPEER, WILLIAM R. $\qquad$
A.B., University of Chicago
M.A., Los Angeles State College

SPENCER, TERREL .................... Superintendent and President B.S., University of South Mississippi M.A., Peabody College

Ph.d., University of Chicago
STONE, JAMES R. $\qquad$ Music, Engineering B.E. University of North Carolina B.M., Westminster Choir College
M.M., University of Southern Californig

SWANN, MARIE B. $\qquad$ Speech, English B.S., Ed.M., University of Oklahoma

THOMPSON, BLAINE R. $\qquad$ Business B.S., MS., University of Utah

UPSON, JOHN F. $\qquad$ English B.A., M.A., University of Nebraska

WASSON, HENRY S . $\qquad$ Physical Science B.S., University of Nebraska
M.B.S., University of Colorado

WHITE, RAY A $\qquad$ Automotive Technology A.A., Antelope Valley Junior College
A.B., Fresno State College

## THE COLLEGE

## LOCATION

The Imperial Valley College is located in Imperial Valley, long recognized as one of the richest, most productive agricultural regions in the country. The mild, delightful winters have made the region attractive to tourists and helped it to become an outstanding recreational region.

The campus is located on a 160 acre site at the intersection of Highway 111 and Ira Aten Road. This location is in the heart of Imperial County and is within reasonable commuting distance of all of the cities of the Valley.

## HISTORY OF IMPERIAL VALLEY COLLEGE

The Imperial Valley College is an integral part of the public school system of California and functions as a public junior college for lower-division college work.

During its thirty-eight years of service to residents of Imperial Valley, the junior college movement has grown from two small colleges, organized by two high school districts, to a county-wide junior college district which serves seven high schools and unified school districts.

It had its beginning on May 9, 1922, when the Board of Trustees of the Central Union High School District of El Centro passed a resolution establishing the Central Junior College. This institution formally opened for instruction in September, 1922.

Two years later, in the fall of 1924, the Brawley Union High School District opened classes at the Brawley Junior College.

Enrollments increased in both schools until the war years, when attendance dropped sharply. Brawley Junior College was forced by lack of attendance to discontinue classes at the close of the 1947 school year.

Although enrollment dropped at Central Junior College, the institution continued to operate and after the war years steadily gained in attendance.

The Associate in Arts degree was first conferred by Central Junior College in 1934.

In the fall of 1951, students, in cooperation with the administration and faculty, petitioned the Board of Trustees for a more representative name for the college, for it was now serving students from all of the Imperial Valley. By action of the Board the name was officially changed to Imperial Valley College.

The school, under the administration of the Central Union High School District, gained recognition as an accredited institution of higher education. As the institution grew with the community, this growth was reflected in the steady rise in enrollment and in the diversity of courses and curricula that was offered.

The extended-day program, which offered regular college classes at night, was initiated on a limited basis in 1952; its rapid growth served to enlarge the service of the college to the community.

An increasing number of students from other high school districts attended the college in El Centro, and it was felt that a county-wide junior college district with a campus of its own could offer much more to the students and be of greater service to the entire Valley.

A recommendation that such a county-wide junior college district be established in Imperial County was submitted to the State Department of Education and was approved on July 10 , 1959. The County Superintendent of Schools then set a date for an election at which all qualified voters residing within the boundaries of the seven high school and unified school districts were eligible to vote. The election was held on October 6, 1959; and by an overwhelming vote of twelve to one, the Imperial Valley Junior College District was established. This was followed by the election of the members of the Junior College District Board of Trustees, one of whom comes from each of the seven high school or unified school districts represented in the area served by the Imperial Junior College District.

This District includes all of Imperial County except a small area in the northwest corner of the County which is a part of the new Coachella Valley Junior College District.

Because of the increase in enrollment at both Central Union High School and the Imperial Valley College, and because of the lack of space on the campus of the Central Union High School in El Centro, the Imperial Valley College moved to temporary quarters erected on the campus of the Imperial Valley Union High School in Imperial, California.

The college opened with over 850 day and evening students. Subsequently, enrollments in special classes during the semester brought the total to over 1,000 students. The average daily attendance was approximately double the number that had been attending college in the County during the previous year. During the school year of 1961-1962 enrollment again increased and over 1400 students were served by the institution.

On October 4, 1960, an all-time State record was set by
the people of Imperial County when they voted thirteen to one in favor of bonds to finance the building of a new campus.

The Board of Trustees selected a nationally known architectural firm to plan the new buildings, and a 160 acre site which met the criteria recommended by the Citizens' Committee was selected for the new campus.

On October 29, 1961, an impressive ground-breaking service was held for the new campus. Board members manned giant earth-moving equipment to break ground for the project. The new buildings include a library, science laboratories, fine arts rooms, student activities building, academic classrooms, administration and faculty offices, social science rooms, physical education shower and locker rooms, and agricultural education classrooms and shop.

## facIIITIES

## Imperial Valley College <br> Freshmen, Sophomores <br> San Diego State College Juniors, Seniors, Graduates

Imperial Valley College is unique among the junior colleges in California in that by close cooperation with a State College certain students can attend four years and complete a bachelor's degree while attending these two cooperating colleges. The students of both lower division and upper division benefit from this close cooperation.

At the present time courses offered in the upper division (third and fourth years) are largely those courses required for the elementary and secondary teaching credentials. Other courses are offered in liberal arts, and as the demand expands, other courses will be added to the San Diego State curriculum.

## LIBRARY

The large, center building of the campus houses the library where over ten thousand volumes are available for student use. A periodical section and pamphlet file offer additional current materials. Every month new volumes are being added to the library.

A section of the library is devoted to audio-visual materials where special equipment makes it possible for the students to individually view film strips, listen to recordings, or work with special foreign language equipment. Reading accelerators, designed to increase speed and comprehension, are available; and other similar educational materials of the latest design have been provided for the students' use.

## OBIECTIVES AND PHILOSOPHY

The following objectives serve as a framework for the total program of Imperial Valley College. They outline the principles which form the basis for evaluating the courses offered, the teaching methods used, the administrative policies, the social relationships and the physical facilities of the campus.

A public junior college serves as a capstone to the locally controlled public educational program. It provides an effective means of strengthening and advancing the basic ideals of democracy.

It is therefore the objective of this college to provide educational experiences which promote and emphasize the fundamental democratic way of life.

A junior college education is likely to be the last organized effort made by most citizens to improve their knowledge, skills, and understanding. It is the accepted obligation of the college to strive to help students to become more competent in using the essential skills of communication, to improve their knowledge and appreciation of the history of our culture, to further develop understandings of other nations and appreciation for their cultures, and to acquire greater knowledge of mathematics and science as a resource for the control of our environment or as an extension of the knowledge of that environment.

The major purpose of the college is to further the development of the talents of all students by helping them to select appropriate vocational and intellectual goals, and to reach these goals through the planning and completion of appropriate educational programs.

The best college education provides for the development of responsible self-direction by all students. The aim of the college is to assist students to gain the necessary knowledge so that they can intelligently make their own decisions and then assume the responsibility for the choices that they have made.

All college students have creative ability to some degree. It is therefore an objective of the college to offer opportunities for the development of creative expression and appreciation.

In a world characterized by rapid social and technological change and one in which the pressures of daily living are severe, the college accepts as an objective the development of moral and spiritual values, ethical ideals and the appreciation of the high standards of conduct.

In its required general education program the college attempts to provide, through appropriate intellectual experiences, the guidelines necessary for the examination and development of appropriate value systems.

The best college program for today is likely to be inade-
quate for tomorrow. In order to keep the program dynamic and developing, teachers are encouraged to keep up with their fields of specialty, special consultants are asked to review and evaluate, and citizens advisory groups are asked to make recommendations about course content and facilities.

The college aims to keep the people of the county who own the school fully informed concerning its program, needs, purposes and the opportunities which it presents.

## GENERAL EDUCATION

The goals of general education, expressed as objectives for each student, are implemented at Imperial Valley College in the following ways:

1. Exercising the privileges and responsibilities of democratic citizenship as studied in the required Constitution of the United States, American History, and State and Local Government; and in participation in Student Government.
2. Developing sound moral and spiritual values by which he guides his life as emphasized throughout the college curriculum and included as an integral part of all college classes.
3. Expressing his thoughts clearly in speaking and writing and in reading and in listening with understanding as studied in required English classes, in speech classes, and in classes formed to develop special study skills; and as practiced in all instructional situations.
4. Using basic mathematical skills necesscary in everyday life as studied in required mathematics classes.
5. Understanding his cultural heritage so that he may gain a perspective of his time and place in the world as studied in the recommended humanities program.
6. Using methods of critical thinking for the solution of problems and for discrimination among values as studied in science, mathematics, philosophy, social studies and other classes.
7. Undersianding his interaction with his biological and physical environment so that he mary better adjust to and improve that environment as studied in the recommended science program.
8. Maintaining good mental and physical health for himself, his family, and his community as studied in physical education, health education, and related areas.

## TYPES OF COURSES AND PROGRAMS

In order that Imperial Valley College may achieve its goal of serving all students who desire to learn, two general types of courses are offered: Transfer and Occupational or Voca-tional-Technical.

## Transfer Courses

The transfer courses are designed to parallel the lower division courses offered in colleges and universities. These courses meet the needs of those students who wish to transfer to four-year institutions at the end of the sophomore year. Regardless of the major interest of the student, the first two years of college work include many fundamentals and basic re quirements that can be met by enrollment in Imperial Valley College.

This offers an opportunity to students to begin their advanced education while still residing at home. Not only can this be of great financial assistance, but it offers an excellent transition between the high school campus and the large, often impersonal, college campus. The intimate, though scholarly, atmosphere of the college; the opportunity of each student to know his instructors personally; and the chance to participate in the counseling program; all offer invaluable opportunities to the student that might not be available in an institution where the very size of enrollment makes personal interest in every student more diffícult.

Not only can the student receive excellent personal assistance with his work, but the opportunities for leadership in student affairs are increased.

Through the counseling program, a close scrutiny is given to the courses in which a student enrolls so that there may be no time lost in the overall four year college program. The student plans ahead, sets up his goal, and systematically includes those courses of study that will be of the greatest benefit to him.

Any student who has deficiencies in high school subjects or grades needed for entrance to the college or university he wishes to attend at the end of his sophomore year, may make these up at the same time he is completing his junior college work. He thereby avoids a loss of time.

## Occupational or Vocational-Technical Courses

The Occupational or Vocational-Technical courses are designed for several types of students.

Many of the needs of the student who seeks employment at the end of the sophomore year can be met by the vocational courses included in this group. In addition to offering a breadth of education, they meat specific needs in the shortest possible time in preparing the student for his chosen field of employment.

These courses also offer a well-organized general education program to meet the needs of the individual who has only two years to devote to post-high school education.

The junior college program also includes courses of study which may be taken by adults who can demonstrate their ability to do college work but who have not had the opportunity of completing high school. Evidence of success in classes of college level will permit these adults to continue their educational endeavors, either in vocational or transfer curricula.

Coordinated with these two general divisions of work at the college (transfer and vocational) there are three programs that are designed with specific types of students in mind. They are the students who can devote only evenings to school, the students who can coordinate their college study with a program of employment, and the outstanding high school seniors who can profit by special work at the college level.

## Extended Day Program

The Extended Day Program, which is composed of regular college classes that meet at night, offers to the first of these an opportunity to work for the Associate in Arts degree, to complete regular lower division work in a four year program, to make up any high school deficiencies, or simply to take additional classes of interest that will add to general education.

Although it takes longer than the day program, students find that with adequate planning, with the assistance of a counselor, in a surprisingly short time the goals they establish in the field of higher education can be attained through the Extended Day Program.

## Vocational Work-Study Program

Coordinated with these courses of study, Imperial Valley College offers a Vocational Work-Study Program. Under this plan students are assisted in finding part-time employment in
fields that are related as closely as possible to their occupational goals. Cooperating with employers and the State Employment Office, representatives of the college investigate the positions that are open; refer the students for interviews; and visit the students at work so that they may help to improve job performance and stress the need for knowledge, skill, and good work habits. Students can earn a maximum of 16 units (four units of credit per semester) toward junior college graduation if they make satisfactory progress and if the work is related directly to their occupational goals. Such credit is generally not accepted for transier by four year colleges. The most important values derived from this program are those which will make the student a better employee. It is intended that this program will provide training in a new field of endeavor for the student and that it will lead to proficiency in a new line of work. Credit cannot be given for continued routine work in a previously established position if it does not lead to the attainment of a specific goal.

## Honors Program for Talented High School Seniors

This program provides high school seniors who have special abilities an opportunity to take college courses. Selected seniors from Imperial Valley high schools are eligible to enroll and pursue an accelerated program by means of concurrent enrollment at Imperial Valley College.

The major objective of the program is to promote the advancement of specially capable students by permitting them to earn college credit while completing high school senior work.

Students selected for the program must complete all graduation requirements in the high school program at the same time they take the college courses. Parents of the students involved must give approval before any nominated students are eligible for the program.

The selection of candidates is made by the high school principal or his designated staff member. He advises the student and his parents of the student's eligibility for the program.

The College staff works with the students, their parents, and the high school counselor, in the implemenlation of the program.

The high school students who accept the invitation to enter the program may take not more than two courses with
a maximum of 8 units of college credit per academic year. Students have a great deal of freedom in the selection of college courses. Among the courses in which they may enroll are the following:

| Agriculture | Engineering <br> Drawing | Mathematics |
| :--- | :--- | :--- |
| Anthropology | English | Music |
| Art | Philosophy |  |
| Business | French | Physics |
| Chemistry | Geology | Sociology |
| Economics | History | Spanish |
|  |  | Zoology |

Although no high school student has attained a high school diploma when he starts the program, he is registered by the college as a regular student. Grades and units earned are part of his permanent college records. Most four year colleges and universities have indicated that they will award transfer credit for work satisfactorily completed.

Both the college and high school transcripts of record will bear a label such as the following:

## HONORS PROGRAM

(Concurrent High School and College Enrollment)
The students will spend a minimum of four periods in high school. The physical education requirements will be met within that four period schedule. Students are restricted to a spectator's role in college student activities, and extracurricular participation is to be confined to the high school. Personal counseling is available at the college, but every effort will be made to leave this responsibility to the high school counseling staff. Educational and occupational counseling is to be shared by the staffs of the two institutions.

The costs of participation will be assumed by the students and their parents. There is no tuition nor other fee and the students are not eligible to join the Imperial Valley College Associated Student Body. Textbook expenditures will range between $\$ 10$ and $\$ 20$ per semester. Transportation provisions are to be made by the student and his parents.

## DEGREES

The Board of Trustees, on recommendation of the president and faculty of the college, is authorized in accordance with Article 12, Section 102, of the State Administrative Code, Title 5, to confer the Associate in Arts (A.A.) and the Associate in Science (A.S.) degrees. Conditions under which the degrees are granted are outlined in the section on graduation requirements.

The junior college degree is awarded to a student who fulfills a two-year organized program of work, either of an occu-pational-vocational-technical type or of a lower-division fouryear college type. Consequently, the degree does not in itself entitle a student to transfer to advanced standing in a fouryear college or university. Each instifution prescribes its own admission requirements. A student who wishes to transfer to the upper division of a four-year college must satisfy the course, unit, and grade requirements of the college he wishes
to enter.

## SCHOLASTIC HONORS

## Graduation Honors

"With Distinction" is accorded those graduates who in the course of their entire college work have achieved a grade-point ratio of 3.5 or higher.
"Honorable Mention" is granted to those graduates who achieve a grade-point ratio of 3.0 in their college work.

## President's Honor List

The president of the college gives special recognition to top scholars each semester by publishing a list of students whose grades for the previous semester show a 3.0 average or better in twelve or more units of work.

## Alpha Gamma Sigma

Temporary membership in Alpha Gamma Sigma, California Junior College Honor Society, is awarded each semester to not more than ten per cent of the enrolled students who meet the following qualifications:

1. Completion of no fewer than 12 units of work, exclusive of physical education.
2. A grade-point average of 3.0 in all subjects undertaken exclusive of physical education.
3. No grade lower than a " C ", including physical education.
4. Recommendation of the faculty.

Permament membership is awarded to not more than ten percent of the graduating students who must meet the following qualifications to be eligible for consideration:

1. Temporary membership in Alpha Gamma Sigma any three cut of four, or four out of five, semesters of attendance.
2. A grade point average of 3.3 or higher.
3. Recommendation of the faculty.

The final selection to permanent membership is made by
a taculty committee that considers the eligible students from the standpoint of three qualities: character as shown by conduct and general behavior, service as shown by loyalty and service to the school, and leadership as shown by activity in student body affairs.

One man and one woman from the graduating cluss may be named to the State Honor Roll of Alpha Gamma Sigma. These students must have a grade point average of at least 3.5 and nust be recommended by the faculty for this high honor.

## SCHOLARSHIPS

Many service organizations and individuals in the Imperial Valley offer scholarships for which students may apply. The purpose of these scholarships is to give some financial assistance to worthy students desiring to continue their educations. The grants are based on factors of scholarship, citizenship, character, need, and life goals and purposes.

Institutions and organizations providing scholarships at Imperial Valley College are:

Mr. and Mrs. Alex Allen, Bank of America, Brawley American Citizens Club, Brawley Junior Chamber of Commerce, Brawley Junior Women's Club, Brawley Lions Club, Brawley Rotary Club, Brawley Women's Community Club, Brenda Sue Sayers Memorial, Brown Employee's Association, Calexico Union High School, Community Service Organization of Brawley, Ray Casey Chorale, Delta Kappa Gamma Society of El Centro, El Centro Rotary Club, Hidalgo PTA, Holtville Chamber of Commerce, Holtville First National Bank, Holtville Lions Club, Holtville Junior Woman's Club, Imperial County Medical Association, Imperial Livestock Supply, Imperial Savings \& Loan, Imperial Valley College Foundation, Imperial Valley Insurance Agents Association, Jill Johnson Memorial, Florence McKenzie, Nicholas Novak Memorial-Music, Phi Delta Kappa -Beta Chi Chapter, Pilot Club of El Centro, Sam Ellis Department Store, Soroptimists of Holtville, Valley Blacksmith Shop, Women's Auxiliary of Brawley American Citizens Club.

Some of these scholarships are restricted to applicants from specified districts; others have no restrictions and may be awarded to anyone from the Imperial Valley. These scholarships range in amount from $\$ 25.00$ to $\$ 500.00$.

An Imperial Valley College Foundation has been established. Capital is invested and interest is used each year to provide scholarships in the names of the donors.

Through the Gamma Delta Chapter of Alpha Gamma Sigma, the junior college scholarship society, awards varying from one hundred to five hundred dollars are available to high-ranking graduating members of the organization. Information concerning these grants may be obtained from the adviser, Gamma Delta Chapter, Alpha Gamma Sigma.

At universities and colleges, scholarships are available for outstanding graduates of junior colleges. In general, applications for these scholarships should be made by January lst of the year preceding enrollment.

Further information regording scholarships may be secured from the counselor or the Chairman of the Scholarships and Loans Committee.

## EXPENSES

There is no tuition charge for full-time students who are legal California residents. Tuition for foreign students and for students who are legal residents of other states is $\$ 10.40$ per unit to a maximum of $\$ 156.00$ per semester. Tuition for California adults taking fewer than 10 class hours is $\$ 2.50$ per unit.

Expenses that are normally incurred by all students are for books, supplies, and a student-body card. These expenses average approximately $\$ 50.00$ a semester, but vary depending upon the courses that are taken.

The student-body card, which costs $\$ 10.00$ per semester, admits the student to all regular athletic activities of the college, pays for the school paper; gives voting privileges and the opportunity to hold office; partially pays the cost of the school annual (credit for two semesters pays the whole cost of the year-book); permits the use of the student store and lounge area; gives reduced rates at some movie theaters; and permits application for membership in campus clubs and organizations, all of which are part of the Associated Student Body organization. A student who registers for nine and a half units or less may purchase a special student body card for $\$ 2.50$ per semseter which enlitles him to the newspaper, admission to the games, and to the use of the student store and lounge area.

## COUNSELING AND GUIDANCE SERVICES

It is the aim of the college to provide all pertinent information that will aid the student in formulating his objectives and
plans and to encourage him to make the most of his potentialities and training.

Each student is served by an experienced and trained counselor who assists in dealing with educational, vocational, and individual problems. In consultation with his counselor the student reviews his aptitudes and potentialities as revealed by standardized tests and by records of past performance, and plans a program of studies in terms of his personal objectives. The student also has the advantage of being able to consult with an instructor who serves as an advisor in the subject area of his major.

Individual counseling is supplemented by group programs which deal with specialized occupational information, and by workshops that deal with particular student interests and needs that are shared in common.

To provide the opportunity for a detailed analysis of individual abilities and interests, and to provide the opportunity for occupational analysis, Psychology 50 is offered under the cuspices of the Counseling Department.

Other services include special testing, employment referals, explanation of veteran benefits and rights, and the processing of various types of scholarship applications.

## ACCREDITATION

The college is officially accredited by the Western College Association and the State Department of Education. The University of California and other colleges and universities of high rank give full credit for transfer courses completed here.

## INSTITUTIONAL AFFILIATIONS

The college is a member of the California Junior College Association and the California Junior College Association, Southern Section.

## APPROVAL BY VETERANS ADMINISTRATION

The College is fully approved by the Veterans' Administration for training in connection with PL 894 (Vocational Rehabilitation), and PL 550 (Korean Veterans).

## STUDENT ACTIVITIES

Student aflairs are governed by the Associated Students of Imperial Valley College. The Executive Board consists of the president; vice-president; recording secretary; corresponding secretary; treasurer; commissioners of activities, assemblies, athletics, publicity, rallies and the student union; sophomore and freshman representatives; Associated Women Stu-
dents and Associated Men Students representatives; cheerleaders; and songleaders.

Those students who are socially inclined will find an opportunity for the development of their interests in clubs and the social affairs of the year. Others who are interested in athletics will benefit from a variety of intercollegiate sports; and those who are interested in music, publications, or student government will find many opportunities for participation in these activities.

To be eligible for any school office or any intercollegiate conference, a student must meet the following requirements: for athletics, he must be passing in at least 10 units of work at the time of the extra-curricular activity; for student government positions, he must be passing in at least 10 units of work, and if previously enrolled in college he must have achieved at least a 2.0 grade point average for all work undertaken.

To maintain a balance between curricular and extracurricular activities, no student is eligible to hold a major leadership office in more than one organization without the approval of the Administration. This makes it possible for the greatest number of students to have the opportunity of actively participating in positions of leadership.

## STUDENT NEWSPAPER

The college newspaper is published periodically throughout the school year by members of the Publications Workshop. It presents articles and news items about college activities and affairs. Students who are interested in any phase of newspaper work should contact the journalism instructor or the student editor for further information.

SCHOOL ANNUAL
The school annual, published by the Yearbook Workshop, highlights with pictures and words the year's activities and becomes $\alpha$ memento of the students' college experiences. Students who are interested in serving on the staff should see the journalism instructor or the student editor.

## COLLEGE BOOKSTORE

The college bookstore is located in the Student Union Building and is furnished and maintained by the Associated Students. All college textbooks and necessary supplies are available. The Student Union Building also contains a snack and coffee bar which provides refreshments and meals for the students.

## ATHLETICS

The college is a member of the Pacific Southwest Conference, consisting of Grossmont, Palomar, San Diego Mesa, San Diego City, Southwestern, Oceanside-Carlsbad and Imperial Valley. The conference itself belongs to the California State Junior College Association. Athletic competition is heId in football, basketball, track, golf, wrestling and baseball. Trophies are awarded to the winning school in each sport.

## ATHLETIC ELIGIBILITY

Conference eligibility rules provide that to participate in interscholastic sports, the student
(1) Must have begun regular attendance not later than the end of the registration period as specified in the college catalog (no later than lst week).
(2) Must be doing passing work in at least 10 units of work, in addition to physical education (if required), at the time the certified list in which he is a member is issued.
(3) After the first semester of attendance, must have passed in at least 10 units, in addition to physical education (if required), in his last semester of attendance.
(4) Must be in good standing, meaning that he must not be on probation.
(5) Unless a bonafide resident, must be enrolled one year before he is eligible for participation. This requirement applies if the student has attended another junior college in California, or is a graduate of a high school of another district that maintains a junior college.
(6) Must be a high school graduate, or at least 19 years of age by August 31 of the year he enters junior college.
These regulations are subject to change by conference officials, and by the California Junior College Association.

## REGULATIONS

## ADMISSION

Admission to Imperial Valley College is governed by the laws of the State and such supplementary regulations as are prescribed by the Board of Trustees. Students who are registering for eight or more units of work are required to (1) submit a transcript of all work taken in high school and a transcript of any advanced work that has been completed, and (2) they are required to take the college placement tests which include English and mathematics achievement tests, unless they have completed regular college courses in both English and mathematics. It is recommended that students take the American College Testing Program Test (ACT).

Failure to submit complete transcripts of prior college work may result in dismissal.

1. Admission of High School Graduates. Graduates of four-year high schools are eligible to apply for admission. An application for admission and a transcript of the secondary school record must be filed with the college and evaluated by the admissions officer.
2. Admission of High School Graduates with Recommended Status. The term recommended status applies to those students who, at the time of their graduation from high school, had completed a college preparatory course which included the following basic academic core of subjects with an average grade of B or higher. (One credit represents one year's work in a high school subject.)
$\begin{aligned} & \text { a. History } \\ & \text { b. English }\end{aligned}$
1 credit
b. Enghsh .............................................................. 3 credits
c. Laboratory Science (11th or 12 th grade
course in chemistry, physics, physi-
ology, botany, or zoology).
1 credit
d. Foreign language (one language) .................... 2 credits
e. Advanced mathematics, or chemistry or physics (in addition to c), or foreign language (additional year in language of-
fered under $d$ ), or 2 years of another language . 1 or 2 credits
NOTE: Any student who wishes to have this recommended status recorded on his transcript may petition the Registrar.

A high school graduate who does not have these requirements but wishes to attend a college or university that has these requirements for entrance, may make up either subject or grade deficiencies at Imperial Valley College and at the same time make progress toward the Associate in Arts degree.
3. Admission of Non-Graduates of Figh School. Any other person eighteen years of age or over may apply for admission to the college. Admission in such cases is governed by the person's seriousness of purpose and whether in the judgment of the administration the college work will be profitable to him. Those admitted may wish to enroll in some course or courses for purposes of general education, in a specialized vocational program, or in courses that will complete requirements for a high school diploma, which, on recommendation of the college, will be granted by a cooperating high school.

Non-high school graduates are automatically placed on probation for the first semester. This probation may be removed upon the completion of the first twelve units of work in which a grade of at least $1.5(\mathrm{D}+$ ) has been earned. All nonhigh school graduates on probation may take only those
courses approved by a counselor. The maximum course load of such students shall be twelve units plus physical education.
4. Admission of Special High School Studenis. Outstanding high school students, selected by the high school principals will be admitted for $2-8$ units of college work. (See "Honors Program for Talented High School Seniors.")
5. Admission of Students with Advanced Standing. Applicants who have attended other colleges may be admitted with advanced standing. Before admission and advanced standing cam be granted, such students must present for evaluation transcripts of their high school records, together with transcripts of their college records, and honorable dismissals from the institutions last attended.
6. Admission of Students from Other States. Students from other States may be accepted for enrollment if they meet the requirements of admission. A fee of $\$ 10.40$ per unit, not to exceed a total of $\$ 156 . C 0$ per semester is charged out-ot-state students.
7. Admission of Foreign Students. Foreign students may be admitted to Imperial Valley College if their qualifications meet the requirements of admission and if they have achieved sufficient mastery of the English language, as evidenced by their scores on entrance examinations, to participate in and profit from college class work. Tuition of $\$ 10.40$ per unit, not to exceed a total of $\$ 156.00$ per semester is charged.

## TRANSCRIPTS

One transcript of credits earned at Imperial Valley College is furnished free to the student at his first request. Thereafter, a fee of fifty cents is charged for each additional transcript requested. Requests for transcripts will not be honored until all outstanding obligations to the college are met.

Transcripts of work completed in high school and in other institutions of higher learning are required by Imperial Valley College for the following students:

1. All students taking eight or more units per semester,
2. All students who are working toward the A.A. or A.S. degree,
3. All foreign sfudents,
4. All part-time students who have been on academic probation,
5. All other students when requested to do so by the administration or by the counselor.

## RESIDENCE REQUIREMENTS

The residence of a student who is under twenty-one years of age is that of his father; or his mother if the father is not living; or of his legal guardian. The address of a married student, regardless of age, is his current residence.

Residents of any part of the State not included in another junior college district who meet entrance requirements will be admitted upon filing the credentials described under Admission Requirements. Applicants from another California district maintaining a junior college cannot be admitted unless they have been granted an inter-district permit.

## DEFERMENT OF STUDENTS UNDER SELECTIVE SERVICE REGULATIONS

Selective Service regulations provide deferments for men in college provided they meet certain requirements. It should be understood that a deferment does not excuse a student from serving in the military, but merely defers military service until a time when he is more valuable to the service. To be eligible for a deferment, a student must make normal progress toward a degree. Normal progress means that a student should carry a minimum of fifteen units per semester and do satisfactory work in all of his classes.

Although subject to change at any time, at present a I-S deferment for a year must be given to every college student regardless of when he is ordered to induction. A II-S deferment may be granted to a student if he makes a high enough scholastic average to warrant it. A student may be privileged to complete his four years of college work so long as he maintains the requisite scholastic average.

Students subject to the draft and desiring deferment should request that the colloge notify their draft boards of their attendance in school, and observe all other regulations concerning deferment. Students who need advice in this area are urged to secure further information from their counselors.

## ATTENDANCE AND AUTOMATIC WITHDRAWALS

A student who fails to attend the first meeting of a class will be dropped by the instructor immediately following that class. Should he desire readmission to the class his status will be the same as that of any other student who desires to add a class.

Regular attendance at all classes is expected of all students enrolled. Instructors are expected to take a student's attendance record into account in computing his grades. A student may be excluded from further attendance in a class
during any semester when his absences after the close of registration have exceeded the number of class hours which the class meets per week. A student may petition the instructor and Registrar for readmission after giving assurances that the work missed will be or has been made up.

Students who have been absent for more than twice as many class hours as the class meets per week shall be automatically withdrawn and be given a grade of "F." In a laboratory lecture situation the lecture hours will be separated from the laboratory hours. (Example: in a class where there is a two-hour lecture and $\alpha$ six-hour laboratory per week the student will be dropped when his total absences in lecture hours exceed four or his total absences in laboratory hours exceed 12.) Students excluded from classes for reason of absences may petition the Petitions Committee for reinstatement. Such petitions will be acted upon favorably only if it can be established that the absences were due to circumstances beyond the student's control and that the work has been made up.

A petition form may be secured from the Registrar's Office and must be signed by the instructor and returned to the Registrar's Office fully executed. The Registrar will grant the student temporary permission to attend class until the Petitions Committee has taken action.

A student who is tardy three times shall be considered as having been absent once. Absences attributed to the representation of the college at officially approved conferences and contests and attendance upon field trips will not be counted as absences. Lists of such students are to be prepared by the Dean of Student Activities.

## STUDY LIST LIMITATIONS

A regular program is 15 to 17 units, excluding an activity course in physical education. To be eligible for deferment under Selective Service, a student should take a minimum of 12 to 15 units per semester. The maximum load for any student is $171 / 2$ units; exception will be made only by special permission of the Administration and then only when there is clear evidence of successful scholastic performance.

A student who is currently enrolled in another school or college (including correspondence school) must report this enrollment to the Registrar. The total number of units carried during a semester may not exceed the above limits.

CHANGES IN PROGRAM OF STUDY
The filing by the student of a program of study and its acceptance by the college obligates the student to perform faithfully the work assigned to the best of his ability.

It is not expected that study lists will be worked out on a trial basis; therefore, the student is expected at the time he files his study list with the Registrar to make no further changes.

If a change in program is dictated by changes in the master schedule of the college, or if other legitimate reasons can be verified, the student must obtain an official change of program slip from the counseling office and secure the approval of his counselor for the change. All changes in study lists must be made before the end of the second week of the semester.

## SCHOLARSHIP GRADING SYSTEM

Grades are based upon the quality of work done, that is, upon actual accomplishment in courses offered for credit. Grades showing the standing of students are issued at the end of each semester. Mid-semester grades are of a preliminary nature only, are recorded for the use of the Registrar and staff and are made known to the student only if a deficiency exists The meaning of each grade is as follows:

## 1. GRADES

## A Superior

HONOR GRADE indicating EXCELLENCE earned as a result of consistently superior examination scores; consistently accurate and prompt completion of assignments: ability to deal resourcefully with ideas; superior mastery of pertinent skills; and promise of success in fields related to the subject.
B Better Than Average
HONOR GRADE indicating COMPETENCE earned as a result of high examination scores; accurate and prompt completion of assignments; ability to deal well with ideas; commendable mastery of pertinent skills; and promise of continued success in sequential courses.
C Average
STANDARD COLLEGE GRADE indicating SUCCESSFUL PERFORMANCE earned as a result of satisfactory examination scores; generally accurate and prompt completion of assignments; ability to deal with ideas; fair mastery of pertinent skills; and sufficient evidence of ability to warrant entering sequential courses.
D Passing
SUBSTANDARD GRADE indicating the MEETING OF MINIMUM REQUIREMENTS ONLY earned as a result of low examination scores; generally inaccurate, incomplete, or late assignments; less than average grasp of ideas;
barely acceptable mastery of pertinent skills; or insufficient evidence of ability to make advisable the enrcllment in sequential courses.
F Failing
UNSATISFACTORY GRADE indicating that the work has been generally unsatisfactory, and that no credit will be given.
Inc. Incomplete
UNFINISHED WORK, OTHERWISE PASSING indicating that an important assignment such as a term paper, final examination, or experiment is missing (for medical or other sufficient reason) but can be submitted to complete the course. Removal of an incomplete establishes whatever grade is warranted, so long as the work is made up before the end of the sixth week of the following semester; otherwise, the final grade is automatically recorded as an " $F$ ".
2. WITHDRAWAL GRADES

W/P Withdrawal, passing
W/F Withdrawal, icriling
A student who must withdraw or drop a course is required to report to the Registrar's Office for instructions on the proper procedure. The student who does not follow the formal procedure will be given a grade of " $F$ " in each course irrespective of the date of withdrawal or dropping.

The student who withdraws or drops courses properly within the first six weeks will be given grades of "WP" or "WF" depending on whether he is passing or failing at the time action is initiated. After the sixth week grades of " $F$ " will be given irrespective of the grades then being earned, unless it can be demonstrated that extenuating circumstances such as an incapacitating illness or injury or moving from the community exist. Under such circumstances the student may petition the petitions committee for withdrawal with grades of "WP" or "WF" whichever is appropriate. Such petitions must be presented in person when possible, or by mail, and in all cases must be accompanied by prima facie evidence supporting the reason for withdrawing.
3. GRADES FOR REPEATED COURSES

A course in which a grade of " $D$ " has been earned may be repeated in special cases but no additional units of credit will be cllowed. A course in which a grade of " $F$ " has been given may be repeated for credit. In each instance, however, the original grades, grade points and units, if earned, will stand as recorded on the student's permanent record;
but the new grade and grade points also will be entered. The cumulative grade point ratio will be determined in cases of repeated courses by including units attempted and grade points earned on both the original and repeated enrollments in the course.
4. GRADE POINTS

Grade points, per semester unit, are assigned as follows:
A 4 grade points per unit
B 3 grade points per unit
C 2 grade points per unit
D 1 grade point per unit
F 0 grade points per unit
W/P 0 grade points per unit; units not charged against the student
W/F 0 grade points per unit; units charged against the student
The grade point average is computed by dividing total grade points earned by total units attempted. Thus in any given semester, if the grade points earned total 28 and the total units attempted equals 14 , the grade point ratio is 2.00 .

## ACADEMIC PROGRESS NOTICES

At any time during the semester an instructor may submit a notice of academic progress to a student. At mid-semester each instructor will complete a notice on academic progress for each student who has failed to maintain an average grade of " C " in his course. A copy of each notice is also filed with the counselor. Every student who receives an academic progress notice is urged to confer with his counselor.

## SEMESTER GRADE REPORTS

An end of the semester grade report is issued to each student by the Registrar after the semester's work has been completed.

## PROBATION

A student who at the end of any semester has failed to achieve a $1.5(\mathrm{D}+$ ) grade point average in units attempted is placed on probation, and the probationary status is entered on the permment record of the student.

A student on probation is enrolled in college conditionally, and is expected to make wise use of his time and to abide by the recommendations of his counselor and instructors in improving his study habits. Neglect of these recommendations
will be considered as evidence of the student's lack of sincerity in improving his academic status.

Regular status can subsequently be attained by attempting twelve or more units in a semester or sequence of semesters and achieving a 1.5 or better grade point average providing there have been no grades of "WF," "F" or "Inc" in the twelve or more units attempted. No student on probation may enroll for more than $121 / 2$ units per semester.

Any student on probation who in the next semester of attendance fails to achieve a 1.5 grade point average in units attempted during that semester will be subject to dismissal.

Students who have been dismissed because of probationary status may, after one full semester, apply for readmission to the college. This application will be reviewed by the administration and if granted will be subject to all conditions specified including probationary status.

## WITHDRAWAL FROM COLLEGE

A student who is required to withdraw from college because of extenuating circumstances must contact the registrar for the procedures to be followed. Unless an official withdrawal petition is filed the student will receive grades of " $F$ " in all classes in which he is registered. See: "Withdrawal grades,"

## PHYSICAL EDUCATION

State law requires that every physically able student regularly attend a physical education class each semester of attendance.

The student must provide himself with a uniform as prescribed by the physical education department.

Exemptions from the participation requirement may be granted for the following reasons only:
(1) Physical disability
(2) Age, twenty-one or over
(3) Postgraduate standing
(4) Enrollment in 8 or fewer units
(5) Completion of basic or recruit training in any of the Armed Forces of the United States.
Exemption on grounds of physical disability will be granted only on receipt of a written statement from a physician advising the exemption. Exemptions are granted on the semester basis but may be renewed on the written request of the physician.

Those applying for exemption for reasons other than physical disability must present suitable evidence at the time of their registration.

A student who is dropped from physical education for nonattendance or for failure to perform in a responsible way will be required to withdraw from all classes in which he has been
officially enrolled. At his option, the student may reduce his study list to not more than 8 units. At the time of mandatory withdrawal, grades to be awarded will be W/P or W/F depending upon progress to date in classes affected.

A student who is legally required to be enrolled in an activity class and who seeks to be excused for medical reasons will not be excused unless he presents to the Registrar at the time of completing registration (filing of study list) a statement over the signature of his physican or the county health officer specifying that he is unable to participate in an activity class. The physician shall also indicate the nature of the infirmity and its prokable duration. A new stalement shall be required at the beginning of each semester.

## CHANGES IN THE CATALOG

Any regulation adopted by the administration of Imperial Valley College shall have the same force as a printed regulation in the catalog and shall supersede, upon appropriate public announcement, any ruling on the same subject which may appear in the printed catalog or official bulletins of the college.

A student mary graduate under the catalog in effect at the time of his initial enrollment, provided he maintains a continuous enrollment status during each semester (excluding summer sessons) of not less than six units of work in which passing grades are earned.

## GRADUATION REQUIREMENTS

Upon the completion of the following requirements, students at Imperial Valley College will be granted the degree, Associate in Arts or Associate in Science, depending upon the major completed. Responsibility for filing a petition for graduation rests with the student. This petition is to be filed with the Registrar not later than the end of the 6th week of the semester of graduation.

The requirements for graduation represent not only the minimum general requirements outlined by the State, but also the firm commitment on the part of Imperial Valley College to the principles of general education. These requirements in general education are designed to develop the potential of every student, broaden his outlook, and contribute to the realization of the well-balanced whole man.

## I. GENERAL REQUIREMENTS

## A. UNIT REQUIREMENT

There must be a satisfactory completion of at least 60 units of work plus physical education activity if required.
B. SCHOLARSHIP REQUIREMENT

A grade point average of $2.0(\mathrm{C})$ or higher must be earned in all work undertaken. However, if a student returns to college after five years of absence, he may petition for the exclusion of his first semester or firs year of college work. If any part of a semester's work is to be excluded, the entire semester's work must be excluded with respect to grades, units and course requirements.
C. RESIDENCE REQUIREMENT

The residence requirement may be met in one of the following ways:

1. Completion of at least the last 15 units at Imperial Valley College.
2. Completion of a minimum of 54 units at Imperial Valley College if not in attendance at the time of qualifications for graduation.

## II. SUBJECT AREA REQUIREMENTS

A. ENGLISH

This requirement may be satisfied by completion of at east six units from one of the following course combinations:

1. English 1A plus 3 units from the following: English 1B, 30A, 30B, 52A, Speech 1A. or Bus. 80.
2. English 51 A plus 3 units from the following: English $51 \mathrm{~B}, 1 \mathrm{~A}$, Business 80 , Journalism 93, or any course in Speech.
B. PHYSICAL EDUCATION

California State law requires all junior college students to take directed physical education activities each semester. (For exemptions see "Physical Education.")
C. HYGIENE AND HEALTH EDUCATION, including First Aid and Safety Education (2 units)
This requirement may be met by completion of Physical Education 21.
Note: A student who has completed a basic training program in any of the Armed Forces of the United States may verify this training and file a petition requesting that he be excused from this requirement.
D. CONSTITUTION OF THE UNITED STATES, AMERICAN HISTORY, AND STATE AND LOCAL GOVERNMENT This requirement may be met by one of the following sequences:
History 17A-17B
Political Science 1, 2

Social Science 51A-51B
E. SOCIAL SCIENCE

This requirement may be met by completing any one of the following courses:
Psychology 1
Psychology 50
Sociology 1A
F. MATHEMATICS

The Mathematics requirement may be met by scoring sufficiently high on the placement test or by passing Mathematics 51
G. NATURAL SCIENCE

This requirement may be met by any course in a physical or biological science.

## III. MAJOR REQUIREMENT

This requirement may be satisfied by the completion of 20 units in a field of major interest chosen from the following
A. AGRICULTURE
B. ART
C. AUTOMOTIVE TECHNOLOGY
D. BIOLOGICAL SCIENCE (anatomy, biology, botany, physical anthropology, physiology, zoology)
E. BUSINESS (business, economics)

1. Bilingual Secretarial
2. Bookkeeping
3. General Business
4. Merchandising
5. Real Estate
6. Secretarial
F. ENGINEERING (engineering, required mathematics, physics)
G. ENGLISH (English, journalism, speech, drama)
H. HISTORY AND POLITICAL SCIENCE
I. HUMANITIES (art, music, dramatic art, literature, philosophy)
J. LANGUAGES (English, French, Spanish)
K. LAW ENFORCEMENT
L. MATHEMATICS (mathematics, engineering, physics) M. MUSIC
N. NURSING, LICENSED VOCATIONAL
O. PHYSICAL SCIENCE (astronomy, physicgl science, chemistry, physical geography, geology, physics, mathematics 2 or higher)
P. SOCIAL SCIENCE, anthropology, economics, geography, history, political science, psychology, sociology)
Q. VOCATIONAL (completion of a Vocational Work-study Program in a specific field combined with a program of related courses approved by the Administration)
R. LETTERS AND SCIENCE (completion of lower division requirements for a selected major as required for upper division standing at a specific university or college)
IV. GENERAL EDUCATION RECOMMENDATIONS

It is strongly recommended that the student, in meeting the above requirements, schedule his program so that he completes additional courses in science and the humanities (dramatic art, literature, philosophy, art, music).

## CREDIT FOR CORRESPONDENCE AND EXTENSION COURSES

A student may petition to have a maximum of six units of credit counted toward graduation for correspondence or extension courses which meet the following standards:
(1) Courses must have been taken from a recognized accredited college or university having a correspondence or extension division.
(2) Courses must be designated as recommended for lower division credit by the college or university.
It is the responsibility of the student to submit evidence establishing the above standards.

## TRANSFER REQUIREMENTS

Two principal kinds of requirements must be met in order to attain full junior standing at a state college, the University of California or other institution maintaining equivalent standards to which the student expects to transfer. These are as follows:

1. The completion of the specified requirements for junior standing in the proposed senior college or university, and,
2. The completion of the lower division prerequisites for upper division majors and minors.
These vary according to the requirements of the institution of higher education in which the student expects to enroll. A STUDENT EXPECTING TO TRANSFER TO SUCH AN INSTITUTION SHOULD CONSULT THE CATALOG OF THE INSTITUTION REGARDING SPECIFIC REQUIREMENTS and plan his Imperial Valley College work so that these requirements will be met.

## GENERAL EDUCATION REQUIREMENTS <br> California State Colleges

All California State Colleges require a minimum of 45 units of credit in General Education for graduation at the end
of four years. With the exception of six units, these are in addition to the units earned in major and minor fields. Many of these units may be earned while the student is in attendance Imperial Valley College.

The following summary of General Education requirements for the degrees of Bachelor of Arts and Bachelor of Science, granted by state colleges, may be of help to students as they plan their junior college courses of study.

Required Curriculum. Each student in a state college to qualify for graduation shall complete a pattern of courses defined by that college to include the following:
General Education, minimum- 45 units
The courses in General Education shall be distributed in the following manner:
(1) Social Sciences $\qquad$ 9-12
The social sciences shall include required instruc. tion in U.S. history, Constitution and American ideals and courses in the fields of anthropology, economics, geography, history, political science, sociology, and similar fields.
Courses must be selected from two or more of these fields.
(2) Natural Science $\qquad$ .9
Natural sciences shall include the fields of astronomy, botany, chemistry, geology, physics, physiology, zoology, and similar fields. At least one course must be selected from a physical science and one from a life science.
(3) Literature, Philosophy or the Arts $\qquad$ 6 (Fine and practical arts not to exceed 3 of the 6 units)
(4) Health and Physical Education $\qquad$ Except as waived by presidents of state colleges in accordance with the law.
(5) Oral and Written Expression
(6) Psychelogy .. 3
(6) Psychology ..................................................................
(7) Additional units in General Education to be determined by each college ................................................ 14
As each college defines these additional units, and since each college may prescribe additional requirements, such as foreign language and mathematics, the student is expected to consult the catalog of the institution to which he intends to transfer.

In most instances it will be to the student's advantage to complete as many of the general education courses as possible during the freshmon and sophomore years. This is of
great importance to the student, for in his long-range planning he will find that the upper division requirements often do not leave time for general education requirements during the third and fourth years of college work.

## University of California

At the University of California the student must meet not only general university requirements for graduation but those requirements established at the campus he will attend. These requirements include study in the following fields:

1. English
2. Foreign language
3. Mathematics
4. Humanities
5. Natural science
6. Social science

The university urges the transfer student to complete all of these general requirements before the junior and senior years. Requirements in foreign language and mathematics may be met in part by high school preparation. See page 69 for Letters and Science requirements.

## Transfer Credit

In State Colleges, and at the University of California, $\alpha$ maximum of 70 semester units earned in a junior college may be applied toward the bachelor's degree, with the exception that no upper division credit may be allowed for courses taken in junior college and no credit may be allowed for professional courses in education taken in a junior college. Many other colleges and universities also allow credit for 70 units of lower division work completed at a junior college.

If a student expects to transfer to a four-year college, it is of the utmost importance that he obtain the catalog of the college he expects to attend and that he plan a long range program with the assistance of his counselor. This will be of great benefit in avoiding loss of time by the inclusion of courses that will not meet the requirements of his selected college.

## SUGGESTED CURRICULA

The following majors represent some of the areas of study that may be selected by students who enroll in the Imperial Valley College. Any person who wishes to pursue a curriculum not listed, or who has a particular objective in mind that is not met by a listed curriculum, should consult with his counselor.

It is important that each student make a long-range plan for his college study, in conference with his counselor, so that all requirements for the Associate degree can be met, and so that, if the student expects to transfer to a four-year college,
he will have completed all of the prerequisites for the course of study that he expects to pursue.

Although the counselor will give every assistance possible, it is the final responsibility of the student to check and recheck all phases of his program and his course of study.

## Transfer Curricula

The Transfer Curricula have been planned to meet the requirements for the Associate degree and at the same time fulfill the lower division requirements of the field of study that the student expects to pursue in a four-year institution. They have been designed to follow the requirements of San Diego State College, the University of California at Los Angeles or Davis, or California State Polytechnic College. As requirements vary at different colleges and universities, it is of great importance that each student who expects to continue his education after leaving Imperial Valley College obtain the catalog of the institution he expects to attend, and that he make, in consultation with his counselor, the necessary adjustment in the suggested curricula of his choice.

Transfer Curricula Majors
Agriculture
Animal Husbandry
Business Management
Crop Production
Agriculture Engineering
Farm Management
and others
Business
Business Administration
Accounting
Law and Finance
Insurance
Management
Business
Industrial
Office
Employee Relations
Production
Secretarial

## Marketing

Real Estate
Business Education
Biological Science
Chemistry
Engineering

English
French
Geography
History
Letters and Science
Anthropology
Business Administration
Economics
English
French
History
International Relations
Mathematics
Political Science
Psychology
Public Service
Social Science
Spanish
Zoology
Mathematics
Philosophy
Physics
Pre-professional
Dentistry
Education (teaching)
Law
Medicine
Pharmacy
Veterinary Science
Psychology
Social Science
Sociology
Sponish

## Occupational-Vocational-Technical Majors

These curricula harve been designed to meet all of the requirements for the Associate degree and at the same time prepare the student for employment.

## Agriculture

Agricultural Business
Agricultural Engineering Technology
Agronomy Technology
Animal Science Technology
Automotive Technology
Business
Bilingual Secretarial
Bookkeeping
General Business
Merchandising
Real Estate
Secretarial
Engineering Technician
Vocational Nursing
Vocational Work-Study
General Majors
Biological Science
Business
English
History
Humanities
Languages
Mathematics
Physical Science
Social Science

## SAMPLE CURRICULA

The following courses of study have been designed to assist the student in planning his program.

All the California State requirements for graduation from a junior college; the requirements for the Associate degree from Imperial Valley College; and, if applicable and as far as possible, the lower division requirements for majors and minors at San Diego State College, the University of California and California State Polytechnic College have been included in the following sample curricula.

If necessary, the student may schedule classes during other semesters than those suggested. It is important, however, that he check prerequisites and be sure that all classes will be offered in the semester he wishes to take them. In general. year courses should be started in the fall semester.

With proper planning the individual needs of every student can be met with no loss of time or units.

## AGRICULTURE

The student who plans to transfer to a College of Agriculture at the University will, during his junior and senior years, complete one of the thirty-four curricula offered by the University in agriculture. These curricula include such areas of concentration as Agricultural Business Management, Agriculture Economics, Agricultural Education, Agricultural Production, Entomology, Food Science, International Agricultural Development, Irrigation Science, Soil Management and Preveterinary Medicine.

The following suggested two year program at IVC presupposes that the student has completed the basic academic core of college preparatory subjects in high school:

## Freshman



| P.E. | Sophomore |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Physical Education Activity | 1/2 | 1/2 |
| H.E. | 21 | Health Education .............. | 2 |  |
| Hist | 17 AB | History of the United States | 3 | 3 |
| Psych | 1 | General Psychology .......... |  | 3 |
|  |  | ${ }^{1}$ Electives ....................... | 12 | 10-11 |
|  |  | Not to Exceed | 171/2 | $171 / 2$ |

1-Electives should be chosen in terms of the student's expected area of concentration. The student should check the catalog of the campus he expects to attend or the University-Wide Bulletin of Prerequisites and Recommended Subjects to determine the lower division courses which must be taken in the major and in the area of breadth requirements for graduation from the University.

## AGRICULTURE

Preparatory to transfer to a California State College (California State Polytechnic College, Fresno State College, etc.) offering an $A B$ or $B S$ degree in agriculture or one of the agricultural specialties. The student may pursue a major leading to the bachelor's degree in Agricultural Business Management, Agricultural Engineering or Mechanical Agriculture, Agricultural Service and Inspection, Agronomy, Animal Husbandry, Crops or Fruit Production, Dairy Husbandry or Manufacturing, Farm Management, Food Processing, Landscape Architecture, Ornamental Horticulture, Poultry Husbandry or Soil Science. Not all state colleges with departments of agriculture offer all of the majors listed. The student should identify the curriculum he wishes to pursue in the catalog of the state college to which he expects to transfer and include in his program not only the courses required for his major, but also the general education requirements listed.

| Freshman |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Dept. | Course | Subject | Sem. 1 | 11 |
| P.E. |  | Physical Education Activity | 1/2 | 1/2 |
| H.E. | 21 | Health Education ............... | 2 |  |
| Eng | 1A | Composition ....................... | 3 |  |
| Eng | 1B | Introduction to Literature .. |  | 3 |
|  |  | 'Courses in Major and General Education |  | 12-14 |
|  |  | Not to exceed .. | $171 / 2$ | 171/2 |
| Sophomore |  |  |  |  |
| P.E. |  | Physical Education Activity | $3^{1 / 2}$ | 1/2 |
| Psych | 1 | General Psychology .......... | 3 |  |
| Speech | 1 A | Speech |  | 3 |
| Hist | 17AB | History of the United States | 3 | 3 |
|  |  | ${ }^{1}$ Courses in Major and General Education | 9-11 | 9-11 |
|  |  | Not to exceed ............... | $171 / 2$ | $171 / 2$ |

1-The student should verify the existence of a mathematics or foreign language requirement as spercified under "General Education Requirements" of the institution to which he plans to transfer.

## AGRICULTURAL BUSINESS

Prepares for employment at the end of two years in the field of Agri-Business.

## Freshman

|  | Course | Subject | Sem. I | II |
| :---: | :---: | :---: | :---: | :---: |
| Dept. | Course | Physical Education Activity |  |  |
| Psych | 51 A | Personal and |  | 3 |
|  |  | Social Development | 3 |  |
| Math |  | 'Mathematics ........................ | 3 | 3 |
| Eng |  | 'English .............................. |  |  |
| Ag | 1 | Introduction to Agricultural \& Business Management | 3 |  |
| Ag | 2 | Agricultural Business |  |  |
|  |  | Organization and Management |  | 3 |
| Bus | 77 AB | Elementary Bookkeeping .... | 3 | 3 |
| Bus | 71 | Elementary Typewriting ... |  | 3 |
| Bus | 73 | Office Machines ................ |  | 0-2 |
|  |  |  |  |  |

## Sophomore

| P.E. |  | Physical Education Activity | $3^{1 / 2}$ | $3^{1 / 2}$ |
| :---: | :---: | :---: | :---: | :---: |
| Bus | 1 AB | Accounting ........................ | 3 |  |
| Bus | 51 C | ${ }^{2}$ Applied Business Law ....... |  |  |
| Bus | 51D | ${ }^{2}$ Essentials of Business Correspondence |  | 2 |
| Soc Sci | $51 A B$ | Introduction to American Society | $\begin{aligned} & 3 \\ & 3 \end{aligned}$ | 3 |
| Bus | 37 | Records Management ........ |  | 2 |
| H.E. | 21 | Health Education ................ | 2 | 2 |
| Ag | 12AB | Truck Crop Produchanics ...... | 2 | 2 |
| Ag | 30AB |  | 161 | $141 / 2$ |

1-Course determined by score on placement test.
Course delermined by score arged to choose the courses with
${ }^{2}$-Students who are qualified are urged 10 choose Law and Bus 80 , higher prerequisites such

## AGRICULTURAL ENGINEERING TECHNOLOGY

Prepares for employment at the end of two years.

| Freshman |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Dept. <br> PE | Course | Subject | Sem. I | II |
| $\stackrel{\text { P.E. }}{\text { Math }}$ |  | Physical Education Activity | 1/2 | 1/2 |
| Eng |  | 'Mathematics ..................... | 3 | 3 |
| Ag | 33 AB | Farm Power ........................... | 3 | 3 |
| $\stackrel{A g}{\text { Sg }}$ (ai $^{\text {a }}$ | 30AB | Agricultural Mechanics ......... | 2 | 2 |
| Soc Sci | 51AB | Introduction to American Society | 3 | 2 |
| Psych | 51.A | Personal and Social | 3 | 3 |
| Ag | 32 | Development Irrigation and Drainage | 3 | 3 |

## Sophomore

| P.E. <br> Math |  | Physical Education Activity <br> ${ }^{1}$ Mathematics $\qquad$ | $3^{1 / 2}$ |
| :---: | :---: | :---: | :---: |
| Ag | 1 | Introduction to Agricultural |  |
| $A g$ | 31 AB | Business Management .. | 3 |
| Ag | 34 AB | Welding | 2 |
| Math | 9 | Technical Mathematics | 2 |
| Engr | 28A | Plane Surveying ........... |  |
| Engr | 1, 2A | Technical \& Engineering |  |
| H.E. | 21 | Drawing .................... | 2 |
|  |  | Health Education |  |
|  |  | Electives | 3 |

'-Courses determined by score on placement test.

## AGRONOMY TECHNOLOGY

Prepares for employment at the end of two years.

| Freshman |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Dept. | Course | Subject | Sem. I | II |
| P.E. |  | Physical Education Activity | 1/2 | 1/2 |
| Psych | 51 A | Personal and Social |  |  |
|  |  | Development .... |  | 3 |
| Math |  | 'Mathematics ...................... | 3 |  |
| Eng |  | 'English ............................. | 3 | 3 |
| Ag | 10 AB | Field, Cereal, Forage Crops | 4. | 4 |
| Ag | 40 | Soils ................................. | 3 |  |
| Ag | 41 | Fertilizers \& Soil Fertility .... |  | 2 |
| Ag | 30AB | Agricultural Mechanics ..... | 2 | 2 |
| Ag | $33 A B$ | Farm Power ........................ | 2 | 2 |

## Sophomore

| P.E. |  | Physical Education Activity | $\begin{aligned} & 2^{1 / 2} \\ & 2 \\ & 3 \\ & 2 \end{aligned}$ | $\begin{aligned} & 2^{1 / 2} \\ & 2 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| Ag | 11 AB | Crop Production |  |  |
| Ag | 12AB | Truck Crop Production ........ |  |  |
| Ag | 13 | Weeds \& Poisonous Plants |  |  |
| Ag | 14 | Introduction to Entomology |  |  |
| Ag | 32 | Irrigation and Drainage .... |  | 3 |
| Ag | 1 | Introduction to Agricultural Business Management .. | 3 |  |
| H.E. | 21 | Health Education ............... |  |  |
| Ag | $31 . A B$ | Farm Machinery ................. | 2 | 2 |
| Ag | 34A | Welding ...........................- |  | 2 |
| Soc Sci | $51 A B$ | Introduction to American Society $\qquad$ | 3 | 3 |
|  |  |  | 171/2 | $161 / 2$ |

1-Course determined by score on placement test

## ANIMAL SCIENCE TECHNOLOGY

Prepares for employment at the end of two years.

| Freshman |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Dept. | Course | Subject | Sem. I | II |
| P.E. |  | Physical Education Activity | $1 / 2$ | 1/2 |
| Math |  | 'Mathematics ...................... | 3 |  |
| Eng |  | 'English ............. | 3 | 3 |
| Ag | 20 | Introduction to Animal |  |  |
|  |  | Science | 3 |  |
| Ag | 30AB | Agricultural Mechanics ...... | 2 | 2 |
| Ag | 33AB | Farm Power ..................... | 2 | 2 |
| Psych | 51A | Personal and Social Development | 3 |  |
| Soc Sci | 51A | Introduction to American |  |  |
|  |  | Society .......................... |  | 3 |
| Ag | 21 | Feeds and Feeding ............. |  | 3 |
| Ag | 22 | Livestock Selection ............. |  | 2 |
|  |  |  | $161 / 2$ | 151/2 |
|  |  | Sophomore |  |  |
| P.E. |  | Physical Education Activity | 1/2 | 1/2 |
| Ag | 31 AB | Farm Machinery ................ | 2 | 2 |
| Ag | 34A | Welding .......... | 2 |  |
| Ag | 1 | Introduction to Agricultural Business Management .. | 3 |  |
| Ag | 2 | Agricultural Business <br> Organization and <br> Management |  | 3 |
| Ag | 40 | Soils .................................. | 3 |  |
| Ag | 41 | Fertilizers and Soil Fertility |  | 3 |
| H.E. | 21 | Health Education .............. |  | 2 |
| Soc Sci | 51B | Introduction to American Society $\qquad$ | 6 | 3 3 |
|  |  |  | 161/2 | 161/2 |

[^0]
## AUTOMOTIVE TECHNOLOGY

Prepares for employment at the end of two years.

| Freshman |  |  |  |
| :---: | :---: | :---: | :---: |
| Dept. Course | Subject | Sem. I | II |
| $\begin{aligned} & \text { Dept. } \\ & \text { P.E. } \end{aligned}$ | Physical Education Activity | 1/2 | 1/2 |
| Psych 51A | Personal and Social |  |  |
| Psych | Development ................ | 3 |  |
| Auto Tech 51AB | Automotive Technology .... | 3 | 3 |
| Math | ${ }^{1}$ Mathematics ..................... | 3 | 3 |
| Eng | English <br> Health Education |  | 2 |
|  |  | $16^{1 / 2}$ | $151 / 2$ |

## Sophomore

P.E. $\quad$ Auto Tech 52AB

Soc Sci 51 AB


1-Course determined by score on placement test.
${ }^{2}$-Engineering 1, 44A, 44B, 10, etc.

## BUSINESS - TRANSFER PROGRAM

Prepares for the junior year at San Diego State College.
The following basic course meets the general lower division requirements at Som Diego State College in Business Administration for majors offered in Business Lerw and Finance (finance, insurance, real estate), Business Education (business education, office management), Accounting, Management, and Marketing. ${ }^{1}$

Courses listed below represent a sample program. Other courses may be selected. Consult a counselor or Business Division advisor.

## Freshman

| Dept. | Course | Subject | Sem. I | II |
| :---: | :---: | :---: | :---: | :---: |
| P.E. |  | Physical Education Activity | 1/2 | 1/2 |
| Bus | 1 AB | Accounting ...................... | 1/2 | 1/2 |
| Bus | $30 A B$ | Business Law | 3 | 4 |
| Eng | 1 A | Composition ............................. |  | 3 |
| Econ <br> Math | $1_{12}^{1 A B}$ | ${ }^{2}$ Selected Science Course .... | 3 |  |
|  |  | Principles of Economics .... | 3 | 3 |
|  |  | Elementary Statistics ......... |  |  |
|  |  | Electives .................... |  | 3 |
|  |  |  | 161/2 | 161/2 |
| Sophomore |  |  |  |  |
| P.E. |  | Physical Education Activity | $1 / 2$ | $1 / 2$ |
| Hist | 17AB | ${ }^{3}$ History of the United States | $3^{1 / 2}$ | $3^{1 / 2}$ |
| Psych | 1 | General Psychology ........... | 3 |  |
| Speech | 1A | Speech .................................. |  | 3 |
| H.E. | 21 | Health Education |  | 2 |
| $\begin{aligned} & \text { Eng } \\ & \text { Bus } \end{aligned}$ | $\begin{aligned} & 1 B \\ & 80^{1} \end{aligned}$ | ${ }^{4}$ Selected Course in the Arts | 3 |  |
|  |  | Introduction to Literature .... | 3 |  |
|  |  | Business Correspondence .. |  | 3 |
|  |  | ${ }^{2}$ Selected Science Course .... | 3 | 3 |
|  |  | Elective .............................. | 0-2 | 2-3 |
|  |  | Not to exceed | 171/2 | 171/2 |

'-Students should consult the San Diego State College for minor variations in prerequisites for the areas of specialization.
${ }^{2}$-A total of at least 9 units of science (including one physical and one biological, and at least one unit of laboratory work) should be
scheduled. scheduled.
${ }^{3}$-Poly Sci 1 and 2 may be substituted
${ }^{4}$-Literature, art, music, philosophy.

## BUSINESS - BILINGUAL SECRETARIAL

Prepares for employment in the specialized field of secretarial work that requires bilingual ability.

| Freshman |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Dept. | Course | Subject | Sem. I | II |
| P.E. |  | Physical Education Activity | 1/2 | 1/2 |
| Eng |  | 'English ................................ | 3 | 3 |
|  |  | Foreign Language | 4 | 4 |
| Bus | 51A | ${ }^{2}$ Orientation to Business ...... | 3 |  |
|  |  | ${ }^{3}$ Typewriting ....................... | 2 |  |
| Bus | 72A | Advanced Typewriting ...... |  | 2 |
| Bus | 75AB | Shorthand ........................... | 3 | 3 |
| Math | 51 | Basic Mathematics ............. |  | 3 |
| Psych | 51A | Personal and | 3 |  |
|  |  | Not to Exceed | $171 / 2$ | $171 / 2$ |
| Sophomore |  |  |  |  |
| P.E. |  | Physical Education Activity | $1 / 2$ | 1/2 |
|  | 77AB | Foreign Language ............. | 0-2 |  |
| Bus |  | ${ }^{2}$ Bookkeeping ....................... | 3 | 3 |
| Bus | 72B | Office Procedures ............... | 4 |  |
| Bus | 73 | Office Machines ................ |  | 3 |
| Bus | 76 AB | Advanced Shorthand .......... | 3 | 3 |
| Soc Sci | 51AB | Introduction to |  |  |
|  |  | American Society ........... | 3 | 3 |
|  |  | Selected Science Course .... |  | 3 |
| $\begin{aligned} & \text { H.E. } \\ & \text { Bus } \end{aligned}$ | $\begin{aligned} & 21 \\ & 51 \mathrm{D} \end{aligned}$ | Health Education .............. | 2 |  |
|  |  | ${ }^{2}$ Business Correspondence .. |  | 3 |
|  |  | Not to Exceed ............... | $171 / 2$ | 171/2 |

1-Course determined by score on placement test.
${ }^{2}$-Students who are qualified are urged to choose the courses with higher prerequisites such as Bus 16 , Bus 1 A , Bus 80 .
${ }^{3}$-Students should register for the typewriting class for which they have the prerequisites.

## BUSINESS - BOOKKEEPING

Prepares for employment at the end of the Sophomore year.

| Freshman |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Dept. | Course | Subject | Sem. I | II |
| P.E. |  | Physical Education Activity | $1 / 2$ | 1/2 |
| Bus | 51 A | 'Orientation to Business ...... | 3 |  |
| Bus | 17 | Business Management ........ |  | 3 |
| Psych | 51A | Personal and |  |  |
|  |  | Social Development ....... | 3 |  |
| Bus | 77AB | Bookkeeping ..................... | 3 | 3 |
| Bus |  | ${ }^{2}$ Typewriting ....................... | 2 | 2 |
| Bus | 73 | Office Machines ................ |  | 3 |
| Eng |  | ${ }^{3}$ English | 3 | 3 |
| Bus | 51 D | 'Essentials of Business Correspondence .... |  | 2 |
| H.E. | 21 | Health Education $\qquad$ Electives $\qquad$ | $\begin{array}{r} 2 \\ 0-2 \end{array}$ | 2-3 |
|  |  | Not to Exceed | 171/2 | $171 / 2$ |
| Sophomore |  |  |  |  |
| P.E. |  | Physical Education Activity | 1/2 | 1/2 |
| Bus | 1 AB | Accounting ......................... | 3 | 3 |
| Bus | 51 C | 'Applied Business Law ........ | 3 |  |
| Bus | 52 | Income Tax ......................... | 2 |  |
| Soc Sci | 51 AB | Introduction to American |  |  |
|  |  | Society ....................... | 3 | 3 |
|  |  | Selected Natural |  |  |
|  |  | Science Course ............... |  | 3 |
|  |  | ${ }^{4}$ Electives | 4-6 | 3-7 |
|  |  | Not to Exceed | $171 / 2$ | $171 / 2$ |

- Students who are qualified are urged to choose the courses with high prerequisites such as Business 16, Business 80, Business 30AB.
${ }^{2}$ - Students should register for the typewriting class for which they have the prerequisites.
${ }^{3}$-Course determined by score on placement test.
${ }^{4}$-Suggested electives: Business 37, 60, 72AB, Speech 51A. English 10AB, Economics, Shorthand, Music, Art, Literature.
NOTE: Those interested in Accounting see Business Transfer Program.


## BUSINESS - GENERAL BUSINESS

Prepares for employment at the end of the Sophomore Year.

## Freshman

| Dept. | Course | Subject | Sem. I | II |
| :---: | :---: | :---: | :---: | :---: |
| P.E. |  | Physical Education Activity | $1 / 2$ | 1/2 |
| Bus | 51A | 'Orientation to Business.. .... | 3 |  |
| Bus | 17 | Business Management ........ |  | 3 |
| Bus | 29 | Principles of Marketing ...... | 3 |  |
| Math |  | ${ }^{2}$ Mathematics ....................... | 3 |  |
| Bus |  | ${ }^{3}$ Typewriting ....................... | 2 |  |
| Bus | 73 | Office Machines ................ |  | 3 |
| Eng |  | ${ }^{2}$ English | 3 |  |
| Bus | 51D | Essentials of Business Correspondence |  | 2 |
| Speech | 51A | Basic Speech ...................... |  | 3 |
| Psych | 51A | Personal and <br> Social Development $\qquad$ <br> ${ }^{4}$ Electives $\qquad$ | 3 | 6 |
|  |  |  | 171/2 | $171 / 2$ |

## Sophomore

| P.E. 51 C |  | Physical Education Activity | $3^{1 / 2}$ | $1 / 2$ |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 'Applied Business Law ........ |  |  |
| Bus | 51D | 'Essentials of Business |  | 23 |
|  |  | Correspondence ............. | 3 |  |
| Bus | 77AB | Bookkeeping ................... |  | 3 |
| Soc Sci | 51 AB | Introduction to American Society | 3 |  |
|  |  |  |  | 3 |
| H.E. | 21 | Health Education ............. |  | 2 |
|  |  | Selected Natural Science .. | 3 |  |
|  |  | ${ }^{4}$ Electives ............................ | 3 | 7 |
|  |  |  | $15^{1 / 2}$ | $71 / 2$ |

1-Students who are qualified are urged to choose the courses with higher prerequisites such as Business 16, Business $30 \AA B$, and Business 80
${ }^{2}$-Course determined by score on placement test.
3-Students should register for the typewriting class for which they have the prerequisites.
4-Suggested electives: English 10, Music, Art, Literature, Economics 1A-B or additional business courses.

## BUSINESS - MERCHANDISING

Prepares for employment at the end of the Sophomore year.

## Freshman

| Dept. | Course | Subject | Sem. 1 | II |
| :---: | :---: | :---: | :---: | :---: |
| P.E. |  | Physical Education Activity | 1/2 | 1/2 |
| Bus | 51A | 'Orientation to Business ...... | 3 |  |
| Bus | 37 | Records Management ......... |  | 3 |
| Bus | 29 | Principles of Marketing ...... | 3 |  |
| Bus | 51 C | 'Applied Business Law ........ | 3 |  |
| Math |  | ${ }^{2}$ Mathematics ....................... |  | 3 |
| Bus 71 | 72 | Typewriting .............................. |  | 3 |
| Eng |  | ${ }^{2}$ English ..... | 3 | 3 |
| Bus | 51D | 'Essentials of Business |  |  |
|  |  | Correspondence ... |  | 3 |
| Psych | 51A | Personal and Social |  |  |
|  |  | Development | 3 |  |
|  |  | Electives | 1-2 | 1-3 |
|  |  | Not to Exceed | $171 / 2$ | 171/2 |
|  |  | Sophomore |  |  |
| P.E. |  | Physical Education Activity | $1 / 2$ | 1/2 |
| Soc Sci | 51 AB | Introduction to |  |  |
|  |  | American Society | 3 | 3 |
| Speech | 51A | Basic Speech ....................... | 3 |  |
| Bus | 34 | Retailing | 3 |  |
| Bus | 51 B | Practical Salesmanship ....... |  | 3 |
| Bus | 77 AB | ${ }^{3}$ Bookkeeping ...................... | 3 | 3 |
| Bus | 73 | Office Machines |  | 3 |
| H.E. | 21 | Health Education |  |  |
|  |  | Selected Natural Science .. | 3 |  |
|  |  | Selected Business Course . |  | 3 |
|  |  | Not to Exceed | 171/2 | $171 / 2$ |

- Students who are qualified are urged to choose the courses with higher prerequisites such as Bus 16, Introduction to Business; Bus 30AB, Business Law; Bus 80, Business Correspondence; Bus 50, Salesmanship.
${ }^{2}$-Course determined by score on placement test.
-Bus 1A-B, Accounting, may be elected instead of Bus 77A-B, Bookkeeping.


## BUSINESS - REAL ESTATE

Prepares for employment at the end of Sophomore year.'

| Dept. | Course | Subject <br> Physical Education Activity | Sem. I <br> $1 / 2$ | II |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| P.E. |  | $1 / 2$ <br> Bus | 51 C | 2pplied Business Law ......... | 3 |

## Sophomore



1-This program meets all requirements for the Imperial Valley College Real Estate Certificate as well as for the Associate in Arts degree.
${ }^{2}$ - Students who are qualified are urged to choose the courses with higher prerequisites such as Bus $30 A-B$, Business Law; Bus 80 , Business higher prerequisites such as Bus 30A-B, B
${ }^{3}$-Course determined by score on placement test.
${ }^{4}$ - Bus 1A-B, Accounting, may be elected instead of Bus 77A-B, Bookkeeping.

## BUSINESS - REAL. ESTATE CERTIFICATE PROGRAM'

On the satisfactory completion of the following courses, the student will be eligible for the California Junior College Real Estate Certificate which is issued in cooperation with the California Division of Real Estate and the California Real Estate Association under their Education and Research Program.

|  |  |  | Units |
| :---: | :---: | :---: | :---: |
| Business | 40 | Real Estate Principles |  |
| Business | 41 | Real Estate Practices . | 3 |
| Business | 42 | Real Estate Law | 3 |
| Business | 43 | Real Estate Finance | 3 |
| Business | 44 | Real Estate Appraising | 3 |
| Business | 45 | Real Estate Trends and | ... 3 |

Plus nine units from the following courses or from business courses approved by the Counselor: $\qquad$ .. 9

Total units - 27

| Business | 17 | Business Management |
| :--- | :--- | :--- |
| Business | $30 A B$ | Business Law (6 units total) |
| Business | 34 | Retailing |
| Business | 50 | Salesmanship |
| Economics | $1 A B$ | Principles of Economics |

1-This program fulfills requirements for the California Junior College Real Estate Certificate but does not fulfill requirements for the Associate in Arts degree. For degree requirements see preceding course of study.

## BUSINESS - SECRETARIAL

Prepares for employment at the end of the Sophomore year.

## Freshman

| Dept. | Course | Subject | Sem. I | II |
| :---: | :---: | :---: | :---: | :---: |
| P.E. |  | Physical Education Activity | 1/2 | 1/2 |
| Bus | 51A | 'Introduction to Business ...... | 3 |  |
| Math | 51 | Basic Mathematics ............ |  | 3 |
| Bus | 77 AB | ${ }^{2}$ Bookkeeping | 3 | 3 |
| Bus | $71 A B$ | ${ }^{3}$ Typewriting ....................... | 2 | 2 |
| Bus | 73 | Office Machines |  | 3 |
| Bus | $75 A B$ | ${ }^{4}$ Shorthand ............. | 3 | 3 |
| Eng |  | ${ }^{5}$ English | 3 | 3 |
| Psych | 51A | Perscnal and Social |  |  |
|  |  | Development ...... | 3 |  |
| H.E. | 21 | Health Education .............. |  | 2 |
|  |  | Not to Exceed | $171 / 2$ | 171/2 |

Sophomore

| P.E. |  | Physical Education Activity | $1 / 2$ | 1/2 |
| :---: | :---: | :---: | :---: | :---: |
| Bus | 51 C | 'Applied Business Law ........ | 3 | 3 |
| Bus | 72A | ${ }^{3}$ Advanced Typewriting ...... | 2 |  |
| Bus | 72B | Office Procedures .............. |  | 4 |
| Bus | 76AB | ${ }^{4}$ Advanced Shorthand .......... | 3 | 3 |
| Bus | 51D | 'Essentials of Business Correspondence |  | 3 |
| Soc Sci | 51 AB | Introduction to American |  |  |
|  |  | Society .......................... | 3 | 3 |
| Speech | 51A | Basic Speech $\qquad$ Selected Natural Science | $\begin{aligned} & 3 \\ & 3 \end{aligned}$ |  |

- Students who are qualified are urged to choose the courses with higher prerequisites such as Bus 16 , Introduction to Business; Bus
$30 \mathrm{~A}-\mathrm{B}$, Business Law; Bus 80 , Business Correspondence.
${ }^{2}$ - Bus 1A-B, Accounting, may be elected instead of Bus 77A-B, Bookkeeping.
${ }^{3}$-Three semesters of typewriting or equivalent are required.
4-Four semesters of shorthand or equivalent are required
5-Course determined by score on placement test.
NOTE: Those who enter the Secretarial major with previous iraining in typing and shorthand may select from other appropriate business courses.


## CHEMISTRY

Prepares for junior year at San Diego State College.

## Freshman

| Dept. | Course | Subject | Sem. 1 | II |
| :---: | :---: | :---: | :---: | :---: |
| P.E. |  | Physical Education Activity | 1/2 | 1/2 |
| Chem | 1 AB | General Inorganic |  |  |
|  |  | Chemistry ........ | 5 | 5 |
| Math | 3AB | Analytic Geometry |  |  |
|  |  | and Calculus ...... | 5 | 5 |
| Physics | 4A | Principles of Physics |  | 4 |
| Eng | 1A | Composition ............ | 3 |  |
| Eng | 1B | Introduction to Literature .... |  | 3 |
| H.E. | 21 | Health .................................. | 2 |  |
|  |  |  | $151 / 2$ | 171/2 |

## Sophomore



## '-Poly Sci 1 and 2 may be substituted.

${ }^{2}$-Course should be selected from biological science, literature, philosophy, art, music, anthropology, economics, geography, history or sociology, to help meet General Education requirements.

## EDUCATION (Not a Major)

## THE STANDARD TEACHING CREDENTIAL WITH

## A SPECIALIZATION IN ELEMENTARY TEACHING

Prepares the student for the junior year at San Diego State College. The transfer student admitted to SDSC must apply for admission to Teacher Education as soon as he enrolls in the college.

The following is a suggested basic program for students who wish to prepare for specialization in elementary teaching. The student should include prerequisites for his teaching majo and minor within the framework of this program.

| Freshman |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Dept. | Course | Subject | Sem. I | II |
| P.E. |  | Physical Education Activity | 1/2 | 1/2 |
| Art | 6A | Design | 3 |  |
| Bio | 3 | Principles of Bio. Science .. | 3 |  |
| Eng | 1 A | Composition .-.................. | 3 |  |
| Eng | 1B | Introduction to Literature .. |  | 3 |
| Geog | 1,2 | Geography ...................... | 3 | 3 |
| H.E. | 21 | Health Education ....... |  | 2 |
| P.E. | 53 | Elementary Games and |  |  |
|  |  | Activities .............. |  |  |
|  |  | Selected Physical Science |  | 3 |
|  |  | ${ }^{2}$ Courses in Major or Minor | 3 | 2-3 |

## Sophomore

| P.E.Hist |  | Physical Education Activity | 1/2 | 1/2 |
| :---: | :---: | :---: | :---: | :---: |
|  | 17AB | ${ }^{1}$ History of the United States | 3 | 3 |
| Math | 18 | Introduction to |  |  |
|  |  | Mathematics | 3 |  |
| Music | 7A | Music Fundamentals | 3 |  |
| Psych | 1 | General Psychology | 3 |  |
| Speech | 1 A | Public Speaking ....... |  | 3 |
|  |  | Literature or Philosophy .. |  | 3 |
|  |  | ${ }^{2}$ Courses in Major or Minor | 3-4 | 6-8 |

1-Poly Sci 1 and 2 may be substituted
${ }^{2}$-At SDSC the following elementary teaching majors and minors are offered.

List of Majors (SDSC)

## Art <br> Chemistry <br> English <br> Fine Arts

Frenc
German
Physical Sciences

Physics
Social Sciences Spanish
Continued on following page

## EDUCATION (Not $\alpha$ Major)

## THE STANDARD TEACHING CREDENTIAL WITH

## A SPECIALIZATION IN SECONDARY TEACHING

The student who plans to complete a program for the Standard Teaching Credential with Specialization in Secondary Teaching at San Diego State College should complete, if possible, the prerequisites for a teaching major and minor selected from the lists below. He should follow the curriculum of the major field at Imperial Valley College and should include, as electives, the required general education courses.

Not all of the majors and minors indicated are available at Imperial Valley College; however, with proper planning the student should be able to complete the combination of his choice with the understanding that it may be necessary to postpone some of the work required for either the major or minor and to substitute therefore general education requirements.

## List of Majors (SDSC)

Art
Biology
Business Education
Chemistry
English
French
German
Health Sciences

## Home Economics <br> Matheriatics

Music
Physical Education (Men)
Physical Education (Women)

## List of Minors (SDSC)

Art
Biology
Business Education
Chemistry
Economics
English
French
Geography
German

Health Sciences
History
Home Economics
Industrial Atts
Mathematics
Music
Physical Education
(Men)
Physical Education
Physical Ed
(Women)

Physical Sciences
Physics
Psychology
Russian
Social Sciences Spanish
Speech and Drama

## Physics

Psychology
Russian
Spanish
Speech and Drama
Specialization in
a) Librarianship
(b) Teaching of

Exceptional Children

The student who desires to transfer to the University of California should follow, at this campus, the program of studies which parallels the requirements for the bachelor's degree established by the College of Letters and Science on the University campus (e.g. San Diego, Irvine, Riverside, Los Angeles, etc.) of his choice.

In every case the student should consult the catalogs, on file in the IVC counseling office, of the school he wishes to attend in his junior, senior and graduate years to be sure that all prerequisites are met.
Continued from preceding page
$\begin{array}{ll}\text { List of Minors (SDSC) } \\ \text { Health Sciences } & \text { Russian } \\ \text { Industrial Arts } & \text { Spanish } \\ \text { Mathematics } & \text { Speech and Drama } \\ \text { Music } & \text { Specialization in }\end{array}$
Music
Physical Education
Physics
Psychology
(a) Librarianship
(b) Teaching of

Exceptional Children

## ENGINEERING

Prepares for the Junior year of college work.'

## Freshman

| Dept, | Course | Subject | Sem. I |  |
| :---: | :---: | :---: | :---: | :---: |
| P.E. |  | Physical Education Activity | $1 / 2$ | 1/2 |
| Eng | 1 A | Composition ........................ | 3 |  |
| Hist | 17A | History of the United States | 3 |  |
| H.E. | 21 | Health Education ................ |  | 2 |
| Math | 3AB | Analytical Geometry and Calculus $\qquad$ | 5 | 5 |
| Physics | 4A | Principles of Physics ......... |  | 4 |
| Engr. | 2A | Engineering Drawing ......... | 3 |  |
| Engr. | 10 | Engineering Problems ........ |  | 3 |
| Engr. | 21 | Descriptive Geometry ........ |  | 3 |
| Engr. | 28A | Plane Surveying ................. | 3 |  |
|  |  |  | $171 / 2$ | 171/2 |

## Sophomore

$\left.\begin{array}{lcllcc}\text { P.E. } & & \begin{array}{l}\text { Physical Education Activity }\end{array} & 1 / 2 & 3^{1 / 2} \\ \text { Hist } & \text { 17B } & \begin{array}{l}\text { History of the United States }\end{array} & & 3 \\ \text { Eng } & \text { IB } & \text { Introduction to Literature .. }\end{array}\right)$

1-Widely diversified avenues of professional engineering education are available in private colleges, state colleges, and the universities. The required subject material in the first two years is similar; however, difterences do exist among the senior institutions. The junior college studen sho the to study the catalog of the senior institution to which he expects to transfer.

## ENGINEERING TECHNICLAN

Prepares for employment at the end of two years as an engineering technician. This is only a proposal. The student and advisor together can modify this program to fill the student's needs.

## Freshman

| Dept. | Course | Subject | Sem. I | II |
| :---: | :---: | :---: | :---: | :---: |
| P.E. |  | Physical Education Activity | $1 / 2$ | 1/2 |
| Psych | 51A | Personal and Social |  |  |
|  |  | Development ... | 3 |  |
| Math | X | 'Beginning Algebra ............. | 3 |  |
| Math | A | Intermediate Algebra ......... |  | 3 |
| Phy Sci | 5 | Introduction to Physical Sciences |  | 3 |
| Ag | 30 AB | Agricultural Mechanics ...... | 2 | 2 |
| Ag | 33 AB | Farm Power ....................... | 2 | 2 |
| Engr. | 1 | Technical Drawing ............. | 3 |  |
| Engr | 2A. | Engineering Drawing ......... |  | 3 |
| Engr. | 8 | Slide Rule ........................... |  | 1 |
| Engr. | $44 A B$ | Welding ............................ | 2 | 2 |
| Engr. |  | Orientation to Engineering | 1 |  |
|  |  | Electives ............................. | 1 | 1 |
|  |  | Not to Exceed | 171/2 | $171 / 2$ |

## Sophomore

| P.E. <br> Soc Sci | $51 A B$ | Physical Education Activity | $1 / 2$ | 1/2 |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Introduction to American |  |  |
|  |  | Society | 3 | 3 |
| Eng |  | ${ }^{\prime}$ English ...... | 3 | 3 |
| Math | 9 | Technical Mathematics | 3 |  |
| Ag | 32 | Irrigation and Drainage .... |  | 3 |
| Engr. | 21 | Descriptive Geometry ....... |  | 3 |
| Engr. | 28AB | Plane Surveying ................ | 3 | 3 |
| H.E. | 21 | Health Education .............. | 2 |  |
|  |  | Electives .............. | 3 | 2 |
|  |  | Not to Exceed ............ | 171/2 | $171 / 2$ |

1-Course determined by score on placement test.

## ENGLISH

Prepares for the junior year at San Diego State College in Liberal Arts and Sciences.

## Freshman

| Dept. | Course | Subject | Sem. I | II |
| :---: | :---: | :---: | :---: | :---: |
| P.E. |  | Physical Education Activity | $3^{1 / 2}$ | $1 / 2$ |
| Eng 1AB |  | Composition ..................... |  | 3 |
| Eng 30A or 52A |  | ${ }^{1}$ Literature ..... |  | 3 |
|  |  | Selected Social Science .... | 3 | 3 |
| Psych <br> Math |  | General Psychology ..........., | 3 |  |
|  | 18 | Introduction to Mathematics | 3 |  |
|  |  | ${ }^{2}$ Foreign Language ............. | 4 | 4 |
|  |  | ${ }^{3}$ Selected Science ...............- |  | 3-4 |
| H.E. | 21 | Health Education ............... |  | 2 |
|  |  |  | $161 / 2 \quad 15$ | -161/2 |

## Sophomore

| P.E. | Physical Education Activity | 1/2 | $1 / 2$ |
| :---: | :---: | :---: | :---: |
|  | ${ }^{3}$ Selected Science ................ | 3-4 | 3-4 |
| Hist 17AB | 'History of the United States | 3 | 3 |
| Eng 30AB | Literature ........................... | 3 | 3 |
| or 52 AB |  |  |  |
| Eng 56AB | Survey of |  |  |
|  | English Literature ........ | 3 | 3 |
| Speech 1A | Speech .............................. |  | 3 |
|  | ${ }^{4}$ Humanities ......................... | 3 | 3 |
|  | Electives ............................ | 0-2 | 0-2 |
|  | Not to exceed ............... | $171 / 2$ | 171/2 |

1-Poly Sci 1 and 2 may be substituted.
${ }^{2}$ - $\AA$ reading knowledge of a foreign language is required. Proficiency may be demonstrated by course work (ordinarily 12 units) or by examination.
${ }^{3}$-Twelve units to indude courses in both biological and physical sciences are required at San Diego State College.
4-Art 50AB, Music 30 AB or Philosophy 1 AB.

## FRENCH

Prepares for the junior year at San Diego State College in Liberal Arts and Science.

## Freshman

| Dept. | Course | Subject | Sem. 1 | II |
| :---: | :---: | :---: | :---: | :---: |
| P.E. |  | Physical Education Activity | 1/2 | 1/2 |
| French |  | 'French .............................. | $4^{1 / 2}$ | 4 |
| Hist | 4AB | History of Western |  |  |
|  |  | Civilization ......... | 3 | 3 |
| Speech | 1 A | Speech .............. | 3 | 3 |
|  |  | ${ }^{2}$ Selected Science Course .... | 3 | 3 |
| Psych | 1 A | General Psychology ........... |  | 3 |
| Eng | 1 A | Composition ....................... | 3 |  |
| Eng | 1B | Introduction to Literature ..... |  | 3 |
|  |  |  | $161 / 2$ | 161/2 |

## Sophomore

| P.E. <br> French <br> Hist | 17A.B | Physical Education Activity | 1/2 | $1 / 2$ |
| :---: | :---: | :---: | :---: | :---: |
|  |  | French ................................ | $\begin{array}{r} 0-4 \\ 3 \\ 3-4 \end{array}$ | 0-4 |
|  |  | ${ }^{3}$ History of the United States |  | 3 |
|  |  | ${ }^{2}$ Selected Science Course .... |  | 3-4 |
|  |  | Selected Literature, Music, Art or Philosophy |  | 3 |
| H.E. | 21 | Health Education ................ |  | 2 |
| Math | 18 | Introduction to |  |  |
|  |  | Mathematics | 3 |  |
|  |  | ${ }^{4}$ Social Science | 0-3 | 0-3 |
| French | 10-11 | Conversational French | 2 | 2 |
|  |  | Not to Exceed .............. | $161 / 2$ | $161 / 2$ |

- Course determined by work completed in high school.
${ }^{2}$-Twelve units, to include both biological and physical sciences are required at San Diego State.
${ }^{3}$-Poly Sci 2 or Poly Sci 1 and 2 may be substituted.
${ }^{4}$-Two 3 -unit courses chosen from Anthropology 1A or 1B, Economics 1A, Geography 2x Sociology 1A.


## GEOGRAPHY

Prepares for the junior year at San Diego State College in Liberal Arts and Sciences.

## Freshman

| Dept. | Course | Subject | Sem. I | II |
| :---: | :---: | :---: | :---: | :---: |
| P.E. Geog | 1,2 | Physical Education Activity | 1/2 | $1 / 2$ |
|  |  | Physical and Cultural |  |  |
|  |  | Geography ..................... | 3 | 3 |
|  |  | 'Foreign Language ............... | 0-4 | 0-4 |
| Hist | 4AB | ${ }^{2}$ History of Western |  |  |
|  |  | Civilization ...................... | 3 | 3 |
| Eng | 1 A | Composition .... | 3 |  |
| Eng | 1B | Literature ............................ |  | 3 |
| Speech | 1 A | Speech | 3 |  |
|  |  | ${ }^{3}$ Selected Science | 3-5 | 3-5 |
|  |  | Not to Exceed ............... | 171/2 | $17^{1 / 2}$ |

## Sophomore

P.E.
'Foreign Language .................
General Psychology ..........
$0-4^{1 / 2}$
$\begin{array}{lccccc}\text { Psych } & 1 & \text { General Psychology ............ } & & 3 \\ \text { Geol } & 1 A & \text { Physical Geology ............ } & 4 & \\ \text { Hist } & 17 A B & \text { 4History of the United States } & 3 & 3\end{array}$

Misth 18
H.E.

Introduction to
Introduction to
Mathematics ....................
Health Education ................. 3
${ }^{5}$ Selected Social Science ......
Selected Music, Literature,
Art or Philosophy ............
Not to Exceed $\qquad$ $\frac{6}{171 / 2} \frac{6}{171 / 2}$
-A reading knowledge of French, Spanish or German is recommended for the Geography major.
2-English 52A-B may be substituted.
${ }^{3}$-See "General Education Requirements."
4-Poly Scil and 2 may be substituted.
S-Suggested Social Science: Sociology 1A, Anthropology 1 or 2, or Economics 1A.

## HISTORY

Prepares for the junior year at San Diego State College in Liberal Arts and Sciences.

| Freshman |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Dept. | Course | Subject | Sem. I | II |
| P.E. Hist | 4AB | Physical Education Activity | $1 / 2$ | 1/2 |
|  |  | History of Western |  |  |
|  |  | Civilization ..................... | 3 | 3 |
| Eng Eng Psych Speech | $\begin{aligned} & 1 A \\ & 1 B \\ & 1 \\ & 1 A \end{aligned}$ | Composition ...... | 3 |  |
|  |  | Introduction to Literature .... |  | 3 |
|  |  | General Psychology ........... |  | 3 |
|  |  | Speech ............................. | 3 |  |
|  |  | ${ }^{\text {'Selected Science }}$ | 3-4 | 3-4 |
|  |  | ${ }^{2}$ Foreign Language ................ | 0-4 | 0-4 |
|  |  | Not to Exceed ............. | $171 / 2$ | $171 / 2$ |
| Sophomore |  |  |  |  |
| P.E. <br> Poly Sci <br> Poly Sci | 1 | Physical Education Activity | $1 / 2$ | $1 / 2$ |
|  |  | Introduction to Government | 3 |  |
|  |  | Survey of American |  |  |
|  |  | Government .................... |  | 3 |
| Econ Math | $18^{1 A B}$ | Economics ... | 3 | 3 |
|  |  | Introduction to |  |  |
|  |  | Mathematics | 3 |  |
| H.E. | 21 | Health Education .............. | 2 |  |
|  |  | 'Selected Science ................ |  | 3-4 |
|  |  | Selected Music, Literature, Art or Philosophy $\qquad$ | 3 | 3 |
|  |  | ${ }^{3}$ Selected Social Science ...... |  | 3 |
|  |  | ${ }^{\text {'Foreign Language ............. }}$ | 0-4 | 0-4 |
|  |  | Not to Exceed | 171/2 | $171 / 2$ |

'Nine units to include biological and. physical sciences are required by San Diego State College
${ }^{2}$ - A reading knowledge of a foreign language is required. Proficiency may be demonstrated by course work (ordinarily 12 units) or by examination
3-Anthro 1 or 2, Geography 2, Sociology 1A.

## LAW ENFORCEMENT

Prepares for employment at the end of two years.

Freshman


1-This course meets the requirements for the Associate in Arts degree and at the same time fulfills the requirements for the cerlificate of completion of $a$ basic police training course.
${ }^{2}$-Course determined by score on placement test.
${ }^{3}$-Suggested electives: Psychology 1, Business 30A-30B, Speech 1B Political Science 1, 2, Art, Music, Literature, Science.

## LAW ENFORCEMENT CERTIFICATE PROGRAM ${ }^{1}$

A certificate of completion of a basic law enforcement course is presented on completion of the following courses:

|  |  |  | Units |
| :---: | :---: | :---: | :---: |
| Law Enf | 1 | Survey of Law Enforcement | 3 |
| Law Enf | 2 | Police Patrol Procedures ..... | 3 |
| Law Enf | 3 | Criminal Law | 3 |
| Law Enf | 4 | Criminal Investigation | 3 |
| Law Enf | 5 | Criminal Evidence .... | 3 |
| Law Enf | 6 | Criminal Procedure | 3 |
| Law Enf | 7 | Juvenile Control | 3 |
| Law Enf | 9 | Defensive Tactics | 2 |
| Law Enf | 10 | Traffic Control and Traffic |  |
|  |  | Accident Investigation ...... | 3 |
| H.E. | 22 | First Aid | 1 |

1-For Law Enforcement Training Program leading to the Associate of Arts Degree see the preceding page.

## LETTERS AND SCIENCE University of California

The college of Letters and Science is the four-year undergraduate, non-professional college on each of the undergraduate campuses of the University.

Requirements in Letters and Science on all campuses are similar but not identical. The requirements of the College of Letters and Science, University of California at Los Angeles are set forth below so that the student who plans to complete two years at IVC may identify those courses at UCLA having parallels at IVC. Since L \& S requirements vary from campus to campus, the student desiring to transfer to a campus other than UCLA will have to check L \& S requirements with the Counseling Office.

## UNIVERSITY OF CALIFORNLA Los Angeles

REQUIREMENTS OF THE COLLEGE OF LETTERS AND SCIENCE
Note: Courses at IVC, if different in number, are enclosed in parentheses. UCLA courses not offered at IVC are followed by an asterisk.
A. English: English 1 A with $a$ grade of $C$ or better.
B. Foreign Language: 16 units in not more than two languages. High school courses with grades of C or better may be used thus:

> 2 yrs. in one language $=4$ units
> 3 yrs. in one language $=8$ units
> 4 yrs. in one language $=12$ units
C. Elementary algebra and plane geometry: completed in high school or other accredited institution.
D. Humanities: Two of the 3 groups listed. Lower division courses which may be used to meet this requirement are:

1. Literature: At least 4 units in the original language or in translation
English 30A, 30B, 46A, 46B (56A, 56B) Humanities $1 A^{*}, 1 B^{*}$ Latin $4^{*}$
2. Philosophy: A six-unit lower division year course. Philosophy 6A-6B (1A-1B) $20 \mathrm{~A}-\mathrm{B}^{*}$
3. The Arts: At least 4 units.

Art 1A, 1B ( $50 \mathrm{~A}, 50 \mathrm{~B}$ ) $5^{*}$ or $7^{*}$
Integrated Arts $1 \mathrm{~A}-1 \mathrm{~B}^{*}$
Music 20A-20B*, 30A, 30B
Theatre Arts 5A (Dramatic Art 5A)
E. Natural Sciences: At least 5 units in physical science and at least 5 units in biological science. Lower division courses which may be used to meet this requirement are listed below.

1. Physical Science: Astronomy 1

Chemistry 1A, 2*, 2A*, 3A*
Geography 1
Geology 2, 2L (IA), 3 (IB)
Mathematics 1* or $3 A$ or $5 A^{*}$ or
$5 \mathrm{~B}^{*}$ or $37 \mathrm{~A}^{*}$ or $37 \mathrm{~B}^{*}$ or Statis-
tics 1 (12) or Philosophy 31
Meteorology $3^{*}$
Physics 1A, 1B, 1C, 1D (4A, 4B, $4 \mathrm{C}), 2 \mathrm{~A}, 2 \mathrm{~B}, 10^{*}$
2. Biological Science: Anthropology 1

Bacteriology 1*, 4*, 5*, 6*
Biology $1 \mathrm{~A}-\mathrm{B}^{*}, 2 \mathrm{~A}-\mathrm{B}^{*}, 12^{*}$
Botany $3^{*}$
Psychology 1B (2)
Zoology 15*
F. Social Sciences:

1. A lower division year course in history:

History $1 \mathrm{~A}-1 \mathrm{~B}(4 \mathrm{~A}-4 \mathrm{~B})$ or $5 \mathrm{~A}-5 \mathrm{~B}^{*}$ or $6 \mathrm{~A}-6 \mathrm{~B}^{*}, 7 \mathrm{~A}-7 \mathrm{~B}$ (17A-17B) or 8A-8B*
2. At least 6 units including courses in at least two subjects chosen from the following list:

Anthropology 2
Economics 1A, 1B, 13*
Geography 2
Political Science 1, 2
Psychology 1A (1)
Public Health 5*
Sociology 1 (1A)
Majors in the College of Letters and Science that may be pursued at IVC include Anthropology, Business Administration Economics, English, French, History, International Relations, Mathematics, Political Science, Psychology, Public Service, Spanish and Zoology. For a complete list of majors the student
should consult the appropriate campus catalog available in the Counseling Office.

The following pattern based upon the above L \& S requirements may be used by the student in planning his twoyear program at IVC. It presupposes that the student has completed the basic academic core of college preparatory subjects in high school.

## Freshman

| Dept. <br> P.E. <br> Eng | Course | Subject | Sem. I | II |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Physical Education Activity | $1 / 2$ | 1/2 |
|  | 1 A | Composition ...................... | 3 |  |
|  |  | Natural Science | 3-4 | 3-4 |
|  |  | Social Science | 3 | 3 |
|  |  | Humanities Course ......... | 3 | 3 |
|  |  | Prerequisites for major and/or minor or electives | 3-4 | 6-7 |
| H.E. | 21 | Health ................................. |  | 2 |
|  |  | Not to exceed ............... | 171/2 | 171/2 |
|  | Sophomore |  |  |  |
|  | 17AB | Elective ...................... | 0-4 | 0-4 |
| Hist |  | History of the United States | 3 | 3 |
|  |  | Natural Science ................ | 3.4 | 3-4 |
|  |  | Humanities ...... | 3 | 3 |
|  |  | Prerequisites for major and/or minor or electives | 2-4 | 2-4 |
|  |  | Not to exceed | $171 / 2$ | $171 / 2$ |

## LIBERAL ARTS - TWO YEAR CURRICULUM

The Liberal Arts Curriculum is designed for those who desire to continue their general education for two years beyond high school and who wish to increase the scope of their knowledge without necessarily preparing for a specific occupation.

| Freshman |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Dept. | Course | Subject | Sem. 1 | II |
| P.E. |  | Physical Education Activity | $1 / 2$ | 1/2 |
| Eng |  | 'English .............................. | 3 | 3 |
|  |  | ${ }^{2}$ Courses in Selected | 3 | 3 |
|  |  | Major Field ... | 7.9 | 8-9 |
| H.E. Math | 21 | Health Education. | 2 |  |
|  |  | ${ }^{\text {'Mathematics }}$ | 3 |  |
|  |  | Electives ..... |  | 3-5 |
|  |  | Not to exceed | 171/2 | $171 / 2$ |
| Sophomore |  |  |  |  |
| P.E. <br> Soc Sci |  | ${ }_{3}$ Physical Education Activity | $1 / 2$ | 1/2 |
|  | 51 AB | 3 - Introduction to American |  |  |
|  |  | ${ }^{2}$ Society ........................ | 3 | 3 |
|  |  | ${ }^{2}$ Courses in Selected |  |  |
|  |  | Major Field .................... | 9 | 9 |
|  |  | Selected Science Course .... | 3-4 |  |
|  |  | Electives ............................ | , | 3-5 |
|  |  | Not to exceed | 171/2 | $17^{1 / 2}$ |

1-Course determined by score on placement test.
${ }^{2}$-The student should select one of the following majors. (A major consists of 20 or more units of work in related subjects.)

Biological Science (Anatomy, Biology, Botany, Psychology 2, Physiology, Zoology)

## Business

English (English, Journalism, Speech)
History
Humanities (Art, Dramatic Art, Music, Literature, Philosophy)
Languages (English, French, Spanish)
Mathematics (Mathematics, Engineering, Physics)
Physical Science (Physical Science, Chemistry, Physical Geography, Geology, Physics)
Social Science (Anthropology, Economics, Education, Cultural Geography, History, Psychology, Sociology)
${ }^{3}$ _History 17 AB or Political Science 1 and 2 may be substituted.

## MATHEMATICS

Prepanes for the junior year at Son Diego State College in Liberal Arts and Sciences.'

| Freshman |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Dept. | Course | Subject | Sem. 1 | II |
| P.E. |  | Physical Education Activity | 1/2 | 1/2 |
| Math | 2 | Advanced Algebra \& |  |  |
|  |  | Trigonometry ... | 5 |  |
| Math | 3A | Analytic Geometry |  |  |
|  |  | and Calculus ... |  | 5 |
| Eng | 1 A | Reading and Composition .. | 3 |  |
| Eng | 1B | Introduction to Literature .... |  | 3 |
| Physics | 4A | Principles of Physics ......... |  | 4 |
| H.E. | 21 | ${ }^{2}$ Foreign Language ............. | 0-4 | 0-4 |
|  |  | Health Education. | 2 |  |
|  |  | ${ }^{3} \mathrm{General}$ Education |  |  |
|  |  | Electives .......... | 0-3 |  |
|  |  | Not to exceed | 171/2 | $171 / 2$ |
|  | Sophomore |  |  |  |
| P.E. <br> Math | 3B | Physical Education Activity | 1/2 | 1/2 |
|  |  | Analytic Geometry and |  |  |
|  |  | Calculus ................ | 5 |  |
| Math | 4A | Calculus \& Differential |  |  |
|  |  | Equations ..................... |  | 5 |
| Physics | 4BC | Principles of Physics ......... | 0-4 | 0-4 |
| Hist | 17 AB | ${ }^{4}$ United States History ......... | 3 | 3 |
| Psych | 1 | General Psychology ......... | 3 |  |
|  |  | ${ }^{3}$ General Education Electives | 0-6 | 3-9 |
|  |  | Not to exceed ............... | 171/2 | $171 / 2$ |

1-The mathematics major may also be taken in Applied Arts and Sciences at San Diego State College.
${ }^{2}$-Twelve units of a loreign language (or equivalent) are required.
${ }^{3}$-Hist 4A-B; 6 units from Anthro 1 or 2, Econ 1A, Geog 2, Sociol 1A; 6 units from Art SOA-B, Music $30 \mathrm{~A}-\mathrm{B}$, Phil 1, Eng $30 \mathrm{~A}-\mathrm{B}, 52 \mathrm{~A}-\mathrm{B}$, 56A-B; Biol 3; Speech 1A.
${ }^{4}$-Poly Sci 1 and 2 may be substituted.

## VOCATIONAL NURSING

The purpose of vocational nursing education is to develop and train the student to assume a significant role in the nursing profession as a licensed vocational nurse in accordance with the standards prescribed by the California State Board of Vocational Nurse Examiners.

Eligible applicants are appointed to a beginning class only after personal interviews conducted by the College nursing staff.

Trainees who successfully complete the 48 -week program will receive 45 units of credit applicable toward the unit requirement established by the college for the AA or A.S degree. Work outside the LVN program should include English 51 A and 51B; Social Science 51A-B; and Sociology 1A.

For students completing the 45 unit sequence the College graduation requirement in health education (H.E. 21) is waived.

Students who wish to become candidates for the AA or AS degrees are required to enroll in a physical education activity class unless exempt.

The curriculum is as follows:

## PART I

Medical and Surgical Conditions
Fundamentals of Nursing Arts (probationary period)

Course

Obstetrical nursing )
Reproductive System)
Care of Newborn )
Digestive System
Circulatory System
Musculo-Skeletal System

## Unit Value

(Indicated to illustrate relative weight only)

$$
\begin{gathered}
5 \\
4 \\
4 \\
\frac{4}{17}
\end{gathered}
$$

PART II
Respiratory System
2
Excretory System
${ }_{4}$
Nervous System $\begin{array}{r}4 \\ 3 \\ \hline\end{array}$
Endocrine System

## PART III

| Geriatrics | 2 |
| :--- | ---: |
| Professional Relations) | 2 |
| Community Problems | 3 |
| Pediatrics | 5 |
| Medical Fundamentals | 5 |
| Surgical Fundamentals | $\mathbf{1 7}$ |

- Total Credit 45*
*The above program is an infegrated program composed of clinical and classroom experiences conducted at the participating hospitals and classroom experiences conducted at the participating hospitals who successfully complete the entire program are eligible to receive credit.


## PHILOSOPHY

Leads to the junior year at San Diego State College in Liberal Arts and Sciences.

## Freshman

| Dept. | Course | Subject | Sem. I | II |
| :---: | :---: | :---: | :---: | :---: |
| P.E. |  | Physical Education Activity | $1 / 2$ | 1/2 |
| Phil | 1 AB | Introduction to Philosophy | 3 | 3 |
| Eng | 1 A | Composition ....................... | 3 |  |
| Eng | 1B | Introduction to Literature .... |  | 3 |
| Hist | 4AB | History of Western |  |  |
|  |  | Civilization ......... | 3 | 3 |
|  |  | Selected Science | 3-4 | 3-4 |
|  |  | 'Foreign Language ............... | 0.4 | 0-4 |
|  |  | Not to Exceed ................ | $171 / 2$ | $171 / 2$ |

## Sophomore

| P.E. |  | Physical Education Activity Selected Science | $3-4{ }^{1 / 2}$ | 1/2 |
| :---: | :---: | :---: | :---: | :---: |
| Psych | 1 | General Psychology ......... | 3 |  |
| H.E. | 21 | Health Education ............... |  | 2 |
| Speech | 1 A | Speech ..... |  | 3 |
| Hist | $17 A B$ | ${ }^{3}$ History of the United States | 3 | 3 |
| Math | 18 | Introduction to |  |  |
|  |  | Mathematics | 3 |  |
|  |  | ${ }^{2}$ Selected Social Science .... |  | 6 |
|  |  | 'Foreign Language ............... | 0-4 |  |
|  |  | Selected Art, Music, Literature or Philosophy |  | 3 |
|  |  | Not to Exceed .............. | $171 / 2$ | $71 / 2$ |

'-Twelve units of a foreign language or equivalent are required for the major. French or German is recommended.
2-Two courses should be selected from the following: Anthropology 1 or 2. Economics 1A, Geography 2, or Sociology 1A
${ }^{3}$-Poly Sci 1 and 2 may be substituted.

## PHYSICS

Prepares for the junior year at San Diego State College in Liberal Arts and Sciences. ${ }^{1}$

## Freshman

| Dept. | Course | Subject | Sem. I | II |
| :---: | :---: | :---: | :---: | :---: |
| P.E. |  | Physical Education Activity | 1/2 | $1 / 2$ |
| Physics | 4A | Principles of Physics ......... |  | 4 |
| Chem | $1 A B$ | General Inorganic Chemistry | 5 | 5 |
| Math | $3 A B$ | Analytic Geometry and Calculus $\qquad$ | 5 | 5 |
| Eng | 1 A | Composition ......... | 3 |  |
| Eng | 1 B | Introduction to Literature .... |  | 3 |
| Hist | 4 AB | History of Western <br> Civilization <br> Foreign Language | $\begin{array}{r} 3 \\ 0-4 \end{array}$ | 3 |
|  |  | Not to exceed ................ | 171/2 | $17^{1 / 2}$ |

## Sophomore

| P.E. |  | Physical Education Activity | 1/2 | 1/2 |
| :---: | :---: | :---: | :---: | :---: |
| Physics | 4BC | Principles of Physics ........... | 4 | 4 |
| Math | 4A | Calculus and Differential |  |  |
|  |  | Equations | 4 |  |
| Hist | 17AB | ${ }^{2}$ History of the United States | 3 | 3 |
| Speech | 1 A | Speech ...... | 3 |  |
| H.E. | 21 | Health Education |  | 2 |
| Psych | 1 | General Psychology ........... | 3 |  |
| Bio | 3 | Principles of Biological |  |  |
|  |  | Science ............... |  | 3 |

## Selected Course in Humanities or Social



1-The Physics major is also given in Applied Arts and Sciences at San Diego State College.
2-Poly Sci 1 and 2 may be substituted.
${ }^{3}$-Art 50A, English 30A or 30B, Eng 52A, Eng 56A, Music 30A, Philosophy 1A, Anthropology 1 or 2, Economics 1A, Geography 2 or Sociology 1A.

## PRE-PROFESSIONAL CURRICULA

It is possible for a student to complete, in addition to the professional curricula listed, one to two years of the PREARCHITECTURAL, PRE-DENTAL, PRE-LEGAL, PRE-LIBRARIAN PRE-MEDICINE, PRE-OPTOMETRY, PRE-SOCIAL WELFARE PRE-VETERINARY, or other pre-professional courses at Imperial Valley College. The student who is interested in one of the professions should consult with his counselor and plan a specific course of study that will meet the requirements of the professional school or college to which he expects to tronsfer.

## PSYCHOLOGY

Prepares for the junior year at the University of California at Los Angeles.

| Dept. | Course | Freshman Subject | Sem. I | II |
| :---: | :---: | :---: | :---: | :---: |
| P.E. |  | Physical Education Activity | 1/2 | 1/2 |
| Psych | 1,2 | General Psychology ........... | 3 | 3 |
| Eng | 1 A | Composition ....................... | 3 |  |
| Eng | 1B | Introduction to Literature .... |  | 3 |
| Hist | 17 AB | History of the United States | 3 | 3 |
|  |  | ${ }^{\prime}$ Electives, including foreign language $\qquad$ | 8 | 8 |
|  |  |  | $171 / 2$ | $17^{1 / 2}$ |
| Sophomore, |  |  |  |  |
| H.E. | 21 | Health Education ............... | 2 |  |
| Speech | 1A | Speech ............................. |  | 3 |
|  |  | ${ }^{1}$ Electives, including foreign language $\qquad$ | 15 | 15 |
|  |  |  | $171 / 2$ | 181/2 |

1-In preparation for the major leading to the bachelors degree only, work in the following areas is recommended according to the student's interest:
(a) natural science such as physics, chemistry, zoology, physiology; (b) social science such as anthropology, sociology, economics, politias philosophy, languages, literature, art, music, drama.

Recommended for students who expect to do graduate study in psychology, at least 18 units, distributed among the following: (a) 6 units of cultural or social anthropology and/or sociology; (b) not less than 3 units of college chemistry; (c) one year of college physics, including laboratory; (d) college algebra and analytic geometry or mathematics for the social and life sciences; (e) not less than one year of work chosen from the following: general zoology, elementary physiology, elementary zoology and physiology, applied human Continued on following page

## SOCIAL SCIENCE

Prepares for the junior year at San Diego State College in Liberal Arts and Sciences.

| Freshman |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Dept. | Course | Subject | Sem. 1 | III |
| P.E. |  | Physical Education Activity | $1 / 2$ | 1/2 |
| Hist | 4 AB | History of Western |  |  |
|  |  | Civilization ......... | 3 | 3 |
| Eng <br> Eng <br> H.E. | $\begin{aligned} & \text { 1A } \\ & 1 B \end{aligned}$ | Composition | 3 | 3 |
|  |  | Introduction to Literature .... |  | 3 |
|  | 21 | Health Education ................ |  | 2 |
|  |  | ${ }^{2}$ Selected Science ................ | 3-4 | 3-4 |
|  |  | ${ }^{3}$ Foreign Language .............. | 0-4 | 0-4 |
| Psych | 1 | General Psychology ........... | 3 | -4 |
|  |  | Not to Exceed ............... | $17^{1 / 2}$ | 171/2 |
| Sophomore |  |  |  |  |
| P.E. | 18 | Physical Education Activity | 1/2 | 1/2 |
| Math |  | Introduction to |  |  |
|  |  | Mathematics | 33 |  |
| Poly Sci | 1 | Introduction to Government |  |  |
| Poly Sci | 2 | Survey of American |  |  |
|  |  | Government ...... |  | 3 |
| Speech | 1A | Speech ............................. |  | 3 |
|  |  | ${ }^{4}$ Selected Sccial Science ...... Selected Music, Art, | 3 | 3 |
|  |  | Literature or Philosophy | 3 | 3 |
|  |  | ${ }^{2}$ Selected Science ................ |  | 3-4 |
|  |  | ${ }^{3}$ Foreign Language ............. | 0-4 |  |
|  |  | Not to Exceed .............. | 171/2 | $171 / 2$ |

1-The Social Science major may also be taken at San Diego State College in Applied Arts and Sciences by students in Teacher Education.
${ }^{2}$ - Nine units, to include not less than three units each from biological science and physical science, are required.
3 - A reading knowledge of a foreign language is required. Proficiency may be demonstrated by course work (ordinarily 12 units) or by examination.
${ }^{4}$ - Year course chosen from Anthropology 1, 2, Economics 1AB, Geography 1, 2, or Sociology IAB.
Continued from Preceeding page
physiology, general physiological biology, endocrinology, genetics. Students should also plan to take such courses as will give them the reading knowledge of two foreign languages required for the Ph.D. degree.

## SOCIOLOGY

Prepares for the junior year at San Diego State College in Liberal Arts and Sciences.

## Freshman

| Dept. | Course | Subject | Sem. I | II |
| :---: | :---: | :---: | :---: | :---: |
| P.E. |  | Physical Education Activity | 1/2 | 1/2 |
| Eng | 1 A | Composition ....................... | 3 |  |
| Eng | 1 B | Introduction to Literature ...- |  | 3 |
| Soc | 1 AB | Principles of Sociology ..... | 3 | 3 |
| Hist | 4 AB | History of Western |  |  |
|  |  | Civilization ........ | 3 | 3 |
|  |  | ${ }^{1}$ Selected Science | 3-4 | 3-4 |
|  |  | Foreign Language ............. | 0-4 | 0-4 |
|  |  | Not to Exceed | $171 / 2$ | 171/2 |
|  | Sophomore |  |  |  |
| P.E. |  | Physical Education Activity | $1 / 2$ | $1 / 2$ |
| Psych | 1 | General Psychology .......... | 3 |  |
|  |  | ${ }^{4}$ Selected Social Science ...... |  | 3 |
| Hist | 17AB | ${ }^{3}$ United States History ........ | 3 | 3 |
| Speech | 1 A | Speech ............................. |  | 3 |
| Math | 12 | ${ }^{\text {s Elementary Statistics }}$ <br> Selected Music, Art, | 3 |  |
|  |  | Literature or Philosophy | 3 | 3 |
|  |  | 'Selected Science ................ |  | 3-4 |
| H.E. | 21 | Heal Education .................. |  | 0-2 |
|  |  | Foreign Language ............ | 0-4 |  |
|  |  | Not to Exceed ............. | $171 / 2$ | 171/2 |

'-Nine units of science, to include both biological and physical are required.
${ }^{2}$-Twelve units of foreign language or equivalent are required.
${ }^{3}$-Poly Sci 1 may be substituted.
${ }^{4}$-Anthropology 1 or 2, Economics $1 A_{\text {, }}$ or Geography 2 are recommended.
5-This math course fulfills lower division requirements for major. Student must complete Math 18 or higher number course to fulfill general education requirements

## SPANISH

Prepares for the junior year at San Diego State College in Liberal Arts and Sciences.

## Freshman

| Dept. | Course | Subject | Sem. I | II |
| :---: | :---: | :---: | :---: | :---: |
| P.E. |  | Physical Education Activity | $1 / 2$ | $1 / 2$ |
| Spanish |  | 'Spanish .............................. | 4 | 4 |
| Hist | 4 AB | History of Western |  |  |
|  |  | Civilization ........ | 3 | 3 |
|  |  | ${ }^{2}$ Selected Science Course .... |  | 3 |
| H.E. | 21 | Health Education | 2 |  |
| Eng | 1A | Composition | 3 |  |
| Eng | 1B | Introduction to Literature .... |  | 3 |
| Psych | 1 | General Psychology ........... |  | 3 |
| Speech | 1A | Speech .............................. | 3 |  |
|  |  |  | 151/2 | $161 / 2$ |

## Sophomore

| P.E. <br> Spanish <br> Hist | 17AB | Physical Education Activity | 1/2 | $1 / 2$ |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Spanish .............................. | 4 | 4 |
|  |  | ${ }^{3}$ History of the United States | 3 | 3 |
|  |  | ${ }^{2}$ Selected Science Course .... | 3-4 | 3-4 |
|  |  | Selected Literature, Music, Art or Philosophy |  | 3 |
| Math | 18 | Introduction to Mathematics | 3 |  |
|  |  | Electives ............................... | 0-2 | 0-1 |
| Spanish 13-14 |  | Conversational Spanish .... | 2 | 2 |
|  |  | Not to Exceed | 151/2 | 51/2 |

${ }^{1}$-Course determined by work completed in high school
${ }^{2}$-Nine units of science, to include biological and physical, are required.
${ }^{3}$-Poly Sci 1 and 2 may be substituted.

## VOCATIONAL WORK STUDY

Prepares for employment at the end of two years.

| Dept. | Course | Subject | Sem. 1 | II |
| :---: | :---: | :---: | :---: | :---: |
| P.E. <br> Eng <br> H.E. <br> Math | 21 | Physical Education Activity | 1/2 | $1 / 2$ |
|  |  | 'English .............................. | 3 | 3 |
|  |  | Health Education ............... | 2 |  |
|  |  | 'Mathematics | 3 |  |
|  |  | Selected Science Course .. |  | 3-4 |
|  |  | ${ }^{2}$ Selected Courses .............. | $3-7$ | $4-8$ |
|  |  | Vocational Work-Study ...... | 1-4 | 1-4 |
|  |  | Not to exceed | 171/2 | $171 / 2$ |
| Sophomore |  |  |  |  |
| P.E. <br> Soc Sci | 51 AB | Physical Education Activity Introduction to American | $1 / 2$ | $1 / 2$ |
|  |  | Society ......................... | 3 | 3 |
|  |  | ${ }^{2}$ Selected Courses .............. | 4-12 | 4-12 |
|  |  | Vocational Work-Study .... | 1-4 | 1. 4 |
|  |  | Not to exceed | 181/2 | 181/2 |

1-Course determined by score on placement test.
${ }^{2}$-Courses are to be selected which are as closely connected as possible with the job situation.

## COURSES OF INSTRUCTION

In the following list of courses, the credit value of each course in semester units is indicated by a number in parentheses after the title.

The session in which the course is given is shown by Roman numerals: I for the fall semester, and II for the spring semester. A course given through the period of September to June is designated Yr. A course designated by a double number (for example, English 52A-52B) is continued through two successive semesters. Each half of the course constitutes a semester's work. The first half is a prerequisite to the second unless there is a statement to the contrary. The individual student should check all prerequisites so that he enrolls only in courses for which he has the proper background.

To make it possible for a greater number of courses to be offered to the students of Imperial Valley, many courses in specialized fields are offered on alternate years only. The student should take this into consideration when making his long-range program.

Courses at Imperial Valley College parallel as closely as possible the courses given at San Diego State College, the University of California at Los Angeles, the University of California at Davis, and the California State Polytechnic College at the Kellogg-Voorhis Campus, and the San Luis Obispo Campus.

A high school graduate who fails to achieve the English 1 A placement level on the placement test may, with the approval of his counselor, be admitied to any course which has eligibility for English lA as a prerequisite (except for courses offered in the English department) provided he fulfills one of the following conditions:
(a) meets the admission requirements to any California state college or campus of the University of California
(b) has earned 14 or more semester grades of $A$ or $B(70$ semester periods or 7 Carnegie units) on a five-point scale in subjects other than physical education, military science, and remedial courses during the last three years in high school, including at least six college preparatory subject grades. College preparatory courses include one or more of the following fields:
(1) English, including speech, drama, and journalism other than activity courses.
(2) Foreign languages.
(3) Mathematics.
(4) Natural sciences.
(5) Social sciences.

## LIST OF JUNIOR COLLEGE GENERAL EDUCATION OR FOUNDATION COURSES

Students wishing to take courses in specific subject areas, but lacking indicated prerequisites as set forth in this catalog should select alternates from the list of junior college general education or foundation courses developed expressly by the faculty to meet the needs of students who (a) harve declared themselves as majors in the occupational, vocational or technical curricula, or who (b) wish to acquire initial competencies and/or understandings essential to becoming responsible citizens of this community and state.

Although these courses are open to all students, it should be understood that they are not intended as lower division courses for students who intend to pursue upper-division work at four-year colleges or universities.

Art 51
Business 51A, 51B, 51C, 51D
Engineering 1
English 051, 50X, 50Y, 51A, 51B, 10A, 10B
Mathematics 51, X, Y
Natural Science 51A
Psychology 51A
Social Science 51A, 51B, 51C
Speech 51A

## AGRICULTURE

Many of the courses in the field of agriculture are offered on alternate years only. Students should keep this in mind as they plan their long-range programs of study with the assistance of their counselors.

## Ag 1 Introduction to Agricultural Business Management

(3) I 3 hrs. Lec.

Changes occurring in agriculture, careers in commercial agricultural businesses and public agricultural service agencies, development and growth of farm related industries, kinds of agricultural businesses, operational characteristics of commercial agricultural industries.
Ag 2 Agricultural Business Organization and Management
(3) II 3 hrs . Lec.

Study of farm lechnological advance, marketing, consumer demand and other such factors as determinants of growth, types and forms of agricultural business organization. Farm and farm related businesses considered from standpoint of primary functions, services and problems including investment, mortgage and working capital requirements, credit and collections, business with
banks, failures and reorganization. Emphasis on California farm related industries.
Ag 10A-10B Field, Cereal, Forage Crops (4-4) Yr. 3 hrs. Lec.
3 hrs . Lab.
The principles and practices of field, cereal, and forage crops production and soil management, including study of distribution, adaptation and utilization of the major field and forage crops of California such as cotton, large edible legumes, sugar crops and cereals. Laboratories and field trips to familiarize the student with production methods, plants, and seeds, processing and quality of field crops. 10A covers forage crops; 10B covers field and cereal crops. Either may be taken separately. Field laboratory work required.
Ag 11A-11B Crop Production (2-2) Yr.
6 hrs. Lab.
Application of production techniques. Cultural practices, harvesting, grading and processing, marketing, disease and pest control of Californic crops.
Ag 12A-12B Truck Crop Production (2-2) Yr. $\quad 3 \mathrm{hrs}$. Lab. Principles involved in seasonal truck crop production, including the scope, value, harvesting, packaging and marketing of the major truck crops grown in California.
Ag 13 Weeds and Poisonous Plants (3) I
3 hrs. Lec.
Common and noxious weeds of California, their identification, life history, and control. Chemicals and equipment used for weed control on cultivated land, in irrigation ditches, on the range, and on wasteland. Poisonous weeds, their effects and prevention.

Ag 14 Introduction to Entomology (2) II
1 hr . Lec.
3 hrs. Lab
A basic study of insects with emphasis on classification anatomy and physiology, and ecology. An insect collection is required. Offered on alternate years only.
Ag 18 Ornamental Shrubs and Trees (3) I, II 3 hrs. Lec. Broadleaf shrubs and vines used in California. Identification, habits of growth, cultural requirements and landscape use.
Ag 20 Introduction to Animal Science (3) I
3 hrs . Lec.
A survey of the sources of the world's supply of animal products. The distribution of and factors influencing domestic animals in the United States. The origin, characteristics, and adaptation of the important breeds and the influence of environment upon their development. Selection, feeding and management of sheep, swine, and cattle on California farms.

## Ag 21 Feeds and Feeding (3) II

3 hrs . Lec.
The basic principles of animal nutrition as they are applied to livestock feeding; the composition and use of feedstuffs in their relation to feeding of farm animals; ration balancing. Identification and classification of feeds, methods of preparing feeds; relative value for each class of livestock. Digestion and utilization of feeds; feeding standards; economy in feeding; vitomins and minerals and feed sources.

## Ag 22 Livestock Selection (2) II

1 hr . Lec. Seletion 3 hrs Lab. , swine and horses according various fype and use. The animal form in relation to its various functions. Studies of recognized type standards in livestock with a critical evaluation of the criteria used in establishing these standards. Correlation of the type of the live animal with the quality of the carcass.

Ag 30A-30B Agricultural Mechanics (2-2) Yr. $\quad 3 \mathrm{hrs}$. Lab. Selection and evaluation of production equipment. Study of specifications, plans, and construction of general agricultural equipment. Pipe work and electrical installations. Selection and grading of lumber and wood preservatives; cold and hot metal work; theory and testing of electrical motors; utilization and construction of agricultural facilities.

## Ag 31A-31B Farm Machinery (2-2) Yr.

1 hr. Lec.
3 hrs . Lac.
Basic principles of machines; materials of construction; lubrication and maintenance. The development and use of farm machinery; the utilization of power on the form; elements of hydrology in relation to agricultural engineering; the economics of farm buildings and machinery; elementary problems in the mechanics of agriculture.

Ag 32 Irrigation and Drainage (3) II
2 hrs . Lec. Fundamental principles and practices of irrigation. Soilmoisture relationships, water measurement, methods of irrigation, crop requirements, farm irrigation structures. Pumps and pumping, and problems of the irrigation farmer. Land preparation and irrigation methods, problems of irrigation, crop requirements, farm irrigation structures including investigation of drainage problems. Types of drainage systems and layout of form drains, and drainage requirements for land reclamation and irrigated agriculture.

Ag 33A-33B Fcrm Power (2-2) Yr.
Field and shop practice in the operation, service and adjustment of the modern farm tractor; including both wheel and track types with gasoline and diesel power units.

1 hr . Lec.
Ag 34A-34B Welding (2-2) Yr.
3 hrs. Lab.
Elements of arc and acetylene welding of mild steel; flat horizontal, vertical, and overhead positions. Arc and acetylene cutting. Brazing and hardface. Introduction to inert gas arc welding.
Ag 40 Soils (3) I
3 hrs . Lec.
Physical, chemical and biological properties of soils as related to agriculture. Principles of soil-plant inter-relations; development of the soil as a natural body, soil moisture, effect of management practices on soil properties; composition and use of fertilizers.
Ag 41 Fertilizers and Soil Fertility (3) II 3 hrs . Lec. The nature of fertilizers and soil amendments, their properties, methods of application, and reaction upon scils and plants. Composition, value and use of fertilizer materials and soil correctives. Methods employed in the manufacture, distribution, and application of fertilizers.
Ag 65 Control of Insects and Other Pests (2) I 3 hrs . Lab. Identification and methods of control of principle insect, rodent, disease, and other pests of crops. Use of pesticide application equipment. Health hazards in use of pesticides.

## ANATOMY

Anat 8 Human Anatomy (3) I

## 2 hrs. Lec.

6 hrs Lab.
Prerequisite: High school biology with a C or better or Zoology 1A or Biology 3. Systems of the human body and their interrelationships.

## ANTHROPOLOGY

Anthro 1 Physical Anthropology (3) I
3 hrs. Lec.
Prerequisites: Eligibility for English 1A or completion of English 51A-B with an average grade of C or better. Man's biological heritage; fossile evidences of early man; theories of human development; genetics; races and racial variability.
Anthro 2 Cultural Anthropology (3) II
3 hrs . Lec. Prerequisites: Eligibility for English 1A or completion of English 51A-B with an average grade of $C$ or better. Social
institutions in primitive and civilized societies; social organization; religion; rise of political institutions; material culture; language. May $b=$ taken before Anthropology 1.

## ART

Art 1A-1B Elementary Drawing (2-2) I, II
6 hrs. Lab. Prerequisites: Art 1A - none; Art 1B - Art 1A with a grade of C or better. A basic course in drawing involving analysis of lines, form, tone, texture and colors as essential media of expression.

## Art 2A-2B Intermediale Drawing and Painting (2-2) I, II

6 hrs. Lab.
Prerequisites: Art 1A-1B. A continuation of the development of composition and the various techniques employed in drawing and painting. Includes figure drawing, landscape, and still-life. Painting; covers styles of painting from the Neo-Classic to the present day.
Art 6A-6B Design (3-3) I, II $\quad 2 \mathrm{hrs}$. Lec.
Prerequisites: Art 6A - none; Art 6B - Art 6A with $\alpha$ grade of C or better. Fundamentals of design and composition; theory of color. Includes organization and utilization of basic elements through design problems.
Art 11 Ceramics (2) II
$6 \mathrm{hrs} . \mathrm{Lab}$.
An introduction to ceramics; basic methods of forming, decorating, glazing and firing.
Art 50A-50B History and Appreciation of Art (3-3) I, II
3 hrs . Lec.
A year course. Either semester may be taken separalely. Art 50A is a survey from Pre-Historic to the Renaissance. Art 50B extends from the Renaissance to the present.
$11 / 2 \mathrm{hrs}$. Lec.
Art 51 Introduction to Art (2) I, II
$11 / 2 \mathrm{hrs}$ Lab.
An exploratory course intended for non-art majors; provides a basis for an understanding of the fundamental art principles. Offers experience in creative expression.

## ASTRONOMY

Astron 1 Elementary Astronomy (3) I, II
3 hrs . Lec.
Prerequisite: Completion of the Mathematics 51 requirement. An introductory survey course in the general principles and the fundamentals of astronomy with emphasis on the solar system.

## AUTOMOTIVE TECHNOLOGY

3 hrs . Lec.
Âuto Tech 51A. Automotive Technology (7) I 12 hrs . Lac. Design, construction and mechanical function of automotive engines including lubricating, cooling, fuel and electrical systems; clutches; and an understanding of the basic sciences relevant to such topics as internal combustion, electricity, hydraulics, pneumatics and energy conversion. \$2.00 material fee payable during registration.

3 hrs Lec.
Auto Tech 51B Automotive Technology (7) II 12 hrs Lab. Prerequisite: Automotive Technology 51A or two years of high school auto mechanics with an average grade of C or better. Advanced study of automotive engines and electrical systems. Design, construction and mechanical function of manual transmissions, automatic transmissions and power-transmitting mechanisms. Manual and power steering, braking systems, including power brakes and wheel suspension and alignment. $\$ 2.00$ material fee payable during registration.

3 hrs . Lec.
Auto Tech 52A Automotive Technology (7) I 12 hrs . Lab. Prerequisite: Ccmpletion of Automotive Technology 51B and Agriculture 34A (Engineering 44A) complsted or taken concurrently. Basic diagnosis and service procedures on automotive repair jobs: motor testing, tune-ups, trouble shooting and refrigeration. $\$ 2.00$ material fee payable during registration.
Auto Tech 52B Automotive Technology (7) II 3 hrs . Lec. Prerequisite: Automotive Technology 52A or 4 years high school auto mechanics and/or one year of trade school with permission of the instructcr. Grade of $C$ or better in Agriculture 34A (Engineering 44A). Shop practice in maintenance and repair in automotive specialty areas, automotive machine shop, wheel alignment, body work electrical service, power equipment, and trouble shooting. $\$ 2.00$ material fee payable during registration.
NOTE: In all of the automotive technology courses the proper use and care of tools and equipment are stressed. In addition, machine shop practices are introduced and emphasized as they relate to the instruction involved.

## BIOLOGY

Bio 3 Principles of Biological Science (3) I, II $\quad 3 \mathrm{hrs}$. Lec. Not open to students with credit in Zoology or Botany. A consideration of basic biological phenomena. Designed for
those students who intend to take only one semester of general biological science. May be combined with Physical Science 5 for a year course in the basic principles of natural science.

## BOTANY

## Bot 1A General Botany (4) I <br> 2 hrs Lec.

Prerequisite: Any year course in a high school laboratory science with a grade of $C$ or better or the equivalent. Designed to present a comprehensive view of the structure and function of stems, rocts, leaves, flowers, and seeds of the flowering plants.

2 hrs . Lec.

## Bot 1B General Botany (4) II

6 hrs. Lab.
Prerequisite: Botany 1A. Designed to present a comprehensive view of the structure and function of the plant kingdom from the lowest to the highest forms; typical representatives of algae, fungi, mosses, ferns, and flowering plants in proper relation to one another.

## BUSINESS

4 hrs . Lec.
Bus 1A-1B Principles of Accounting (4-4) Yr. 1 hr . Lab. Prerequisites: Satisfactory score on the mathematics placement test or completion of Mathematics 51 with a grade of C or better and eligibility for English 1A or completion of English 51A with a grade of C or better. Recommended: Business 77AB or the equivalent. Introduction to the theory, practice, principles of acccunting as they relate to single proprietorship, partnership, and corporate types of business enterprises.
Bus 16 Introduction to Business (3) I, II
3 hrs . Lec. Prerequisite: Eligibility for English 1A or completion of English 51A with a grade of C or better. A basic beginning college course that introduces U.S. business and industry. Includes the nature and importance of business, business forms and organization, management, finance, marketing, government and legal regulations, pricing, and taxes.
Bus 17 Business Management (3) II
3 hrs . Lec. Prerequisite: Business 16. A study of the organizing and merchandising problems of $\alpha$ business; financial problems; business management.
Bus 19 Momagement Concepts of Supervision (3) I 3 hrs . Lec. Prerequisite: Eligibility for English 51A. The role of the supervisor in industry and business; the development of techniques in meeting administrative, organizational, labor, and human relations problems; the utilization of men, ma-
chines and materials, and case studies in supervisory problems.
Bus 20 Human Relations in Management (3) II 3 hrs . Lec. Prerequisite: Eligibility for English 51A. Improving supervision by the use of basic psychclogy in building better employer-employea relationships through human relations techniques; development of leadership qualities; main human relations problems and their causes and solutions.
Bus 29 Principles of Marketing (3) I
3 hrs . Lec. Prerequisite: Eligibility for English 1A or completion of English 51A with a grade of $C$ or better. The organization and operation of systems for the distribution of goods and services; includes a study of retail and wholesale distribution channels, consumer buying characteristics, marketing of industrial goods, cooperative marketing of agricultural products, pricing policies and governmental regulations.
Bus 30A-30B Business Law (3-3) Yr.
3 hrs .Lec.
Prerequisite: Eligibility for English 1A or completion of English 51A with a grade of C or better. Principles of business law and their application to actual cases involving business transactions, contracts, sales, partnerships, corporations, negotiable instruments, and property and creditor's rights.
Bus 31 Insurance (3) I
3 hrs . Lec.
The philosophy and fundamental principles of the various fields of insurance; covers the basic provisions of insurance offered by commercial companies to businesses and individuals; social insurance offered by governmental agencies is surveyed.
Bus 34 Retailing (3) II
3 hrs . Lec.
Selection of a location for a retail outlet, organization of the store, buying, the movement of merchandise, and the study of other problems related to retail merchandising.
Bus 36 Personal Finance (3-3) I, II
3 hrs . Lec. Practical application of the principles of good business to the handling of personal funds. Budgets, financial services, insurance, investment, home ownership, taxes, and consumer problems.
Bus 37 Records Management (3-3) I, II
3 hrs . Lec.
Lecture and supervised individual and group procedural activity designed to acquaint students with progressive filing and records management rules, procedures and techniques. Alphabetic, numeric, geographic and subject filing are studied.
Bus 40 Real Estate Principles (3) I
3 hrs . Lec. An analysis of the principles of real estate in California; history of California real estate, property, contracts, agency, listings, real estate financing, deeds, liens and
encumberances, escrows and title insurance, land descriptions, real estate mathematics, and real estate licensing and state regulations.
Bus 41 Real Estate Practices (3) II
3 hrs . Lec.
Prerequisite: Business 40. An analysis of the problems related to the establishing and conducting of a real estate business; the real estate business, the real estate office, listings, valuation of listings, prospecting, advertising, the selling process, closing the sale, financing real estate, exchanges and specialized brokerages, income properties, property management and leasing, taxes and real estate deals, land utilization, and professional and public relations.
Bus 42 Real Estate Law (3) I
3 hrs . Lec.
Prerequisite: Business 40, or permission of the instructor. A practical applied study of California Real Estate Law intended to be of help in aroiding legal difficulties which can arise in connection with real estate transactions.
Bus 43 Real Estate Finance (3) II
3 hrs . Lec.
Prerequisite: Business 40, or permission of the instructor. A practical applied study and analysis of money markets, interest rates and real estate financing, with actual case illustrations demonstrating lending policies, problems, and rules involved in financing real property, including residential, multi-family, commercial, and special purpose properties.
Bus 44 Real Estate Appraising (3) I
3 hrs Lec. Prerequisite: Permission of the instructor. Methods and techniques for determination of loan, morket, and insurance values. Case study methods are employed; field work and demonstration appraisal reports are required. Principles of real estate valuations; cost, market data, summation and sales analysis methods of appraising are studied with an emphasis on residential properties.
Bus 45 Real Estate Trends and Factors (3) II 3 hrs. Lec. Prerequisites: Business 40, 41, and 42, recommended Business 43 and 44. A practical study of the economic aspects of real estate designed to provide a grasp of the dynamic economic conditions and other factors underlying the real estate business in California. This is designed to be the senior course - the final course - in the real estate curriculum.
Bus 50 Salesmanship (3) II
3 hrs. Lec. Prerequisite: Eligibility for English 1A or completion of English 51A with a grade of C or better. Theoretical and psychological backgrounds of salesmanship; newer concepts of selling; the selling of ideas and services; steps in a sale; the development of clientele and of good will; the
personal factor in salesmanship. Presents the need for and the functions of salesmen.
Bus 51A Orientation to Business (3) I, II 3 hrs Lec. A beginning business course that introduces business and industrial structure, the nature of business, forms of ownership and management, finance, marketing, government regulations, and legal aspects of business operations. Not open to students who have completed Business 16 or the equivalent with a grade of $C$ or better.
Bus 51B Practical Salesmanship (3) I, II
3 hrs . Lec.
The practical background of salesmanship; the duties and functions of a salesman in the selling of ideas, services, and products. Includes the place and importance of salesmen in the marketing structure of the U.S. economy. Not open to students who have completed Business 50 or the equivalent with a grade of C or better.
Bus 51C Applied Business Law (3) I, II
$3 \mathrm{hrs}$. Lec. A one-semester course covering courts and court procedures, contracts, sales, bailments, negotiable instruments, agency and employment, partnerships, corporations, insurance, and property. Not open to students who have completed Business 30 or the equivalent with a grade of C or better.

## $2 \mathrm{hrs} . L e c$.

Bus 51D Essentials of Business Correspondence
(2) I, II

Emphasizes the basic elements and skills necessary for effective business communications. The business vocabulary - pronunciation, spelling, meaning, and punctuation -logether with standard letter-writing styles will be stressed. Not open to students who have completed Business 80 with a grade of $C$ or better.
Bus 52 Income Tax (2) I, II
2 hrs . Lec.
An elementary course in computation of income tax, use of forms and some of the less complex computations. Tax regulations are studied and students are taught to prepare returns. (Formerly numbered Business 51.)
Bus 60 Introduction to Daia Processing (3) I 3 hrs An introductory course designed to familiarize the student with the role and application of data processing practices and procedures to the modern business world.
Bus 71A Elementary Typewriting (2) I. II
5 hrs . Lab.
Designed to impart the fundamental skills and knowledge of typing. The student is introduced to the basic concepts of typewriting production.
Bus 71B Intermediate Typewriting (2) I, II
5 hrs Lab.
Prerequisite: Business 71A with the ability to type 30 w.p.m. or one year of high school typing with the ability
to type 30 w.p.m. Emphasis is placed on business letter styles and refinement of production skills.
Bus 72A Advanced Typewriting (2) I, II 5 hrs . Lab. Prerequisite: Business 71B with the ability to type 40 w.p.m. or the equivalent. The course includes drills designed to increase speed and accuracy. Further study of letter writing, manuscripts, legal documents, tabulation and statistical work is emphasized.
Bus 72B Office Procedures (4) I, II 2 hrs . to be carranged Prerequisite: Business 72 A with the ability to type 50 w.p.m. or the equivalent. An integrated course oriented towards production techniques that meet the standards of the business community. Covers the full range of office duties stressing those competencies required of the general office worker.
Bus 73 Office Machines (3) I, II $\quad 2 \mathrm{hrs}$. Lec. Prerequisite: Satisfactory score on mathematics placement test or Mathematics 51 with a grade of $C$ or better. Develops skills required for rapid and accurate operation of calculating machines with emphasis on the rotary calculator.
Bus 75A Elementary Shorthand (3) I
5 hrs .
A beginning course in Gregg Shorthand. Theory and dictation practice for students who have had no previous training.

Bus 75B Intermediate Shorthand (3) II $\quad 2 \mathrm{hrs}$. Lec. Prerequisite: Business 75A with a grade of C or better. Review of Gregg Shorthand theory. Speed building is emphasized through dictation and transcription from both new and practiced matter.
 Prerequisites: Business 75B, a net typing speed of at least 35 w.p.m. and a dictation level of $80-100$ w.p.m. Five hours of intensive speed building to enable students to meet commercial standards.

2 hrs . Lec.
3 hrs. Lab.
Bus 76B Advanced Dictation and Transcription (3) II
Prerequisites: Business 76 A and a dictation level of 100 120 w.p.m. Five hours of Gregg Shorthand dictation and typewriter transcription.
Bus 77A-77B Elementary Bookkeeping (3-3) Yr.
A course designed to meet the needs of ing in a single proprietorship, partnership, and corporation.

Work is given in journalizing, posting, trial balance and preparation of financial reports. Preparation of the payroll and other practical work is included. Not open to students with credit in high school bookkeeping or Business 1A. Students who have completed one year of high school bookkeeping with an average grade of less than C may enroll in 77A; however, credit received may not be counted towards unit requirements for the major.

$$
2 \mathrm{hrs} \text {. Lec. }
$$

(2-2) Yr.
Bus 78A-78B Law Office Procedures and Practices for Secretaries Prerequisites: Ability to type 50 net w.p.m. and a dictation level of 100 w.p.m. Practical instruction and exercises for secretaries; forms of pleadings; procedures for various actions (probate, divorce, and civil litigation); the law library and legal research; dictation of legal documents.
Bus 79A-79B Medical Terminology for Secretaries (3-3) Yr.
3 hrs Lec.
Provides training in the proper usage,meaning and origin of terms and names used in the medical sciences. Covers the following areas: skin, musculoskeletal, neurological and psychiatric, cardiovascular, blood and blood-forming organs, respiratory, digestive, urogenital, gynecological, obstetrical and neonatal, endocrine and metabolic, special sense organs, and diseases of the body as a whole. The course is designed for medical secretarial students. It includes rules of conduct as they apply to the medical secretary, the patient and the physician. 79B may be taken before 79A.
Bus 80 Business Correspondence (3-3) I, II
3 hrs.
Prerequisites: Business 71A or the equivalent and eligibility for English 1A or completion of English 51A with a grade of C or better. Major emphasis will be given to letter form and style, the psychology of the sales letter, letters of complaint and adjustment, credit and collection, job application and the business report.

3 hrs . Lec. \& Lab.
Bus 81A-81B Methods and Terminology for Library Clerks
This course is designed to acquaint students with the terms and methods used in libraries. In addition, it provides laboratory training in the skills necessary for employment as a library clerk.

CHEMISTRY
Chem 1A-1B General Inorganic Chemistry (5-5) Yr. 3 hrs . Lec. Prerequisites: High school algebra and plane geometry with grades of $C$ or better, and high school chemistry or

Chemistry 2 with a grade of C or better. General principles of chemistry with emphasis on inorganic materials and calculations. Qualitative analysis is included in the second semester.

Chem 2 Introduction to Chemistry (4) I, II Prerequisites: One year of high school algebra or its equivalent with a grade of $C$ or better. Intended for students who have not had high school chemistry or who need further preparation for Chemistry 1A. The course is recommended for those who desire a basic understanding of the elementary principles of chemistry. Not open to students who have completed Chemistry 1A or the equivalent.

Chem 5 Quantitative Analysis (4) I
$2 \mathrm{hrs}$. Lec.
Prerequisite: Chemistry 1 B with grade of 6 hrs Lab. blumetric gravimetric or better. trochemical methods of analysis.

Chem 12 Organic Chemistry (5) II Prerequisite: Chemistry 1B with a grade of C or better. A study of the compounds of carbon with special emphasis on the aliphatic compounds; includes an introduction to the aromatic compounds. Emphasis is given to the molecular orbital concept throughout the course.

## DRAMATIC ART

Drm Art 5A-5B History of World Drama (3-3) Yr. 3 hrs. Lec. Prerequisite: Eligibility for English IA. The study of the history of drama and theatre development from primitive times to the present. Emphasis will be placed on the correlation between staging and acting techniques and dramatic literature. 5A covers theatre development through Ibsen; 5B from Ibsen to the present. 5A or $5 B$ may be taken separately.

2 hrs . Lec.
Drm Art 10A-10B Fundamentals of Acting (3-3) I, II 3 hrs.Lab. An introduction to the interpretation of drama through the art of the actor. Development of individual insights, skills, and disciplines in the presentation of the dramatic material to an audience. Laboratory hours to be arranged.

2 hrs . Lec.
Drm Art 10C Intermediate Acting (3) I, II
3 hrs . Lab. Prerequisite: Dramatic Art 10B. A continuation of 10B with further emphasis on fundamental acting skills, laboratory hours to be arranged.

Dim Art 12A,B,C.D Rehearsal and Performance (1-1-1-1) I. II
3 hrs. Lab.
Prerequisite: Permission of the instructor. Enrollment contingent upon participation in campus major dramatic pra duction. Maximum credit 1 unit per semseter for four semesters. Hours to be arranged.

## ECONOMICS

Econ 1A-1B Principles of Economics (3-3) Yr. 3 hrs Lec. Prerequisite: Eligibility for English 1A or completion of English 51A-51B with an average grade of C or better. An introduction to principles of economic analysis, economic institutions, and issues of economic policy; allocation of resources and distribution of income through the price system; aggregative economics, including money and banking, national income, and international trade. Includes a brief introduction to comparative economic systems. Ecenomics IA emphasizes micro-analysis, 1B, macroanalysis.

## ENGINEERING

Engr 1 Technical Drawing (2) I, II
6 hrs Lab.
A general course for students who have had no high school mechanical drawing. Covers proper use of drafting instruments, geometric constructians, lettering, orthographic projections, pictorial representations, isometric drawings, dimensions, and symbols.

Engr 2A-2B Engineering Drawing (3-3) Yr. $\quad 4^{11 / 2} \mathrm{hrs}$. Lab. Prerequisite: Engineering 1 or 2 years of high school mechanical drawing or permission of the instructor. Geometric construction, sketching, dimensioning, theory of orthogonal projections, auxiliaries, sectioning, tolerance, piping, structural and mechanical design, and simple working drawings.
Engr 4 Orientation to Engineering (1) I
1 hr . Lec. Helping the engineering student adjust to college life through motivating experiences and guidance, clarifying his concepts of the engineering college and the engineering profession, and aiding him to acquire the fundamental tools and skills required in his future work. Formerly Engineering 61.
Engr 8 Slide Rule and Computations (1) II
1 hr . Lec.
Prerequisite: Completion of Mathematics X or satisfactory score on mathematics placement test. Performing necessary manipulations with the slide rule, while using correct methods, to solve engineering and technical problems.
Engr 10 Engineering and Technical Problems (3) I, II 3 hrs. Lec. Prerequisite: Completion of Mathematics 2 or Mathematics

9 or satisfactory score on Mathematics placement test. An applied course in geometry, algebra, and trigonometry with applications to problems in engineering.

## Engr 21 Descriptive Geometry (3) II

$11 / 2 \mathrm{hrs}$. Lec.
Prerecuisite: Engineering 2 A or 2 B . An $4 \frac{1}{2}$ hrs. Lab. in draw drwing: three dimensional location of points, lines and planes; surface and intersection problems with engineering applications and vector geometry.

1 hr . Lec.
Engr 28A-28B Plane Surveying (3-3) I, II 6 hrs . Lab. Prerequisite: Trigonometry and Engineering 1 or the equivalent. Principles of surveying, use of surveying instruments in the field, calculations, mapping, and plotting.

Engr 44A-44B Beginning Welding (2-2) Yr.
1 hr . Lec.
Gas and 3 hrs. Lab. pipe: Engineering 51A-B
Engr 50A Statistics (3) I
3 hrs. Lec.
Prerequisite: Physics 4A. Using vector algebra for analyzing and solving practical problems. Problems dealing with force systems, static equilibrium requirements, centroids, friction, moments of inertia of area and mass, centers of gravity, sheer and moment diagrams.
Engr 50B Dynamics (3) II
3 hrs. Lec.
Prerequisite: Engineering 50A and Physics 4B. Kinematics of a particle, radius of gyration, dynamics of a particle, dynamics of a rigid body in plane motion, translation and rotation, working energy impulse and momentum, simple harmonic motions and vibrations, conservation of linear and angular momentum.

## ENGLISH

1 hr . Lab.
Eng 50X English as $\alpha$ Second Language (4) I 4 hrs . Lec. Prerequisite: Placement by a raw score of $85 \%$ or lower on the ESL entrance exam. An intermediate course in English grammar, reading, and composition for students who have some background in the language. Intensive oral practice.

1 hr . Lab.
Eng 50Y English as a Second Language (4) II 4 hrs . Lec. Prerequisite: English 50X. English grammar and composition. Satisfactory completion of this course qualifies the student for enrolling in English 1A or 51A.
Those foreign students taking English as a Second Language, Eng 50X and 50Y, normally will be limited to a 12-unit maximum in their study load.

3 hrs . Lec.
Eng 051 English Review (3 I, II
2 hrs . Lab.
A review of English grammar and usage, plus considerable practice in reading and some practice in writing. Those students whose score on the English placement test is lower than the minimum needed to enroll in English 51A. must take this course. It does not fulfill English requirements for graduation and may not be counted as part of the English requirement of any major or minor.

## Eng 51A English Fundamentals (3) L, II

3 hrs LLec. Prerequisite: English 051 with a grade of $C$ or better, or assignment by English placement test. Intensive study of grammar and usage with frequent writing of short themes. Includes reading from our cultural heritage. This course is designed for those students who do not plan to work for a four-year degree and for those students who need a thorough review in preparation for English 1A. Not intended as a lower division foundation course for upper division work.
Eng 51B English Fundamentals (3) I, II
3 hrs . Lec. Prerequisite: English 51A. A continuation of English 51A, but with a major emphasis given to a selection of readings from our cultural heritage. The student is required to do additional writing. This course, together with English 51A, fulfills the requirement for students seeking the associate degree in the occupational, vocational and technical twoyear programs.
Eng 10A-10B Reading and Vocabulary Improvement (3) I, II
3 hrs. Lec.
A course designed for those who wish to increase reading speed and comprehension. Mechanical reading devices are used to increase speed. The student also studies word origins, meanings, and roots, stems, and affixes.

Eng 1A Reading and Composition (3) L. II
3 hrs . Lec. Prerequisite: Satisfactory grade on English placement test; or English 51A with a grade of A; or English 51A-51B with an average grade of $B$ or better; or by retesting. The standard course in freshman English. The course emphasizes the principles and methods of expository writing. Readings to stimulate writing will be required.
Eng IB Introducton to Literature (3) I. II
3 hrg Lec. Prerequisite: English 1A. Introduction to the study of poetry, fiction, and drama, with further practice in writing.
Eng 30A-30B American Literature (3-3) Yr.
3 hrs Lec. Prerequisite: English 1B on permission of the instructor. A
critical analysis of literary works of major American wziters. The two parts of this course are divided, approximately, by the Civil War. English 30B may be taken before English 30A.
Eng 31 Creative Writing (2) II
2 hrs Lec.
Prerequisite: English 1A. Study and application of the principles of literary construction. Concentrated exercises in the writing of imaginative literature including short story, poetry, and essay.

Eng 52A-52B Masterpieces of World Literature (3-3) Yr.
Prerequisite: English IB or permission of the instructor. A chronological survey from Homer to modern times. English 52B may be taken before English 52A.
Eng 56A-56B Survey of English Literature (3-3) Yr. 3 hrs . Lec. Prerequisite: English 1B or permission of the instructor. Close study of typical works of major English writers, with consideration of the more important aspects of English literary history. English 56B may be taken before English 56A.

Eng 83A-83B Yearbook Workshop (2-2) I( II
1 hr. Lec. (Same as Jrn 83A-83B)

1 hr . Lec.
Eng 83C-83D Advanced Yearbook Workship (2-2) I. II 2 hrs. Lab. (Same as Jrn 83C-83D)

1 hr. Lec.
Eng 93A-93B Newspaper Workshop (2-2) I, II 2 hrs . Lab. (Same as Jrn 93A-93B)

2 hrs . Lec.
Eng 93C-93D Advanced Newspaper Workshop (3-3) 3 hrs . Lab. (Same as Jrn 93C-93D)

## FRENCH

High school foreign language courses may be used for purposes of placement in college courses and may be counted toward meeting the foreign language requirement in various majors. These high school courses will not count as college credit toward graduation.

The first two years of high school French may be counted as the equivalent of French 1; three years the equivalent of French 2; and four years the equivalent of French 3. The last year-course taken by a student in the high school language sequence may be repeated in college for graduation credit, not to exceed four units of repeated foreign language work.

## Fr 1 Elementary French (4) I, II

4 hrs. Lec.
Pronunciation, oral practice, study of French culture and civilization, and basic grammar of the French language.

The student must plan for an additional $11 / 2 \mathrm{hrs}$. of individual language laboratory. Not open to students who have completed four semesters or more of French in high schcol with an average grade of B or better.

Fr 2 Elementary French (4) I, II
4 hrs . Lec.
1 hr . Lab.
Prerequisite: French 1 or two years of high school French with an average grade of C or better. Continuation of French 1.

Fr 3 Intermediate French (4) I
4 hrs. Lec.
1 hr . Lab.
Prerequisite: French 2 with a grade of C or better, or three years of high school French with an average grade of B or better. Continuation of French 2 with a review of grammar in depth and practical oral application. Emphasizes oral practice, writing and reading in French. Includes cultural material, short stories, novels and plays. Outside reading with oral and written reports.

Fr. 4 Intermediate French (4) II
4 hrs. Lec.
$1 \mathrm{hr} . \mathrm{Lab}$ requisite: French 3 with a grade of C or better or four years of high school French with an average grade of B. Continuation of French 3.

2 hrs . Lec.
Fr 10 Conversational French (2) I 1 hr . Lab. Prerequisites: French 2 with a grade of C or three years of high school French with a B average or by examination. Conversational skills are developed through oral drills laboratory work and guided conversations on selected readings and topics. Practice in the spoken language; practical and idiomatic vocabulary, simple dialogues and plays. Meets French conversation requirements for enrollment in upper division courses in French at SDSC.

2 hrs . Lec.
Fr 11 Conversational French (2) II
1 hr . Lab.
Prerequisite: French 10 with a grade of C . This course is ar continuation of French 10.
Fr 30 Individual Study in French (1-3) I, II Hrs. to be arranged Prerequisite: French 4 and permission of the instructor. An advanced course for students who have completed the second year of French and whose command of the lamguage merits continued study. Includes extensive reading in French. The number of books read determines the number of units awarded.
Fr 40 French Civilization (2) I
3 hrs . Lec.
The major currents and characteristics of French culture
and their development as expressed through the centuries in literature, art, philosophy, music, science, and politics, and life of the people. Satisfies requirement for French major or minor at San Diego State College. Conducted in English.
Fr 41 French Civilization (2) II
3 hrs . Lec.
Continuation of French 40.

## GEOGRAPHY

Geog 1 Physical Geography (3) I. II
3 hrs . Lec.
Prerequisites: Eligibility for English 1A or completion of English 51A-51B with an average grade of $C$ or better and Mathematics 51 with a grade of C or Mathematics exempt on placement test. Earth movements, latitude and longitude; relationships of earth, sun, and seasons; elements of the weather including air temperature, winds, pressure, precipitation, air masses and fronts; world patterns of climate, natural vegetation, soils, and landforms; the earth's water and mineral resources. A physical science general education course in the area of the natural sciences.
Geog 2 Cultural Geography (3) I, II
3 hrs. Lec. Prerequisites: Eligibility for English 1A or completion of English 51A-51B. with an average grade of $C$ or better. Stresses the major regions of the earth and their population, including the physical background, races, language, religion, and economy of each region. A social science course in general education. Geography 2 may be taken before Geography 1.

## GEOLOGY

 Geol 1A. Physical Geology (4) I 3 hrs. Lerb.3 hrs . Lec. Prerequisites: Eligibility for English 1A or completion of English 51A-51B with an average grade of C or better. Destructive and constructive work of water, ice, and wind; earthquakes and the earth's interior; volcanoes and geysers; rocks and rock formations; mineral resources, coral islands; origin and history of the larger topographic features.

Geol 1B Historical Geology (4) II Prerequisite: 3 hrs Lab. English 51A. Eligibility for en C or better completion of earth; measurement of geologic time; the geologic periods; typical fossils and organic evolution; organic and structural studies connected with important events in the development of the earth to the present time; oncient geogrophy; geologic maps and structure sections. Geology 1B may be taken before 1 A .

Geol 2 Introduction to Geology (4) I. II $\quad 3 \mathrm{hrs}$. Lec Prerequisites: Eligibility for English 1A or completion of English 51A with a grade of C or better. A survey of the whole field of physical and historical geology including a study of sarth materials, processes, and history as revealed in an examination of rocks and tossils. Intended as a general education course for non-majors. The course is not open to those who have credit in Geology 1A or Geology IB. This course may be taken for 3 units without laboratory.

## HEALTH, PHYSICAL EDUCATION AND RECREATION

Unless excused, each student is required by law to schedule one activity course each semester. A student may take both the $A$ and $B$ sections of the same course but may not repeat either section for credit,
P.E. 1OA-10B(W) Team Sports for Women ( $1 / 2$ ) I, II 2 hrs.
P.E. 10A-10B(M) Team Sports for Men ( $1 / 2$ ) I. II

An introduction to fundamental physical skills and team games. Designed to stimulate the development of mental and physical alertness and poise, and to encourage regular participation in a variety of sports.
P.E. 11A-11B Archery and Badminton ( $1 / 2$ ) I, II

2 hrs . Coeducational. An introduction to archery and badminton.
P.E. 12A-12B Combative Sports for Men ( $1 / 2$ ) I, II 2 hrs . A study of the art of self-defense through boxing, wrestling, and judo. Includes weight lifting.
P.E. 13A-B(W) Individual and Dual Sports for Women (1/2) I, II 2 hrs. An introduction to such individual and dual sports as archery, golf, tennis and badminton.
P.E. 13A-B(M) Individual Sports for Men (1/2) I, II

2 hrs. An introduction to the events in track, field and archery includes the Iowa-Brace achievement tests.
P.E. 14 $\bar{A}-14 \mathrm{~B}$ Volleyball and Badminton ( $1 / 2$ ) I. II $\quad 2 \mathrm{hrs}$. Coeducational. The etiquette, rules, background, and techniques of playing badminton and volleyball.
P.E. 16A-16B Folk and Square Dancing ( $1 / 2$ ) I. II

2 hrs . Coeducational. Participation and instruction in basic fundamentals, forms, and patterns of folk and square dancing.
P.E. 17A-17B Physical Fitness (1/2) I, II

2 hrs.
This course is designed to emphasize physical conditioning and development. Equips the student with a repertoire of exercises and conditioning activities which can be used to maintain physical fitness throughout his or her colloge and adult life.
P.E. 18A-18B Beginning Golf ( $1 / 2$ ) I, II Offers training in the basic fundamentals of strokes with irons, woods and putters; includes rules and etiquette of the game.
H.E. 21 Health Education (2) I, II 2 hrs scientific halth inforide scientific health information, and promote desirable attitudes and practices. Includes the study of first aid and the relationship of alcohol, narcotics, and smoking to health, and the factors involved in family and community health and safety. Required for graduation.
H.E. 22 First Aid (2) II

General procedures in administering first aid. This course msets the requirements of the Red Cross First Aid Certificate. Lecture and laboratory.
F.E. 31 A.B-C-D Football ( $1 / 2$ ) I Hours to be arranged Theory and practice of competitive football. Limited to students trying out for varsity teams. The student must schedule for a minimum of ten hours per week.
P.E. 32A-32B-32C-32D Basketball ( $1 / 2$ ) I, II Hours to be arranged Theory and practice of basketball. Limited to students trying out for varsity team. The student must schedule for a minimum of ten hours per week.
P.E. 33A-33B-33C-33D Track (1/2) II

Hours to be arranged Theory and practice of track. Limited to students trying out for varsity team. The student must schedule for a minimum of ten hours per week.
P.E. 34A-34B-34C-34D Baseball ( $1 / 2$ ) II

Hours to be arranged Theory and practice of baseball. Limited to students trying out for varsity team. The student must schedule for a minimum of ten hours per week
P.E. 35A-35B-35C-35D Wrestling ( $1 / 2$ ) II Hours to be arranged Theory and practice of wrestling. Limited to students trying out for varsity team. The student must schedule for a minimum of ten hours per week.
P.E. 41A Sports Officiating (2) I

2 hrs . Lec. A study of the rules for officiating football, basketball, and wrestling.
P.E. 41B Sports Officiating (2) II

2 hrs . Lec. A study of the rules for officiating baseball, track and field, swimming and tennis. 41B may be taken before 41A.
P.E. 53 Elementary Games and Activities (3) I. II 3 hrs . Participation in physical education activities which are designed for the elementary school child; understanding of principles of movement in fundamental skills and their application.

HPER 54 Introduction to Health, Physical Education and Recreation (2) I, II

2 hrs . Lec.
Covers the development and significance of the major areas in the broad field of health, physical education and recreation. Focuses on the development of a basic philosophy for the student whose occupational interests lie in this field.

## HISTORY

Hist 4A History of Western Civilization (3) I 3 hrs . Lec. Prerequisites: Eligibility for English 1A or completion of English 51A-51B with an average grade of $C$ or better. A survey of the major developments in the Western heritage from the world of the ancient Greaks to Sixteenth Century Europe. Emphasis is on the foundations of Western culture, religion, politics, and society.
Hist 4B History of Western Civilization
3 hrs . Lec. Prerequisites: Eligibility for English 1A or completion of English 51A-51B with an average grade of C or better. A study of Western civilization from the Sixteenth Century to the present in which political, economic, social and intellectual changes and developments are stressed. May be taken before History 4A.
Hist 5A-5B Centemporary World Aftairs (2) Yr. 2 hrs . Lec. A study of contemporary national and international affairs. Provides the historical background necessary to the understanding of changing course of current events. History 5B may be taken before 5A.
Hist 17A-17B United States History (3-3) Yr.
3 hrs . Lec. Prerequisites: Eligibility for English 1A or completion of English 51A-51B with an average grade of $C$ or better. A survey of the political and social development of the United States from the seventeenth century to modern times, emphasizing the rise of American civilization and ideals. This year course meets the graduation requirements in American Institutions.

## JOURNALISM

Irn 83A-83B Yearbook Workshop (2-2) I, II 2 hr . Lec This course offers special work in yearbook production in connection with the school yearbook and includes style, copy writing, layout, advertising, and the graphic arts connected with yearbook production. An additional hour of laboratory-type activities to be arronged.

1 hr . Lec.
Jrn 83C-83D Advanced Yearbook Workshop (2-2) I, II 2 hrs. Lab. Prerequisite: Journalism 83A-83B. This course offers special
advanced work in yearbook production in connection with the school yearbook and includes editing, business management, graphic arts connected with yearbook production and photography. An additional hour of laboratory-type activities to be arranged.

1 hr . Lec.
Irn 93A-93B Newspaper Workshop (2-2) I, II
2 hrs . Lab. Prerequisite: Permission of the instructor. This course offers special work in journalism in connection with the school newspaper and includes interviewing, copy writing, copy reading, photography, style sheet and advertising. An additional hour of laboratory-type activities to be arranged.
Jrn 93C-93D Advanced Newspaper Workshop (3-3) I, II
2 hrs. Lec.
3 hrs Lab.
Prerequisite: Journalism 93A-93B. This course offers special advanced work in connection with the school newspaper and includes editing, proof reading, headline writing, layout, business management, and actual printshop experience.

## LAW ENFORCEMENT

Law Enf X A-B Peace Officers' Basic Training (6)

## Academy <br> Program

Prerequisites: Full time officer's status or 12 units of Law Enforcement course work completed with a C average or better or completion of pre-employment screening and eligibility for appointment to a law enforcement agency. Elements of police investigation, procedure and records. A basic course covering classroom note taking, elements of investigation, report writing, collection and preservation, report writing, collection and preservation of evidence, interrogation, public relations, crowd and panic control, laws of arrest, search and seizure, courtroom procedure, and other related topics.
Law Ent 1 Survey of Law Enforcement (3) I
3 hrs . Lec.
The philosophy and history of law enforcement agencies involved in the administration of criminal justice; processes of justice from detection of crime to parole of offender; evaluation of modern police services; survey of professional career opportunities.
Law Ent 2 Police Patrol Procedures (3) II
3 hrs. Lec. Techniques of patrol and observation; handling complaints and colled-for services; public relations; techniques of field interrogation; officer's notebook procedures; essentials of police report writing; utilization of specialized equipment.

Law Enf 3 Criminal Law (3) I $\quad 3 \mathrm{hrs}$. Lec.
3 hrs . Lec. Elements of criminal aw with and seizure, right and duties
alties; laws of arrest, search and of officers and citizens.
Law Enf 4 Criminal Investigation (3) I
3.hrs. Lec.

Fundamentals of investigation; techniques of crime scene recording and search; collection and preservation of physical evidence; modus operandi processes; sources of information; interview and interrogation; follow-up and case preparation.
Law Enf 5 Criminal Evidence (3) II 3 hrs . Lec. Origin, development, and philosophy of rules of evidence; tests of admissability; weight and value of types of evidence.
Law Ent 6 Criminal Procedure (3) II
3 hrs. Lec. General court procedure and judicial process. Principles of constitutional and civil law as applicable to police operations. Preparation for trial, courtroom testimony, moot court.
Luaw Ení 7 Juvenile Control (3) I
3 hrs . Lec.
Techniques of handling juvenile offenders and victims; prevention and repression of delinquency; diagnosis and referral; organization of community resources; juvenile law and juvenile procedure.
Law Enf 9 Defensive Tactics (2) I, II
3 hrs . Lec.
A study of the art of self-defense through boxing, wrestling, and fencing. Includes the art of weight lifting.

## Law Enf 10 Traffic Control and Traffic Āccident

 Investigation (3) II3 hrs . Lec.
The study of traffic control problems and procedures for accident investigation.
Law Enf 11 Firearms (1) II
3 hrs. Lab.
Prerequisites: Open only to law enforcement majors or those who are currently enrolled in or have completed Law Enf XA or XB. Survey of types and uses of law enforcement weapons.

## MATHEMATICS

Math 51 Basic Mathematics (3) I. II
3 hrs . Lec. Brief review of arithmetic including fractions, decimals, per cent, square root, and an introduction to algebra. This course is not open to students having satisfactory scores on mathematics placement tests.
Math X Beginning Algebra (3) I, II
3 hrs . Lec.
Prerequisite: Completion of Mathematics 51 or satisfactory
score on mathematics placement test. A one-semester course which covers the material generally included in a full year high schocl algebra course.
Math Y Plane Geometry (3) I, II
Prerequisite: Completion of Mathematics 51 or satisfactory score on mathematics placement test. Covers the same material included in the full year of plane geometry in high school.
Math A Intermediate Algebra (3) L. II
3 hrs . Lec. Prerequisites: Mathematics X or the equivalent with grades of $C$ or better. This one-semester course takes the place of a strong second-year algebra course studied for the full year in high school. Included will be a development of real number system, radicals and exponents, quadratic equations, binomial expansion, arithmetic and geometric progressions, logarithms, conics, and the introduction to determinants.
Math C Plane Trigonometry (3) I, II
3 hrs . Lec.
Prerequisites: Mathematics A or its equivalent with $\alpha$ grade of C or better. Special emphasis is placed on trigonometric analysis, applications, solving triganometric equations including some with inverse functions, and graphing. Open to all students who have credit for high school trigonometry as well as for those who have not.
SPECIAL NOTE: Mathematics courses 51, X, Y, A and C are treated by most universities and many state colleges as high school subjects and may not, therefore, be recognized in terms of transfer credit. It is the responsibility of the student to check the catalog of that institution to which he expects to transfer to identify deficiencies which must be removed or to plan the sequence of courses which must be completed.
Math 2 Advanced Algebra and Trigonometry (5) I, II 5 hrs . Lec. Prerequisite: Mathematics $A$ or equivalent with grade of $C$ or better. This is a course intended for students who need a thorough foundation before attempting calculus. Included will be the study of the real number system; functions with special emphasis on exponential, logarithmic and trigonometric functions; the complex numbers; theory of equations; systems of equations; permutations, combinations, the binomial theorem, probability.
Math 3A Analytic Geometry and Calculus (5) I, II 5 hrs . Lec. Prerequisite: Mathematics or equivalent with a grade of C or better. Analytics of the straight line and conics; differentiation and integration of algebraic, trigonometric, and exponential functions with applications.
Math 3B Analytic Geometry and Calculus (5) I, II 5 hrs . Lec. Prerequisite: Mathematics 3A with a grade of $C$ or better.

Parametric equations, polar coordinates, special formulas and methods of integration, with applications in physical and life sciences, solid analytic geometry, vectors in the plane and 3 dimensional space, infinite series.
Math 4A Calculus and Differential Equations (4) 5 hrs . Lec. Prerequisite: Mathematics 3B with a grade of C or better. Partial differentiation, multiple integration, ordinary ditferential equations, applications, and elements of linear algebra.
Math 9 Technical Mathematics (3) I 3 hrs . Lec. Prerequisites: Satisfactory score on mathematics placement test. An applied course in mathematics for engineering technicians or related fields.
Math 12 Elementary Statistics (3) I. II 3 hrs . Lec. Prerequisite: Mathematics A or the equivalent. Graphical representation of statistical data, calculations and uses of various averages, measures of variability, elementary probability and the normal curve, sampling and estimation.
Math 18 Introduction to Mathematics (3) I, II 3 hrs. Lec. Prerequisites: Mathematics X and Y with grades of C or better or equivalent. Topics, from logic, modern algebra and analysis designed to give the student an introduction to the structure of mathematical theories and their applications. Includes course work in the theory of the structure, arithmetic and algebra of the real number system. Not intended for mathematics majors.

## MUSIC

Mus 7A Music Fundamentals (3) I
3 hrs . Lec. Elementary music theory and skills including notation, meter, rhythm, scales, intervals, triads, sight singing, ear training, dictation, elementary keyboard facility and other fundamentals.
Mus 9A-9B Elementary Harmony (3-3) I, II 3 hrs . Lec. Siaht-singing, dictation, and kepboard harmony. Tradi-Siaht-singing, dictation, four-voice writing, analysis.
tional diatonic harmony, (our-v.
3 hrs .
Mus 10A-10B Piano Class (1-1) Yr. Basic keyboard experience and sight-reading covering a repertoire of beginning and intermediate songs and piano literature, with emphasis on keyboard harmony. The student must schedule a minimum of 40 minutes outside pracdent must sch
tice per day.

3 hrs .
Mus 10C-10D Piano Class (1-1) I, II Prerequisite: Music 10 B or its equivalent, pianistic tech-
the essentials of advanced piano study; pin
niques involved in selected literature from classic, romantic and modern compositions; participation in informal recitals.
Mus 30A-30B History and Appreciation of Music (3-3) Yr.
3 hrs . Lec.
A study of the important composers and their works. Purpose of the course is to develop an understanding of various types of music from different eras as a medium of cultural development and as a background toward further musical study. 30A and 30B may be taken separately.

## Mus 51A-51B-51C-51D Rehearsal and

Performance (1-1-1-1) I, II
3 hrs . Lab.
Prerequisite: Permission of the instructor. Enrollment contingent upon participation in campus major musical production. Maximum credit, 1 unit per semester for four semesters. Hours to be arranged.
Mus 55A-55B-55C-55D Band (1-1-1-1) I, II
2 hrs.
The band finds continuous and practical experience in playing for assemblies, athletic rallies, games and other public functions. Public performance and field trips required.
Mus 62A-62B-62C-62D College Chorus (1-1-1-1) I, II 3 hrs. Open to all students who have an interest in learning to sing and who enjoy music. Breath control, tone placement articulation and enunciation; rehearsal and performance of choral music.
Mus 64A-64B-64C-64D College Madrigal Singers (2-2-2-2) I, II 3 hrs .
Prerequisite: Permission of the instructor. A performance organization specializing in the madrigal songs which are sung a capella and are characterized by elaborate rhythm and contrapuntal imitation. A. minimum of six outside performances required each semester.

## NATURAL SCIENCE

Nat Sci 5lA Survey of the Earth Sciences (3) I, II 3 hrs . Lec. A junior college general education course to acquaint the student with some principles of the earth sciences including sections on astronomy, meteorology, oceanography, geology and physical geography.

## NURSING, VOCATIONAL

Voc Nursing 60 (45) Yr.
Special
Students are admitted to the forty-five unit program by special application to the Office of Nursing Education. Students who enroll in Vocational Nursing must complete the program in its entirety to receive the 45 units of credit and establish eligibility to take the examination for
a state license. A student who withdraws from the course will not be eligible for partial credit. Students who wish to become A.S. degree candidates must complete general education requirements.

## PHILOSOPHY

Phil 1A-1B Introduction to Philosophy (3-3) Yr. 3 hrs . Lec. Prerequisite: Eligibility for English 1A. Man's interpretation of the nature and meaning of reality, conduct, and his own thinking. A very brief introduction to the principles of valid reasoning.

## PHYSICAL SCIENCE

3 hrs. Lec.
Phys Sci 5 Introduction to Physical Science (4) II 3 hrs. Lab. Selected topics in physical science. The relations of physical science to modern life through emphasis on the scientific method. Designed for those intending to take only one semester of physical science. Mary be combined with Biology 3 for a year course in the basic principles of natural science.

## PHYSICS

3 hrs . Lec.
3 hrs . Lab.
Phys 2A-2B General Physics (4-4) Yr. better, trigonometry strongly recommended. Properties of matter, mechanics, heat, sound, magnetism, light and modern physics.

3 hrs . Lec.
Phys 4A-4B-4C Principles of Physics (4-4-4) II, I, II 3 hrs. Lab.
Prerequisites: 4A. Credit for or concurrent registration in Mathematics 3A.
Prerequisites: 4B. Physics 4A with a grade of $C$ or better and credit for or concurrent registration in Mathematics 3B. This course is designed to give a thorough understanding of the fundamental principles of physics in the areas of mechanics, wave motion, heat, electricity, light, and modern physics.

## PHYSIOLOGY

2 hrs . Lec.
6 hrs . Lab.
Physio 1 Human Physiology (4) II
Prerequisite: High school chemisiology with a grade of $C$ Chemistry 2, and high school biology with a grade of $C$
or Biology 3 or Anatomy 8. The functions of the human body; emphasis on the circulatory, muscular, and nervous systems.

## POLITICAL SCIENCE

Poly Sci 1 Introduction to Government (3) I, II 3 hrs. Lec. Prerequisites: Eligibility for English 1A or completion of English 51A-51B with an average grade of C or better. An introduction to the theories, principles and problems of mdoern government and the methods of studying and acquiring political knowledge. Illustrative materials drawn primarily from the American experience. This course with Political Science 2 will meet all requirements in American history and institutions. Replaces 1A. Not open to students wth credit in Political Science 1A.
Poly Sci 2 Survey of American Government (3) I. II 3 hrs . Lec. Prerequisites: Eligibility for English 1 A or completion of English 51A-51B with an average grade of Cor better. An introducton to the governments of the United States and the State of California within an historical framework. Emphasis focused upon the political prcoesses and the governmental functions of both. This course and Political Science I fulfill the American history and institutions requirements.
Poly Sci 3 Comparative Government (3) II
3 hrs . Lec Prerequisite: Political Science 1 or 2. A comparative study of constitutional principles, governmental institutions and political problems of selected national governments. Replaces Political Science 1B. Not open to students with credit in Political Science 1B.

## PSYCHOLOGY

Psych 1 General Psychology (3) I, II
3 hrs . Lec.
Prerequisite: Eligibility for English 1 A or completion of English 51A-51B with an average grade of $C$ or better. An introduction to some of the facts, principles, and concepts which are basic to understanding human behavoir. Includes intellectual abilities, motivation, learning, perception, personality, and social behavior.

## Psych 2 Principles of Psychology (3) II

3 hrs . Lec. Prerequisite: Psychology 1. Lectures, demonstrations and participation in simple classroom experiments to emphasize the importance of scientific method and research design. Emphasis is placed on problems of human learning and forgetting, perception, personality, and individual dif-

## 3 hrs . Lec.

Psych 33 Psychology of Personal and Social Adjustment (3) I, II Prerequisite: Eligibility for English 1A or completion of English 51A-51B with an average grade of C or better. The development of the normal personality. Particular emphasis is placed on those social and emotional problems of adjustment which are unique to the college student.
Psych 51A Personal and Social Development (3) I, II 3 hrs . Lec. The course is designed to give an overview of psychological principles applicable to personal and social development. Emphasis will also be given to educational and vocational planning and the development of effective study habits. Beginning with the entering class for Fall, 1965, Psychology 1 or Psychology 51A will be required for graduation. Not open to students with credit in Psychology 1. Formerly numbered Psychology 50.

## SOCIAL SCIENCE

Soc Sci 51A Introduction to American Society (3) I, II 3 hrs . An introduction to the foundations and major characteristics of American society, stressing the basic cultural patterns, institutions, and the social problems of the American people. This course and Social Science 51B fulfill the graduation requirements for American history and institutions. Not open to students with credit in History 17A-17B, Political Science 1, 2 or History 2.
Soc Sci 51B Introduction to American Society (3) I, II 3 hrs . Lec. An introduction to the foundations and major characteristics of American society, stressing the political habits of the American people within an historical framework. This course and Social Science 51A fulfill the graduation requirements in American history and institutions. Not open to students with credit in History 17A-B, Political Science 1. 2 or History 2. May be taken before Social Science 51A.

Soc Sci 51C Introduction to American Society (3) I, II 3 hrs . Lec. An introduction to the geography of the American nation, and the economic practices of the American people. Not open to students with credit in Geography 2 or Economics $1 A$ or $1 B$.

## SOCIOLOGY

Sociol 1A Principles of Sociology (3) I. II $\quad 3 \mathrm{hrs}$. Lec. Prerequisites: Eligibility for English 1A or completion of English 51A-51B with an average grade of $C$ or better. A study of the characteristics of social life; the processes of social interaction; the tools of sociological investigation; concepts applied to sociological analysis, and the identification and analysis of social problems in the United States.

Sociol 1B Contemporary Social Problems (3) II 3 hrs. Lec. Prerequisite: Sociology 1A or Psychology 1. Survey of modern social problems recognizing the sociological factors involved. Emphasis on the scientific method of approach. An evaluation of various causes and solutions of problems.

## SPANISH

High school foreign language courses may be used for purposes of placement in college courses and may be counted toward meeting the foreign language requirement in various majors. These high school courses will not count as college credit toward graduation.

The first two years of high school Spanish may be counted as the equivalent of Spanish 1; three years the equivalent of Spanish 2; and four years the equivalent of Spanish 3. The last year-course taken by a student in the high school language sequence may be repeated in college for graduation credit, nct to exceed four units of repeated foreign language work.

Span 1 Elementary Spanish (4) I
4 hrs. Lec.
Pronunciation, oral practice, study of Spanish and Spanish-
American culture and civilization, and basic grammar of the Spanish language as well as initiation into reading, writing and aural understonding. Not open to students with a speaking knowledge of Spanish. (See Spanish 21.)

4 hrs. Lec.
Span 2 Elementary Spomish (4) II
1 hrs . Lac.
Prerequisite: Spanish 1 or two years of high school Spanish with an average grade of $C$ or better. Continuation of Spanish 1. Not open to students with a speaking knowledge of Spanish. (See Spanish 21.)
Span 3 Intermediate Spanish (4) I
4 hrs . Lec.
1 hr . Lab. high school Spanish with an grade of $C$ or three years of high school Spanish with an average grade of B or better. Continuation of Spanish 2, study of grammar in depth, emphasis on written language (reading and writing).
Span 4 Intermediate Spanish (4) II
5 hrs.
Prerequisite: Spanish 3 with a grade of $C$ or four years of high school Spanish with an average grade of $B$ or better. Continuation of Spanish 3.
Span 13, 14 Conversational Spanish (2) I. II 2 hrs . Lec. Prerequisite: Spanish 2 or three years of high school Spanish. Conversational skills are developed through oralaural drills, lab work and guided conversation based on selected readings. Not open to students with bilingual or native ability.

## Span 21 Spanish for Bilingual Students (2) I

2 hrs. A course designed for the bilingual speaker at the same level as Spanish 1 and 2. Emphasizes Spanish grammar and composition and Spanish culture.
Span 22 Spanish for Bilingual Students (2) II
2 hrs . Prerequisite: Spanish 21 with grade of C or better or at least three years of high school Spanish with an average grade of C or better. A continuation of Spanish 21, at the same level (for bilingual speakers) as Spanish 3 and 4. Emphasizes Spanish grammar and composition and Spanish-American culture.
Span 23 Composition for Bilingual Students (3) II 3 hrs . Prerequisite: Spanish 22 or consent of the instructor. Practice in writing formal Spanish. Special attention given to problems connected with slang and local idioms and expressions, as well as to vocabulary building. Recommended for bilingual secretaries and those planning on future study in Spanish.

Span 30 Individual Study in Spanish (1-3) I, II
Prerequisite: Spanish 4 and permission of the instructor. An advanced course for students who have completed the second year of Spanish and whose command of the language merits continued study. Includes extensive reading and composition in Spanish. The number of books read determines the number of units awarded.
Span 41 Spanish-American Civilization (3) I. II
2 hrs. Lec. Conducted in English. The major currents and characteristics of Spanish-American culture as expressed through the centuries in literature, art, and philosophy
Span 51A-51B Everyday Spanish (2) Yr. $\quad 1 \mathrm{hr}$. Lab. A course designed to give the non-transfer student a basic ability in everyday Spanish. The course will emphasize vocabulary building, conversational skills, and listening comprehension.

SPEECH
Sp 1A Public Speaking (3) I, II
3 hrs.
Prerequisite: Eligibility for English $1 \AA$. Training in the fundamental processes involved in oral communication with emphasis on organizing material, outlining, construction, and delivery of various forms of speeches.
Sp 1B Intermediate Public Speaking (3) I, II
3 hrs.
Prerequisite: Speech 1A. A continuation of Speech 1A with particular emphasis on organization and delivery, and study in the areas of parliamentary procedure, debate, discussion, and oral reading.

Sp 10A-10B Argumentation and Debate (3-3) I 3 hrs . Lec. Prerequisite: Speech 1A, taken previously or concurrently. An introduction to the problems of evidence and inference, with emphasis on the application of logic to rational discussion of sccial problems.
Sp 11A-11B Oral Interpretation (3-3) I, II
Prerequisite. Eligibility for English 1A. Discovering and imparting, vocally, intelligent and emotional meanings of the printed page.

## Sp 12A-B-C-D Intercollegiate Debate (1-1-1-1) I, II

Prerequisites: Eiligibility for English 1A and permission of the instructor. Speech $1 A$ and $1 B$ recommended. Enrollment contingent upon participation in Forensic, or competitive, speech activities on or off compus as a member of the IVC Speech Team. Student must be prepared to meet the following: 1) be present at at least 15 regular sessions with instructor during the semester (by arrangement with instructor); 2) be prepared to attend at least two forensic meets during the semester.
Sp 51A Basic Speech (3) II
3 hrs .
Designed to assist the student in achieving effective personal communication. Emphasis is given to self-improvement drills involving voice projection, articulation, pronunciation, movement and other basic speech fundamentals. Recommended for students taking English 051, 51A or 51B.

## VOCATIONAL WORK-STUDY EDUCATION

51 Vocational Work-Study Education (1-4) I, II
Hours by currangement
This is a program designed to supplement classroom instruction and to provide actual occupational experience in business, industrial, and agricultural vocations. One unit of credit is given for four hours of work per week. The course may be repeated for a maximum of 16 units of elective credit toward graduation. The student must be concurrently doing satisfactory work in a minimum of 8 units. He must be willing to work up to sixteen hours per week for at least sixteen weeks at wage rates agreed upon by the employer and student. Units for work-study are allowed for graduation, but grade points are not given. In other words, the grade point average for graduation is figured on academic class work only. The grades that are received for work-study are entered on the permanent records of the students, and may be arvailable to future employers.

## ZOOLOGY

## Zool 1A General Zoology (4) I

2 hrs . Lec.
6 hrs. Lab.
Prerequisite: Any year course in a high school laboratory science with a grade of $C$ or better or the equivalent. Introduction to basic principles of animal biology with reference to structure, functions, classification, heredity, and the environment of animals in general and of invertebrates in particular.

Zool 1B General Zoology (4) II
$2 \mathrm{hrs}$. Lec.
Prerequisite: Zoology 1A. Continuation of Zoology 1A with emphasis upon comparative anatomy and physiology, development of vertebrate forms and their interrelationships.

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